5.0 ALTERNATIVES

INTRODUCTION

The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) describe a reasonable range of alternatives to the proposed project or to its location that could feasibly attain most of the basic project objectives but avoid or substantially lessen any of the significant effects and that it evaluate the comparative merits of each of the alternatives. This section sets forth the potential alternatives to the proposed project and evaluates them as required by CEQA and the CEQA Guidelines.

Key provisions in the CEQA Guidelines regarding alternatives (Section 15126.6) are summarized below to explain the foundation of the alternatives analysis herein.

- The EIR will describe and analyze a range of reasonable alternatives to the project or the project’s location that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant impacts of the project. The EIR will also evaluate the comparative merits of the alternatives.

- The No Project/No Development Alternative shall be evaluated along with its impact. The No Project/No Development Alternative analysis shall discuss the existing conditions as well as what could be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

- The range of alternatives required in an EIR is governed by the “rule of reason,” which requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.

- Factors that may be taken into account when addressing the feasibility of alternatives are site suitability; economic viability; availability of infrastructure; General Plan consistency; other plans or regulatory limitations; jurisdictional boundaries; and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site(s).

- Only alternative locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.

- An EIR need not consider an alternative under which the effect cannot be reasonably ascertained and implementation is remote and speculative.
In identifying alternatives for this EIR, alternatives were selected by the City of Long Beach (City) that comply with CEQA requirements, would be reasonable and feasible for the project site, are in consideration of the existing uses of the project area, and are based upon public comments received on the Notice of Preparation (NOP).

In addition to the alternatives selected for evaluation, several possible alternatives were considered but rejected because they failed to meet the project objectives and/or were not deemed feasible. These considered but rejected alternatives are described in Section 5.3.

5.1 SELECTION OF ALTERNATIVES

Section 21100 of the Public Resources Code (PRC) and Section 15126 of the CEQA Guidelines require an EIR to identify and discuss a No Project/No Development Alternative as well as a reasonable range of alternatives to the proposed project that would feasibly attain most of the basic objectives of the project and would avoid or substantially lessen any of the significant environmental impacts. Alternatives to the proposed Alamitos Bay Marina Rehabilitation Project considered for analysis in this EIR are described below.

- **Alternative 1: No Project/No Development.** Consistent with Section 15126.6(e) of the CEQA Guidelines, the No Project/No Development Alternative is analyzed in terms of the existing condition of the project site at the time the NOP was published, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved. This alternative evaluates circumstances under which the project does not proceed. Alternative 1 does not include any improvements or changes to the dock and slip facilities, seawall repairs, upgrading of the existing restroom structures, or repaving of the parking areas within the Marina. In addition, Alternative 1 would not include the habitat mitigation site or the temporary/long dock. However, this alternative does include maintenance dredging in the Basin fairways, but the sediment removed would most likely be reduced since the docks and pilings would not be removed for replacement. The dredging is considered to be a necessary and reasonably foreseeable maintenance activity for the existing Marina in order to allow continued navigation of the channels and fairways.

- **Alternative 2: Reduced Project Alternative.** This alternative is a reduced intensity alternative that would eliminate the restroom rehabilitations and the parking lot repaving components of the project, including the associated land side Americans with Disabilities Act (ADA) improvements. In addition, due to input received during the public scoping process regarding the narrowing of the Marina Channel between Basins 3 and 4, fewer docks and slips would be constructed in Basin 4 under the Reduced Project Alternative. Alternative 2 is intended to update the Marina’s water side facilities in compliance with ADA and California Department of Boating and Waterways (DBAW) standards. This alternative includes dock renovations, seawall repairs, and maintenance dredging as
planned in all 7 Basins, with the exception that the layout of Basin 4 would include fewer slips and would not extend as far into the channel (resulting in a greater loss of slips overall). Alternative 2 would include the habitat mitigation site and the temporary dock (relocated to the northwest to allow use of an existing gangway), but would not include the long dock. Similar to the proposed project, this alternative would result in an overall loss of slips.

- **Alternative 3: On-Site Dry Stack Storage Alternative.** This alternative is intended to implement the necessary components of the proposed project and create an on-site dry stack storage system to minimize the loss of smaller slips. This alternative includes complete dock renovations, seawall repairs, basin dredging, restroom building and parking lot rehabilitations, and ADA improvements. Alternative 3 would include the habitat mitigation site and the temporary/long dock. Similar to Alternative 2, this alternative would reduce the distance that the docks extend from Basin 4 into the Marina Channel, thereby resulting in fewer slips in Basin 4, and a greater loss of slips overall. However, an on-site storage area would be created in the Basin 3 parking lot adjacent to the Marina Shipyard. The dry stack storage would accommodate up to 150 small boats.

A complete discussion of each alternative is provided below. For each alternative, the analysis provides the following:

- A description of the alternative
- An overview of the potential impacts of the alternative and the significance of those impacts (per CEQA Guidelines, the significant effects of an alternative shall be discussed but in less detail than those of the proposed project)
- A summary comparison of the alternative relative to the proposed project, specifically addressing whether the alternative would meet the project objectives and reduce impacts in comparison with the proposed project

### 5.2 ALTERNATIVES CONSIDERED BUT REJECTED

Section 15126.6(c) of the CEQA Guidelines requires EIRs to identify any alternatives that were considered by the Lead Agency but were rejected during the scoping process and briefly explain the reasons underlying the Lead Agency’s determination. In evaluating an appropriate range of alternatives to the proposed project, a number of alternatives were considered and rejected for differing reasons by the City.

The alternatives considered and rejected for the proposed project are listed below.
5.2.1 Alternative Project Locations

CEQA Guidelines Section 15126.6(f)(2)(A) states, “The key question [with regard to alternative locations] and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.” The proposed project is location-specific, as the project is to upgrade and replace the Alamitos Bay Marina docks and slip facilities that are approximately 50 years old. Because the project is specific to the Marina, there are no alternative locations; therefore, the EIR does not include analysis regarding alternative locations.

5.2.2 Alternative Habitat Mitigation Site Locations

The City considered several alternatives for the location of the habitat mitigation site. The habitat mitigation site for eelgrass is required due to the removal of eelgrass that would occur with dredging activities and is based on the Southern California Eelgrass Mitigation Policy (National Marine Fisheries Service, 1991 as amended). Agencies require that mitigation habitat be successfully created “in kind” (i.e., mitigation of eelgrass), and “on site” (i.e., within the same system—Alamitos Bay). Several factors need to be met in order to create an acceptable and successful eelgrass mitigation site. These factors include water quality (temperature, salinity, percentage of hydrogen [pH], and underwater light levels), water depth, and tidal flushing requirements.

The following sites were evaluated between November 2008 and March 2008 as potential eelgrass mitigation sites. These alternative mitigation sites and the reasons for their rejection are briefly described below.

**Alamitos Bay Peninsula between Balboa and 56th Place.** Eelgrass grows in small patches along this section of bay shoreline, and there are open areas of bare sediments that potentially could serve as a mitigation site. Although water quality factors at this site are not limiting to eelgrass growth, beach and subtidal profiles indicate a steep slope and a narrow intertidal to shallow subtidal bench to depths of -5 feet (ft) mean lower low water (MLLW). The degree of the slope in this area would likely limit eelgrass distribution. In addition, public use (swimming, shoreline sports fishing activity, and kayak/inner tube fishing) may also be limiting to eelgrass growth at this site. During a preconsultation meeting held with the California Department of Fish and Game (CDFG), it indicated that it did not approve of this eelgrass mitigation site because of the high public use. Therefore, this site was rejected from further consideration.
Cerritos Channel and Wetlands. Eelgrass is currently abundant along the south bank of the channel east of the Pacific Coast Highway Bridge leading to the Cerritos Wetlands. Therefore, there is no opportunity for a mitigation site along this bank. Although there is a potential opportunity to include eelgrass mitigation with the future restoration of the Cerritos Wetlands, the restoration plans are not finalized or proceeding at this time. As mandated under CEQA (Guidelines Section 15126.4), mitigation measures shall not be deferred until some future time. Resource and regulatory agencies would therefore be unlikely to approve the Cerritos Channel and Wetlands as an acceptable mitigation site. Therefore, this site was rejected from further consideration.

Basin 6-North–Cerritos Channel. A portion of Basin 6-North (Basin 6-N) was evaluated as a potential eelgrass mitigation site evaluation and was determined to be feasible from a biological standpoint. Preliminary design of a mitigation site was subsequently prepared by Coastal Resources Management, Inc. (CRM). However, the site was rejected by the Long Beach Marine Bureau due to the substantial loss of boat slips in this Basin that would result with implementation of the mitigation area. The loss of slips is also a concern recently expressed by the California Coastal Commission for similar projects. Therefore, this site was rejected from further consideration.

Long Beach Shoreline between Junipero Ave to 1st Street (Downtown Marina). This site was investigated because eelgrass is known to occur immediately offshore of the surf zone along this stretch of protected beach. The specific site investigated was the shallow water shoal that has been formed at the junction of the Downtown Marina and the shoreline. Although water quality and depths were not considered limiting factors, eelgrass actively competes with the red algae Gracilaria for light and space throughout this stretch of nearshore shallow water habitat. In addition, Coastal Resources Management, Inc. (CRM) diver surveys of the site in May 2008 confirmed that eelgrass had colonized this shoal and grows extensively throughout the area. Therefore, due to the abundance of existing eelgrass beds that would preclude this as a mitigation site, this location was rejected from further consideration.

Rainbow Marina (Along the South Jetty/Breakwall). Dive surveys at the Rainbow Marina site were conducted by CRM in May 2008 at depths between 0.0 and -15 ft MLLW. The area investigated includes a narrow sandy beach/quarry rock shoreline. The quarry rock shoreline extends subtidally to a depth of -15 ft MLLW in front of the Long Beach Aquarium dock facilities and other commercial vessels. In order for this area to be used as an eelgrass mitigation site, the waterway would have to be narrowed and filled in with appropriate sandy sediments, which would result in the loss of the existing subtidal riprap in this area. Biologically, the subtidal riprap is highly productive, and it would be unlikely that the loss of
the subtidal “artificial structure” and associated marine life would be approved by the resource and regulatory agencies. Therefore, this site was rejected from further consideration.

**Huntington Beach Wetlands Restoration Project.** The Huntington Beach Wetlands Conservancy, with local and state funding, has renovated wetland habitat along Pacific Coast Highway for fishery habitat and is planning to do additional work to create habitat areas for specific wetland mitigation projects. This location would be an off-site mitigation option. The Conservancy has indicated willingness to accommodate the City’s need for eelgrass habitat mitigation through the direct compensation of the costs required to create the subtidal channel habitat. However, because the mitigation would be located outside the City’s sphere of influence within another jurisdiction, and because this alternative would not address the City’s need for a long-term solution for habitat mitigation, this site was rejected from further consideration.

**5.2.3 Existing Layout Alternative**

The Marina dock facilities are approximately 50 years old, have reached the end of their useful life, and now require ongoing repairs. Several comments in response to the NOP and scoping meeting suggested that the Marina be rebuilt in the exact layout as currently exists. However, any rehabilitation of the Marina would require compliance with updated building codes and ADA access requirements. For example, ADA compliant gangways need to provide a 1:12 maximum slope, or a gangway at least 80 ft long.

These regulations and requirements did not exist at the time the Marina was originally constructed, but must be adhered to with newly constructed or altered recreational facilities. Therefore, it is not possible to rebuild the docks and refurbish the restroom structures in their existing layout or design. Slip spaces would be lost due to required design components and standards; some reconfiguration would be required to accommodate the existing slip mix and layout. In addition, the financial costs to rebuild the Marina would remain approximately the same as under the proposed project, but neither the vacancy trend in the 20 ft and under slip category nor the demand for larger slips would be addressed. Therefore, this alternative was rejected from further consideration.

1 According to the Marine Bureau, vacancies in the 20 ft and under category historically run between 100 and 200 slips; currently there is a 4-year waiting list for 50 ft slips, a 6-year waiting list for 60 ft slips, an 8-year waiting list for 70 ft slips, and a 7-year waiting list for 80 ft slips.
5.3 **PROPOSED PROJECT**

As previously noted, alternatives must be evaluated as to their ability to reduce or eliminate significant unavoidable adverse environmental impacts associated with the proposed project, including an alternate location, and to attain the basic objectives of the project. The comparative merits of the different alternatives are evaluated in accordance with CEQA.

The project addressed in this EIR includes complete rehabilitation of dock and slip facilities and maintenance dredging in Basins 1–7, seawall repairs, upgrading of restroom facilities, repaving of parking areas, construction of an open space/habitat mitigation site, and construction of a new long dock adjacent to Basin 4 and the Long Beach Yacht Club (LBYC). In addition, a temporary dock would be constructed at the terminus of the long dock to accommodate displaced boats during project implementation.

### 5.3.1 Significant Unavoidable Environmental Impacts of the Proposed Project

The potential impacts of the proposed project are described in Section 4.0 along with feasible mitigation measures to reduce significant impacts. Many of the project impacts are below established thresholds of significance or can be reduced to below thresholds of significance with implementation of mitigation measures. Some impacts cannot be reduced to below a level of significance, even with mitigation, and are considered unavoidable adverse impacts. The unavoidable adverse impacts for the proposed project are discussed below.

**Air Quality Construction Impacts.** Implementation of the Alamitos Bay Marina Rehabilitation Project would result in significant adverse impacts related to emissions of nitrogen oxide (NO$_X$) during construction. While the adherence to South Coast Air Quality Management District (SCAQMD) rules and regulations and compliance with standard construction conditions would reduce impacts from construction activity, construction vehicle emissions related to vehicle trips to a land side facility would still exceed the SCAQMD-established daily emissions thresholds for NO$_X$ emissions. Therefore, impacts would remain significant and adverse. No feasible mitigation measures beyond compliance with SCAQMD rules and regulations and standard construction conditions are available to offset this significant impact. However, emissions from the proposed project’s construction activities would not exceed SCAQMD localized significance thresholds (LSTs), and significant adverse air quality impacts related to LSTs would not occur.

Construction activities for the proposed project, in conjunction with other planned projects, would contribute cumulatively to the local and regional air pollutants. They would also contribute to construction-related adverse cumulative air quality impacts, resulting in significant construction-related air quality impacts. Therefore, the cumulative construction impacts of the proposed project would remain adverse and significant.
The project would not result in increases in long-term operational emissions because capacity of the Marina would not be increased with the proposed project, and no additional boats would be added to the Marina. Therefore, the project would not contribute cumulatively to long-term local and regional air quality degradation.

**Noise Construction Impacts.** Implementation of the Alamitos Bay Marina Rehabilitation Project would result in significant adverse impacts related to on-site construction noise. Pile driving will be the noisiest activity on site, generating up to 93 dBA $L_{\text{max}}$ at a distance of 50 ft. Other construction equipment used on site, such as loaders and backhoes, would generate up to 86 dBA $L_{\text{max}}$ at a distance of 50 ft. Construction noise would be intermittent and temporary and would cease once construction is complete. Adherence to the City’s noise regulations and implementation of Mitigation Measures 4.9-1 through 4.9-5 would reduce construction noise impacts to sensitive receptors; however, construction noise impacts would remain significant and unavoidable due to intermittent high levels of noise and the disturbance that noise will have on nearby residents and the public using outdoor recreation open space.

Construction noise from the proposed project and other future projects would be localized to each project site. In addition, pile driving, which will be the noisiest activity on site, does not occur with any of the other cumulative projects. The project would therefore not result in significant and adverse cumulative noise impacts. Similarly, implementation of the proposed project would not result in significant adverse operational noise impacts because the on-site uses would not be changed or intensified.

### 5.4 PROJECT GOALS AND OBJECTIVES

The primary goals of the Alamitos Bay Marina Rehabilitation Project are to rehabilitate the Marina facilities for boaters, local residents, and tourists while maintaining the unique character of the Marina. Project objectives include:

- Renovate and replace the deteriorating Marina facilities to expand recreational boating opportunities in keeping with the current and future demands of the boating public for larger slips
- Restore the Marina’s original and/or design depths by dredging the basins to ensure safe navigation and adequate access for the boating public
- Provide overdue and necessary Marina repairs and maintenance through surface repaving of parking areas, repairs to basin seawalls where required, and complete renovations to the 13 restroom buildings
• Maintain the Marina’s existing character
• Satisfy ADA requirements for access to the Marina facilities and docks
• Enhance the level of safety for boaters
• Extend the useful life of the Marina
• Upgrade utility facilities
• Provide slips/layout designs in accordance with Department of Boating and Waterways (DBAW) standards
• Rebuild the Marina consistent with the goals of the Alamitos Bay Master Plan and the Department of Parks, Recreation, and Marine Departmental Strategic Plan

5.5 **ALTERNATIVE 1: NO PROJECT/NO DEVELOPMENT**

5.5.1 **Description**

Consistent with Section 15126.6(e) of the CEQA Guidelines, the No Project/No Development Alternative is the existing condition of the project site at the time the NOP was published, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved. The setting of the site at the time of the NOP is described throughout Section 4.0 of this EIR with respect to individual environmental issues and the baseline of the impact assessment of the proposed project. This alternative will evaluate circumstances under which the project does not proceed. This alternative includes maintenance dredging in the Basin fairways, although less dredge sediments would be removed since the docks and pilings would not be removed for replacement. The dredging is considered to be a necessary and reasonably foreseeable maintenance activity for the existing Marina in order to allow continued navigation of the channels and fairways.

5.5.2 **Environmental Analysis**

The No Project/No Development Alternative assumes that the existing on-site conditions would remain unchanged except for reasonably foreseeable maintenance activities such as dredging in order to allow continued navigation of the Marina channels and fairways. As this alternative would eliminate the large majority of construction activities, implementation of this alternative would result in reduced environmental impacts when compared to the proposed project.

In leaving the project area in its current condition, none of the physical impacts associated with removal and replacement of the dock and slips, pilings, seawall repairs, restroom upgrades and parking lot paving would occur (with the exception of the maintenance dredging activities). No construction air emissions or noise associated with the dock, parking
lots, and restroom construction activities would be generated; however, because maintenance dredging would be required at some point in order to allow continued navigation of the Marina channels and fairways, some contaminated sediments from Basin 1 would still be removed. Therefore, the potential for significant and unavoidable air quality impacts associated with trucking these materials to a land side facility would still occur, but the number of truck trips would be incrementally reduced as compared to the proposed project. In addition, the No Project/No Development Alternative would not avoid impacts to eelgrass resources due to necessary maintenance dredging. Therefore, physical impacts associated with removal of eelgrass and construction of a habitat mitigation site would occur even under this alternative.

Under the No Project/No Development Alternative, the number of slips in the Marina would not decrease, but the recreational benefits and enhancements to the project area would not be achieved. The Marina docks, slips, restrooms, and seawalls would continue to degrade, increasing the safety risk associated with operation of the facilities. The foreseeable maintenance dredging of the No Project/No Development Alternative could result in a slight improvement in water quality compared with existing conditions. However, the parking lot storm drain facilities would not be improved with filters, and surface runoff would continue to discharge directly into the Marina waters.

5.5.3 Attainment of Project Objectives

The No Project/No Development Alternative would not achieve the project objectives. The aging and deteriorating docks and slip facilities would not be replaced, and recreational boating would not be enhanced. Maintenance costs and safety concerns would continue to increase. The goals of the Alamitos Bay Master Plan would not be implemented, and the overall environmental and recreational improvements associated with the project would not be realized. Moreover, the objectives contained in the City’s Open Space and Recreation Element in the Department of Parks, Recreation, and Marine Departmental Strategic Plan would not be furthered. For example, without ADA improvements, the required access to the Marina’s recreation resources for handicapped and disadvantaged residents would not be implemented, and the Marina condition, infrastructure, amenities, and safety would not be improved. Finally, the slip vacancies for smaller slips and waiting lists for larger slips would not be addressed or rectified.

5.5.4 Conclusion

The No Project/No Development Alternative would require maintenance dredging at some point in order to allow continued navigation of the Marina channels and fairways. Therefore, some contaminated sediments from Basin 1 would still require removal by truck to a land side facility. This alternative does not eliminate the significant and unavoidable air quality
impacts associated with the proposed project. In addition, the project objectives would not be achieved with the No Project/No Development Alternative, and none of the project benefits would be realized.

5.6 ALTERNATIVE 2: REDUCED PROJECT ALTERNATIVE

5.6.1 Description

Alternative 2 is the Reduced Project Alternative, which would eliminate the restroom rehabilitations and the parking lot repaving components of the project, including the associated land side ADA improvements. In addition, due to input received during the public scoping process regarding the narrowing of the Marina Channel between Basins 3 and 4, fewer docks and slips would be constructed in Basin 4 under the Reduced Project Alternative, thereby resulting in fewer slips overall. Alternative 2 is intended to update the Marina’s water side facilities in compliance with ADA and DBAW standards. This alternative includes dock renovations, seawall repairs, and maintenance dredging as planned in all seven basins, with the exception that the layout of Basin 4 would include fewer slips and would not extend as far into the channel. Alternative 2 would include the habitat mitigation site and the temporary dock (relocated to the northwest to allow use of an existing gangway), but would not include the long dock. This alternative would result in an overall greater loss of slips as compared to the proposed project layout.

5.6.2 Environmental Analysis

Aesthetics. The Reduced Project Alternative would eliminate rehabilitation of the restroom facilities, parking lot repaving, a number of slips in Basin 4 and the long dock. The temporary dock would still be implemented in order to accommodate displaced boats during construction. As a result, on- and off-site views of the overall Marina with this Alternative would be similar to the proposed project, but views associated with the new long dock would be eliminated. Under this alternative, potential aesthetic impacts related to construction would be reduced compared to impacts under the proposed project because no land side construction would occur, and construction activities in Basin 4 would be incrementally reduced. Similar to the proposed project, visual impacts associated with the Reduced Project Alternative would be considered less than significant. However, the Reduced Project Alternative would result in fewer aesthetics-related construction impacts compared to the proposed project.

Air Quality. The Reduced Project Alternative would reduce the duration of the project construction emissions since there would be no rehabilitation of the restroom facilities, parking lot repaving, or construction of the long dock. In addition, the reduction of the dock area in Basin 4 would incrementally reduce the emissions associated with dock and piling
replacement. The overall amount and duration of localized emissions being generated by
collection would be reduced as compared to the proposed project. However, because
dredging activities would still occur under this alternative, the potential for significant and
unavoidable air quality impacts associated with trucking these materials from Basin 1 to a
land side facility would still occur. Therefore, implementation of this alternative is not
expected to reduce the significant and adverse construction emission impacts associated with
the proposed project.

As with the proposed project, this alternative would not result in any significant long-term
operational impacts. However, Alternative 2 would not increase energy efficiency that would
occur with the renovation of restrooms under the proposed project. Therefore, this alternative
would not contribute to a reduction in GHG emissions and would have incrementally greater
impacts when compared to the proposed project.

Biological Resources. The Reduced Project Alternative would result in essentially the same
level of impacts to marine biological resources as the proposed project since water side
construction would be reduced only in Basin 4. Immediate or near-term impacts to eelgrass,
fish, benthic communities, and other marine organisms would be the same with
implementation of either the Reduced Project Alternative or the proposed project, which is
less than significant with incorporated mitigation measures. Because the eelgrass resources
exist in the interior portion of Basin 4 where docks would be replaced, and because there are
no eelgrass beds where the long dock would be constructed, impacts to this marine resource
would remain the same as the proposed project.

Construction impacts associated with piling activities and dredging would be slightly reduced
in Basin 4 as compared to the proposed project but are not an indicator of an environmentally
superior alternative for biological resources. Because of the improvement in tidal flushing
due to dredging, both Alternative 2 and the proposed project would provide an enhanced
marine habitat for fish and other organisms. The Reduced Project Alternative would not
require removal of any trees. However, potential noise and disturbance impacts to nesting
birds could occur with water side construction activities.

Similar to the proposed project, the Reduced Project Alternative would have no significant
impacts related to long-term operations. Implementation of mitigation measures to address
impacts to biological resources within the Marina and at the open space habitat site would
reduce impacts to a less than significant level for both the proposed project and this
alternative.

Cultural and Historic Resources. The Reduced Project Alternative would reduce the
amount of dock surface area and the long dock within Basin 4. In addition, this alternative
would eliminate the restroom renovations and parking area repaving and would therefore reduce the potential for encountering cultural resources; however, the proposed project is considered unlikely to impact such resources due to the site being highly disturbed and the minimal grading required to resurface the parking lots and renovate restrooms. Potential cultural resource impacts with Alternative 2 would therefore be similar to those under the proposed project, which are considered less than significant.

Potential impacts on Marine Stadium, a historic resource, would be similar to the proposed project with Alternative 2 because the open space/habitat mitigation site would still be implemented. Although improvements within Basin 4 would be reduced with this alternative, Basin 4 is outside of Marine Stadium’s boundaries, which terminate at the northern edge of the Second Street Bridge. Therefore, potential impacts to this historic resource under the Reduced Project Alternative are considered less than significant, similar to the proposed project.

**Geology and Soils.** The Reduced Project Alternative would eliminate rehabilitation of the restroom facilities, parking lot repaving, a number of slips in Basin 4, and the long dock. Because this alternative eliminates structural components of land side construction, potential impacts related to soil stability and seismic ground-shaking impacts for this alternative would be less than those under the proposed project. However, the reduced Project Alternative would not renovate the existing restroom structures in accordance with the most current seismic design parameters, and unlike the proposed project, would not provide additional seismic protection in comparison to existing conditions. Overall, the Reduced Project Alternative would result in less than significant impacts related to geology and soils, similar to the proposed project.

**Hazards and Hazardous Materials.** The Reduced Project Alternative would eliminate rehabilitation of the restroom facilities, parking lot repaving, construction of the long dock, and would reduce the dock area in Basin 4. The proposed dredging activities would still occur under this alternative, and the removal of contaminated dredge materials from Basin 1 would be included. Similar to the proposed project, it is unlikely that any dredging activities associated with Alternative 2 would pose a significant concern through the routine transport, use, or disposal of sediment material.

Under Alternative 2 there would be no demolition of the existing restroom structures, and no potential exposure to lead-based paints (LBPs) and polychlorinated biphenyls (PCBs) found in existing building materials. Therefore, potential hazards and hazardous waste construction impacts under the Reduced Project Alternative would be less than those under the proposed project. Overall, the Reduced Project Alternative would result in less than significant impacts
related to hazards and hazardous wastes, as does the proposed project with mitigation incorporated.

The operational handling, use, storage, transport, and disposal of small amounts of substances used for boat cleaning and maintenance such as cleaners, solvents, and paints would be similar under both the proposed project and the Reduced Project Alternative. Impacts related to the use of hazardous materials under operational conditions at the Marina are not significantly reduced under Alternative 2 and are considered less than significant for this alternative, similar to the proposed project.

**Hydrology and Water Quality.** The Reduced Project Alternative would eliminate rehabilitation of the restroom facilities, parking lot repaving, construction of the long dock, and would reduce the dock area in Basin 4. Potential hydrology and water impacts due to dock and piling replacements would be incrementally less with the reduced Project Alternative than under the proposed project because fewer construction activities would occur within Basin 4. However, water quality impacts resulting from dredging activities would be similar for both Alternative 2 and the proposed project.

The Reduced Project Alternative would include the open space/habitat mitigation site and would require excavation similar to the proposed project, which could lead to sediment and erosion control impacts to marine waters, similar to the proposed project. However, the restroom structures and the repaving of parking areas would not occur with this alternative; therefore, potential erosion and water quality impacts resulting from soil disturbance would be less for this alternative than under the proposed project. With implementation of mitigation measures, construction activities related to the Reduced Project Alternative would result in less than significant impacts related to hydrology and water quality, similar to the proposed project.

The Reduced Project Alternative would eliminate several components of the proposed project but would not significantly alter the operational characteristics within the Marina or the potential for water quality impacts. Boaters would continue to be regulated by the City’s Environmental Policies and the Marina Guidelines regarding the proper disposal and containment of hazardous materials and/or practices that may impair water quality. However, under the Reduced Project Alternative the storm drain facilities in the parking lots would not be improved with filters, and surface runoff would continue to discharge directly into the Marina waters. Therefore, although overall operational water quality impacts would be similar for both the Reduced Project Alternative and the proposed project, water quality impacts related to storm drain runoff would be greater under the Reduced Project Alternative.
Land Use. The Reduced Project Alternative would eliminate rehabilitation of the restroom facilities, parking lot repaving, construction of the long dock, and would reduce the dock area in Basin 4. Alternative 2, like the proposed project, would continue to provide Marina-related recreation uses on site and would therefore be consistent with the existing marine and water-related recreational uses at the site. Similar to the proposed project, impacts for this alternative related to consistency with existing land use regulations and planning documents are considered less than significant. Therefore, land use impacts compared to the proposed project are neutral, having no greater or lesser impacts than the proposed project.

Noise. The Reduced Project Alternative would eliminate rehabilitation of the restroom facilities, parking lot repaving, construction of the long dock, and would reduce the dock area in Basin 4. Under both the proposed project and Alternative 2, significant and adverse noise impacts would occur during project construction, including pile driving and general construction activities. However, Alternative 2 would reduce the duration of the construction operations and would eliminate some pile driving required under the proposed project for the long dock and the extended docks within Basin 4. Therefore, although construction noise impacts are incrementally reduced due to the reduction of construction activity, construction noise would remain significant and adverse under Alternative 2. As with the proposed project, this alternative would not result in any significant long-term operational noise impacts.

Public Services and Utilities. The Reduced Project Alternative eliminates several components as compared to the proposed project, including renovated restrooms and repaving of parking areas, but does not alter the operational characteristics of the Marina. Under the Reduced Project Alternative, emergency calls for police and fire services and demands for school and library services are not anticipated to increase, which is the same as the proposed project.

Under the Reduced Project Alternative, the restroom facilities would not be renovated, but the reduction in the overall number of slips and users would ensure that impacts to water and wastewater services and facilities would be less than significant, which is the same as the proposed project. However, because the existing restrooms would not be remodeled to utilize low-flow facilities, corresponding benefits in the reduction of potable water demand would not occur. Additionally, Alternative 2 would not increase energy efficiency, which would occur with the renovation of restrooms under the proposed project. Although storm drain facilities would not be upgraded with this alternative, the effects to solid waste and storm drain facilities under the Reduced Project Alternative would be similar to the proposed project due to the reduction in the number of slips. Therefore, impacts related to public services and utilities under the Reduced Project Alternative would be the same as under the proposed project.
Recreation. The Reduced Project Alternative would eliminate rehabilitation of the restroom facilities, parking lot repaving, construction of the long dock, and would reduce the dock area in Basin 4. Therefore, short-term construction-related impacts on recreational facilities would be lessened with this alternative as compared to the proposed project.

Neither this alternative nor the proposed project changes the Harbor’s use as a recreational facility; however, both would result in a loss of slips. Because Alternative 2 reduces slips in Basin 4, long-term recreational impacts are considered greater for this alternative when compared to the proposed project. However, no potentially significant impacts are identified for either scenario.

Alternative 2, similar to the proposed project, would not result in an increased demand for recreational facilities (including other Marinas, boat storage facilities, or boat launch facilities) or require development or expansion of additional recreational facilities. Similar to the proposed project, Alternative 2 would include the addition of approximately 23 dry storage spaces for 30 ft and under boats in the Basin 4 parking lots. Overall, compared to the proposed project, recreational impacts are slightly greater for the Reduced Project Alternative due to the lack of ADA access at the restroom and parking facilities and the reduced number of slips in Basin 4. Therefore, operational impacts to recreational resources for the Reduced Project Alternative are considered greater than the proposed project.

Traffic and Circulation. The Reduced Project Alternative would eliminate rehabilitation of the restroom facilities, parking lot repaving, construction of the long dock, and would reduce the dock area in Basin 4. Under this alternative, potential short-term circulation impacts would be similar to those under the proposed project because construction activities would occur at the same locations and in similar phases. However, because the restroom buildings and parking lot paving would not be renovated, short-term parking and access impacts within the Marina would be fewer for Alternative 2 than under the proposed project. In addition, the duration of project construction would be reduced under this alternative. However, the overall potential impacts to area circulation would be less than significant, similar to the proposed project.

Vehicle traffic associated with the usage patterns of larger boats is too speculative to determine potential impacts. However, due to the reduction in the number of slips, long-term operation of either the proposed project or the Reduced Project Alternative would have less than significant impacts related to traffic conditions in the project vicinity. Therefore, operational traffic impacts for Alternative 2 are similar to the proposed project.
5.6.3 Attainment of Project Objectives

The Reduced Project Alternative would achieve some, but not all, of the project objectives. The aging and deteriorating docks and slip facilities would be replaced, and recreational boating would be enhanced. However, because this alternative would result in a greater loss of smaller slips than the proposed project, it would potentially reduce the overall recreational opportunities for small boat owners and users when compared to the proposed project.

The goals of the Alamitos Bay Master Plan to remodel the restrooms and bring them up to current standards, and the objectives contained in the City’s Open Space and Recreation Element related to modernizing the Marina condition, infrastructure, and amenities would not be fully implemented with the Reduced Project Alternative. In addition, ADA access to the restroom facilities for handicapped and disadvantaged residents would not be implemented.

5.6.4 Conclusion

The Reduced Project Alternative would eliminate rehabilitation of the restroom facilities, parking lot repaving, land side ADA access improvements, construction of the long dock, and would reduce the dock area and number of slips in Basin 4. Although several components are eliminated with the Reduced Project Alternative, impacts related to aesthetics, biological resources, cultural/historic resources, geology and soils, hazardous materials, land use, and public services and utilities would be similar to the proposed project for this alternative.

Compared to the proposed project, recreational impacts are slightly greater for Alternative 2, the Reduced Project Alternative, due to the lack of ADA access at the restroom and parking facilities and the overall greater loss of slips as compared to the proposed project.

Construction-related hydrology and water quality impacts would be fewer than those under the proposed project because construction activities would be reduced. Conversely, operational water quality impacts would be greater than the proposed project because storm drain filters would not be included. Operational traffic and circulation impacts would be similar to the proposed project, while construction-related traffic impacts would be reduced when compared to the proposed project. However, with mitigation these impacts were less than significant for the proposed project.

Similar to the proposed project, this alternative would require removal of contaminated dredge materials to a land side facility. Therefore, the Reduced Project Alternative would not eliminate the significant and unavoidable adverse air quality impacts associated with the proposed project.
Although Alternative 2 would reduce the duration of the construction operations and would eliminate some pile driving, construction noise would remain significant and adverse under Alternative 2, similar to the proposed project.

5.7 ALTERNATIVE 3: ON-SITE DRY STACK STORAGE ALTERNATIVE

5.7.1 Description

Alternative 3, the On-Site Dry Stack Storage Alternative, is intended to implement all of the necessary components of the proposed project and create an on-site dry stack storage system to minimize the loss of smaller slips. This alternative includes complete dock renovations, seawall repairs, basin dredging, restroom building and parking lot rehabilitations, and ADA improvements associated with the proposed project. Alternative 3 would also include the habitat mitigation site and the temporary/long dock. Similar to Alternative 2, this alternative would reduce the distance that the docks extend from Basin 4 into the Marina Channel, thereby resulting in fewer slips in Basin 4 and a greater loss of slips overall. However, an on-site storage area would be created in the Basin 3 parking lot adjacent to the Marina Shipyard.

Although no formal plans have been developed at the time this EIR was prepared, the conceptual idea for the dry stack storage facility includes a three-boat-high rack storage unit able to accommodate up to 150 small boats. The overall height could be up to 30 ft, depending on the size of boats to be accommodated. For similar dry stack units, the boats are moved on and off the rack system by a specialized marine forklift. Boats would then be lowered into the water at the southwest end of the shipyard, adjacent to Basin 3.

5.7.2 Environmental Analysis

Aesthetics. The On-Site Dry Stack Storage Alternative would be similar to the proposed project with the exception that some slips in Basin 4 would be eliminated, and a dry stack storage area to accommodate up to 150 small boats would be included. As a result, on- and off-site views of the overall Marina with this alternative would be similar to the proposed project, but the new dry stack storage area would create a new visual component. The storage site would be located in the Basin 3 parking lot area, adjacent to the Marina Shipyard. The shipyard is a full-service boatyard, capable of lifting large sail and power boats out of the water. The height of the dry stack system would likely be similar to the height of structures and boats being serviced by the Marina Shipyard (up to approximately 30 ft high). No new lighting would be required for the proposed facility. This proposed use is consistent with Marina and shipyard operations and the character of the surrounding visual environment, and therefore would not create an adverse visual impact.

No significant viewsheds would be altered by the addition of this project element, and operational impacts to visual resources are considered to be similar to the proposed project.
Although construction activities in Basin 4 would be incrementally reduced under this alternative, potential aesthetic impacts related to construction would be the same as with the proposed project.

**Air Quality.** The reduction of the dock area in Basin 4 would incrementally reduce the emissions associated with dock and piling replacement. However, construction required for the dry storage area would likely offset any minor reductions associated with Basin 4. Therefore, the overall amount and duration of localized emissions being generated by construction would be similar to the proposed project.

Dredging activities would still occur under the On-Site Dry Stack Storage Alternative, and therefore, the significant and unavoidable air quality impacts associated with trucking these materials from Basin 1 to a land side facility would still occur. Therefore, implementation of this alternative is not expected to reduce the significant and adverse construction emission impacts associated with the proposed project.

As with the proposed project, this alternative would not result in any significant long-term operational impacts.

**Biological Resources.** The On-Site Dry Stack Storage Alternative would result in essentially the same level of impacts to biological resources as the proposed project. The addition of a land side storage area would not have an effect on marine habitats. The proposed location for the dry stack storage is within an existing parking lot adjacent to Marina-related uses, and no terrestrial habitats or biological resources would be impacted.

Immediate or near-term impacts to eelgrass, fish, benthic communities, and other marine organisms would be the same with implementation of either the On-Site Dry Stack Storage Alternative or the proposed project, which is less than significant with incorporated mitigation measures. Alternative 3 would impact the same amount of eelgrass as the proposed project because although the docks in Basin 4 are reduced under this alternative, eelgrass is located in the interior portion of Basin 4, where docks would be replaced and dredging would occur. Therefore, impacts to this marine resource would remain the same as the proposed project.

Construction impacts associated with piling activities and dredging would be slightly reduced in Basin 4 compared to the proposed project but are not an indicator of an environmentally superior alternative for biological resources. Because of the improvement in tidal flushing due to dredging, both Alternative 3 and the proposed project would provide an enhanced marine habitat for fish and other organisms. Potential noise and disturbance impacts to
nesting birds would occur with water side construction activities, similar to the proposed project.

Similar to the proposed project, the On-Site Dry Stack Storage Alternative would have no significant impacts related to long-term operations. Implementation of mitigation measures to address impacts to biological resources within the Marina and at the open space habitat site would reduce impacts to a less than significant level for both the proposed project and this alternative.

**Cultural and Historic Resources.** The On-Site Dry Stack Storage Alternative reduces the amount of dock surface area within Basin 4 and adds a land side storage facility. Implementation of the storage area would require little to no grading, as the location is already paved and would, at the most, require resurfacing. Similar to the proposed project, the potential for encountering cultural resources is considered unlikely due to the site being highly disturbed and the minimal grading required for resurfacing the parking lots and renovating restrooms. Potential cultural resource impacts with this alternative would therefore be similar to those under the proposed project, which are considered less than significant.

Potential impacts on Marine Stadium, a historic resource, would be similar to the proposed project with the On-Site Dry Stack Storage Alternative because the open space/habitat mitigation site would still be implemented. Although improvements within Basin 4 would be reduced with this alternative, Basin 4 is outside of Marine Stadium’s boundaries, which terminate at the northern edge of the Second Street Bridge. Therefore, potential impacts to this historic resource under the On-Site Dry Stack Storage Alternative are considered less than significant and are similar to the proposed project.

**Geology and Soils.** The On-Site Dry Stack Storage Alternative reduces the amount of dock surface area within Basin 4 and adds a land side storage facility. Implementation of the storage area would require little to no soil disturbance, as the location is already paved and would not require any significant excavation or grading. Disturbance to and preparation of the ground surface would be similar to land side improvements required for renovations to parking areas and restroom facilities. Therefore, potential impacts related to soil stability and seismic ground-shaking impacts for this alternative would be the same as those under the proposed project. Overall, the On-Site Dry Stack Storage Alternative would result in less than significant impacts related to geology and soils, similar to the proposed project.

**Hazards and Hazardous Materials.** The proposed dredging activities would still occur under the On-Site Dry Stack Storage Alternative, and the removal of contaminated dredge
materials from Basin 1 would be included. Similar to the proposed project, it is unlikely that any dredging activities associated with this alternative would pose a significant concern through the routine transport, use, or disposal of sediment material.

The On-Site Dry Stack Storage Alternative would include demolition of the existing restroom structures, and similar to the proposed project, would create a potential for exposure to LBPs and PCBs found in existing building materials. Therefore, potential hazards and hazardous waste construction impacts under the On-Site Dry Stack Storage Alternative would be the same as those under the proposed project. No additional structures would require removal for implementation of this alternative. Overall, the On-Site Dry Stack Storage Alternative would result in less than significant impacts related to hazards and hazardous wastes, as does the proposed project with mitigation incorporated.

The operational handling, use, storage, transport, and disposal of small amounts of substances used for boat cleaning and maintenance such as cleaners, solvents, and paints would be similar under both the proposed project and the On-Site Dry Stack Storage Alternative. Impacts related to the use of hazardous materials under operational conditions at the Marina are not significantly reduced under Alternative 3 and, with implementation of mitigation measures, are considered less than significant for this alternative, similar to the proposed project.

**Hydrology and Water Quality.** Potential hydrology and water impacts due to dock and piling replacements would be incrementally less with the On-Site Dry Stack Storage Alternative than under the proposed project because fewer construction activities would occur within Basin 4. However, overall water quality impacts resulting from dredging activities would be similar for both this alternative and the proposed project.

The On-Site Dry Stack Storage Alternative would include the open space/habitat mitigation site and would require excavation similar to the proposed project, which could lead to sediment and erosion control impacts to marine waters, similar to the proposed project. Implementation of the storage area would require little to no grading, as the location is already paved and would not require any significant excavation or grading. Therefore, erosion and water quality impacts resulting from soil disturbance would be the same for this alternative as with the proposed project. With implementation of mitigation measures, construction activities related to the On-Site Dry Stack Storage Alternative would result in less than significant impacts related to hydrology and water quality, similar to the proposed project.

The On-Site Dry Stack Storage Alternative would create a new land side storage facility but would not significantly alter the operational characteristics within the Marina or the potential for water quality impacts. Boaters would continue to be regulated by the City’s
Environmental Policies and Marina Guidelines regarding the proper disposal and containment of hazardous materials and/or practices that may impair water quality. Additionally, the storm drain facilities in the parking lots would be improved with filters and the quality of surface runoff would be improved, similar to the proposed project. Therefore, overall operational water quality impacts would be similar for both the On-Site Dry Stack Storage Alternative and the proposed project.

**Land Use.** The On-Site Dry Stack Storage Alternative, similar to the proposed project, would continue to provide Marina-related recreation uses on site and would therefore be consistent with the existing marine- and water-related recreational uses on site. In addition, this alternative provides dry storage for boats on site and would help offset the loss of smaller slips. The provision of new recreational boating opportunities is consistent with the Coastal Act policies requiring that facilities serving recreational boating industries be protected and, where feasible, upgraded (Coastal Act Section 30234). In addition, the provision of a dry storage boating facility is likely to be more affordable than in-water slips and would further the goals of the Coastal Act policy regarding provision of lower-cost visitor and recreational facilities (Coastal Act Section 30213).

Similar to the proposed project, impacts for this alternative related to consistency with existing land use regulations and planning documents are considered less than significant. Therefore, land use impacts compared to the proposed project are neutral, having no greater or lesser impacts than the proposed project.

**Noise.** Both the proposed project and the On-Site Dry Stack Storage Alternative would result in significant and adverse noise impacts during project construction, including pile driving and general construction activities. However, this alternative would incrementally reduce the duration of the construction operations required in Basin 4 and would eliminate some pile driving required under the proposed project. Additional construction activity and noise related to the dry stack storage facility would partially offset the reduced construction noise in Basin 4. Therefore, although construction noise impacts associated with pile driving are incrementally reduced due to the reduction of construction activity, construction noise would remain significant and adverse under the On-Site Dry Stack Storage Alternative. As with the proposed project, this alternative would not result in any significant long-term operational noise impacts.

**Public Services and Utilities.** The On-Site Dry Stack Storage Alternative adds a land side storage facility but would not significantly alter the operational characteristics of the Marina. Under the On-Site Dry Stack Storage Alternative, emergency calls for police and fire
services and demands for school and library services are not anticipated to increase over existing levels, which are the same as the proposed project.

Under the On-Site Dry Stack Storage Alternative, there is a greater reduction in the overall number of slips, but an increased number of dry storage opportunities for users. Therefore, the demand for water, wastewater, and solid waste services and facilities could be greater under this alternative than for the proposed project. However, this alternative would still benefit from a reduction of potable water and utility demands due to upgraded restrooms containing low-flow facilities and energy-efficient utilities. The effects to storm drain facilities under the On-Site Dry Stack Storage Alternative would be similar to the proposed project, as similar improvements would be made. Overall, impacts related to public services and utilities under the On-Site Dry Stack Storage Alternative would be incrementally greater than under the proposed project due to a potential for additional visitors to the facilities.

**Recreation.** The On-Site Dry Stack Storage Alternative would reduce the dock area in Basin 4 but increase land side storage opportunities. Short-term construction-related impacts on recreational facilities are anticipated to be similar to the proposed project for this alternative.

Neither this alternative nor the proposed project changes the Harbor’s use as a recreational facility. The On-Site Dry Stack Storage Alternative would not result in an increased demand for recreational facilities (including other Marinas, boat storage facilities, or boat launch facilities) or require development or expansion of additional recreational facilities. The On-Site Dry Stack Storage Alternative results in a greater loss of slips in Basin 4 than the proposed project, but provides up to 150 land side storage spaces for small boats. Therefore, the loss of smaller slips is partially offset and the long-term recreational impacts are reduced for this alternative when compared to the proposed project. However, no potentially significant impacts are identified for either scenario.

**Traffic and Circulation.** Potential short-term circulation impacts would be similar to those under the proposed project for the On-Site Dry Stack Storage Alternative because construction activities would occur at the same locations and in similar phases. Construction of the dry stack storage facility is not expected to impact traffic, as it will be implemented within the proposed project’s construction area. The overall potential impacts to area circulation would be less than significant, similar to the proposed project.

Vehicle traffic associated with the usage patterns of larger boats is too speculative to determine potential impacts. However, due to the reduction in the number of slips, long-term operation of either the proposed project or the On-Site Dry Stack Storage Alternative would have less than significant impacts related to traffic conditions in the project vicinity. In
addition, the dry stack facility is proposed to help offset the loss of smaller slips. Therefore, vehicle trips to the Marina and parking demand would not be expected to significantly change from existing conditions. Similar to the proposed project, Alternative 3 would result in a surplus of parking. Therefore, although spaces in the Basin 3 parking lot could be lost due to construction of the dry storage system, there would remain an adequate surplus of parking spaces. Therefore, operational traffic and parking impacts for this alternative are similar to the proposed project.

5.7.3 Attainment of Project Objectives

The On-Site Dry Stack Storage Alternative would achieve all of the project objectives. The aging and deteriorating docks and slip facilities would be replaced, and recreational boating would be enhanced. Although this alternative would result in a greater loss of smaller slips than the proposed project, it includes a dry stack storage facility for up to 150 small boats and would therefore partially offset the loss of slips. The On-Site Dry Stack Storage Alternative therefore increases overall recreational opportunities for small boat owners and users and results in fewer recreational impacts when compared to the proposed project.

5.7.4 Conclusion

The On-Site Dry Stack Storage Alternative would eliminate some slips in Basin 4 but would include a dry stack storage facility for up to 150 small boats. Impacts related to aesthetics, biological resources, cultural/historic resources, geology and soils, hazardous materials, hydrology and water quality, land use, public services and utilities, and traffic would be similar to the proposed project for this alternative.

Although there is an overall greater loss of slips with this alternative as compared to the proposed project, recreational impacts are reduced under the On-Site Dry Stack Storage Alternative due to the provision of on-site small boat storage for up to 150 boats.

Similar to the proposed project, this alternative would require removal of contaminated dredge materials to a land side facility. Therefore, construction air quality impacts would still occur, and the On-Site Dry Stack Storage Alternative would not eliminate the significant and unavoidable adverse air quality impacts associated with the proposed project.

Although Alternative 3 would reduce the duration of the construction operations and would eliminate some pile driving in Basin 3, construction noise would remain significant and adverse under Alternative 3, similar to the proposed project.

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1 The proposed project provides 2,524 parking spaces and results in a surplus over the required number of approximately 1,289 spaces.
5.8 IDENTIFICATION OF ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The No Project/No Development Alternative would be environmentally superior to the proposed project on the basis of the lack of physical impacts that would occur with the No Project/No Development Alternative. If there were no changes to the existing conditions on the site, there would be no potential impacts associated with construction-related traffic, noise, or air emissions. However, because maintenance dredging would be a reasonably foreseeable activity required to maintain navigable channels and fairways, the No Project/No Development Alternative would include construction vehicle trips to dispose of contaminated dredge materials at a land side facility. Therefore, the No Project/No Development Alternative would not eliminate the proposed project’s significant and unavoidable air quality impacts. Overall, however, the No Project/No Development Alternative is considered environmentally superior because the physical impacts associated with this Alternative are significantly less than the proposed project and other alternatives.

The CEQA Guidelines require that if the environmentally superior alternative is the No Project Alternative, “the EIR also identify an environmentally superior alternative among the other alternatives” (CEQA Guidelines Section 15126.6(e)(2)). The Environmentally Superior Alternative, in terms of direct physical effects on the environment, is Alternative 2, the Reduced Project Alternative.

Alternative 2 would eliminate construction activities associated with the proposed project’s land side improvements (rehabilitation of the restroom facilities, parking lot repaving, and ADA access improvements), as well as eliminating construction of the long dock and reducing the dock area and number of slips in Basin 4. Therefore, direct physical effects on the environment as a result of construction would be reduced as compared to the proposed project.

Overall, the Reduced Project Alternative reduces the amount and duration of the construction activities and potential impacts of the proposed project. The Reduced Project Alternative would result in reduced overall construction impacts for cultural resources, geology and soils, hazardous materials, hydrology/water quality, and traffic compared to the proposed project because the improvements to land side facilities would not occur with this alternative. Impacts related to these environmental topics would still result in less than significant impacts, as would the proposed project.

Alternative 2 includes some maintenance dredging, which would be required in order to maintain safe navigation throughout the Marina, and to continue the Marina’s use as a recreational facility. Therefore, the removal of some contaminated material from Basin 1
would still occur and would require construction vehicle trips to dispose of contaminated
dredge materials at a land side facility. Therefore, the Reduced Project Alternative would,
like the proposed project, result in significant and unavoidable air quality impacts.
Additionally, although Alternative 2 would reduce the duration of construction operations
and would eliminate some pile driving, construction noise would remain significant and
adverse under Alternative 2, similar to the proposed project.

Alternative 2 would not increase the energy efficiency that would occur with the renovation
of restrooms under the proposed project. Therefore, this alternative would not contribute to a
reduction in greenhouse gas (GHG) emissions and would have incrementally greater impacts
when compared to the proposed project. In addition, ADA access to the restroom facilities
for handicapped and disadvantaged residents would not be implemented.

The Reduced Project Alternative would achieve some, but not all, of the project objectives.
The aging and deteriorating docks and slip facilities would be replaced, and recreational
boating would be enhanced. However, because this alternative would result in a greater loss
of smaller slips than the proposed project, it would potentially reduce the overall recreational
opportunities for small boat owners and users when compared to the proposed project.
Further, the goals of the Alamitos Bay Master Plan to remodel the restrooms and bring them
up to current standards, and the objectives contained in the City’s Open Space and
Recreation Element related to modernizing the Marina condition, infrastructure, and
amenities, would not be fully implemented with the Reduced Project Alternative. The
restroom facilities and parking areas would continue to deteriorate, and the costs associated
with continued maintenance would continue to rise.

Table 5.A provides a comparison of the significant adverse impacts of the proposed project
and the proposed alternatives.
Table 5.A: Alternatives Comparison Matrix

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<tr>
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<tbody>
<tr>
<td>Characteristics</td>
<td>• Complete rehabilitation of docks and slips (resulting in approximately 1,646 new slips), including pilings and gangways • Upgrade Marina with ADA required facilities, including gangways, access to restroom buildings, and ADA parking • Construction of temporary and new long dock • Construction and/or renovation of 13 restroom buildings • Repaving of parking areas • Dredging of basins • Seawall repairs where necessary</td>
<td>• Existing condition/No improvements • Maintenance dredging of fairways as required, where accessible</td>
<td>• Rehabilitation of docks and slips, including pilings and gangways, except with fewer slips in Basin 4 • Upgrade Marina’s water side facilities with ADA required facilities • Construction of temporary dock • Dredging of basin seafloors • Seawall repairs where necessary • Construction of open space/habitat mitigation site <strong>Does not include:</strong> renovation of restroom buildings, repaving, long dock, or ADA access at land side facilities</td>
<td>• Complete rehabilitation of docks and slips, including pilings and gangways • Reduction of dock area and slips in Basin 4 • Construction of on-site dry stack storage for approximately 150 small boats • Upgrade Marina with ADA required facilities, including gangways, access to restroom buildings and ADA parking • Construction of temporary and new long dock • Construction and/or renovation of 13 restroom buildings • Repaving of parking areas • Dredging of basins • Seawall repairs where necessary</td>
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### Table 5.A: Alternatives Comparison Matrix

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<tbody>
<tr>
<td>Meets Project Objectives?</td>
<td>• Meets all project objectives</td>
<td>• Would not meet any project objectives</td>
<td>• Meets some, but not all, of the project objectives</td>
<td>• Meets all project objectives</td>
</tr>
<tr>
<td>Aesthetics</td>
<td>• Similar visual character compared to existing conditions</td>
<td>• No change in aesthetic condition of site or views of the Marina from on- or off-site vantage points</td>
<td>• Marina visual character similar to the proposed project</td>
<td>• Marina visual character similar to the proposed project</td>
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<tr>
<td></td>
<td>• Less than significant aesthetic impacts, no mitigation required</td>
<td>• No aesthetic impacts</td>
<td>• Visual character of the restroom structures and parking areas would remain the same as existing conditions</td>
<td>• Views of and within the Marina would include the addition of the dry stack storage facility</td>
</tr>
<tr>
<td>Air Quality</td>
<td>• Significant and adverse impacts related to construction vehicle emissions during construction</td>
<td>• Fewer air quality emissions generated compared to proposed project</td>
<td>• Same as proposed project</td>
<td>• Same as proposed project</td>
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</table>
### Table 5.A: Alternatives Comparison Matrix

|----------------------|----------------------------------------------------------------------------------|------------------------------------------|-------------------------------------------|---------------------------------------------------|
| **Biological Resources** | • Potentially significant construction-related impacts to the California brown pelican and Great Blue Heron, if present during such activities, and to nesting native birds  
  • Potentially significant impacts to eelgrass, fish, benthic communities, and other marine organisms  
  • Potentially significant impacts to green sea turtles and other sensitive marine species, if present | • No change from existing conditions | • No trees would be removed or relocated, and potential impacts to nesting birds would be reduced | • Same as proposed project |
|                      | • No significant operational air quality impacts                                 | • Significant and adverse cumulative construction emissions impacts |                                           |                                                   |
Table 5.A: Alternatives Comparison Matrix

|----------------------|-----------------------------------------------------------------------------------|------------------------------------------|-------------------------------------------|---------------------------------------------------|
| Cultural Resources   | • No impact to any known archaeological or paleontological resources on the project site  
|                      | • Less than significant impact to Marine Stadium, a historic resource, adjacent to the project site  
|                      | • Possibility of discovering unknown archaeological or paleontological resources  
|                      | • Less than significant impacts to cultural/historic resources with                |                                           |                                           |                                                   |
|                      | • No change from existing conditions                                              |                                           |                                           |                                                   |
|                      | • Less potential of discovering unknown archaeological or paleontological resources than the project |                                           |                                           |                                                   |
|                      | • Same as project                                                               |                                           |                                           |                                                   |
Table 5.A: Alternatives Comparison Matrix

|------------------------------|-----------------------------------------------------------------------------------|------------------------------------------|--------------------------------------------|-----------------------------------------------------|
| Geology and Soils           | • Potential geologic hazards include impacts related to soil erosion, seismic ground shaking, liquefaction, lateral spreading, subsidence, and expansive soil  
• Less than significant impacts related to geology and soils with mitigation | • No change from existing conditions | • Fewer potential impacts related to soil stability and seismic ground-shaking impacts as compared to the proposed project  
• Would not upgrade restroom structures in accordance with the most current seismic design parameters or provide additional seismic protection | • Same as project |
| Hazards and Hazardous Materials | • Potential hazards related to exposure to lead-based paints (LBPs), asbestos-containing materials (ACMs) and polychlorinated biphenyls (PCBs) during demolition of | • No change from existing conditions | • Fewer potential hazards related to exposure to LBPs, ACMs, PCBs or contaminated soils from building structures and/or soils as compared to the proposed project  
• Similar potential impacts related to exposure to contaminated dredge materials | • Same as project |
Table 5.A: Alternatives Comparison Matrix

<table>
<thead>
<tr>
<th>Issue Topic</th>
<th>Proposed Project</th>
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<tbody>
<tr>
<td></td>
<td>Alternative 1: No Project/ No Development</td>
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<td></td>
<td>Alternative 2: Reduced Project Alternative</td>
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<td></td>
<td>Alternative 3: On-Site Dry Stack Storage Alternative</td>
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<tr>
<td>Hydrology and</td>
<td>• Potential hazards related to exposure to contaminated soils/dredge materials</td>
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<tr>
<td>Water Quality</td>
<td>during excavation, grading and dredging activities</td>
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<tr>
<td></td>
<td>• Less than significant impacts related to hazards and hazardous materials with</td>
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<td>mitigation</td>
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<td></td>
<td>• No change from existing conditions</td>
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<td></td>
<td>• No benefit from water quality improvements</td>
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<td>• Incrementally fewer potential water quality impacts during construction as</td>
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<td>compared to the proposed project</td>
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<td></td>
<td>• No benefit from water quality improvements</td>
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<td>• Incrementally fewer potential water quality impacts during construction</td>
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<td>compared to the proposed project</td>
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<td></td>
<td>• Less than significant impacts related to water quality with mitigation</td>
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<td>• Same as proposed project</td>
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<tr>
<td></td>
<td>• Same as proposed project</td>
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<tr>
<td>Land Use</td>
<td>• No impacts related to land use</td>
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<tr>
<td></td>
<td>• No change from existing conditions</td>
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<td></td>
<td>• Same as proposed project</td>
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<td>• Same as proposed project</td>
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Table 5.A: Alternatives Comparison Matrix

|----------------------|-------------------------------------------------------|-------------------------------------------|--------------------------------------------|--------------------------------------------------|
| Noise                | • Significant and adverse noise impacts during construction  
                     • No significant operational noise impacts | • No change from existing conditions  
                     • Incrementally less noise during dredging activities | • Reduced duration of noise impacts during construction activities; however, construction noise impacts remain significant and adverse  
                     • No significant operational noise impacts | • Same as project |
| Public Services and Utilities | • No significant impacts related to public services and utilities  
                                    • Benefit from reduction in potable water demand and energy efficient upgrades | • No changes in public services or utilities  
                                    • No benefits from reduction in potable water demand or energy efficient upgrades | • No benefits from reduction in potable water demand or energy efficient upgrades  
                                    • No significant impacts related to public services and utilities | • Same as project |
Table 5.A: Alternatives Comparison Matrix

|-------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Recreation        | • Improvements to existing recreation facilities and continuation of the useful life of the Marina by providing upgraded docks and slips, ADA-compliant facilities, renovated restrooms, and dredged basins to ensure safe navigation  
                    • Loss of approximately 321 slips                                                | • No change from existing conditions  
                    • Would continue the physical deterioration of, and costs related to, on-site recreational facilities | • Would not include renovations to restroom facilities  
                    • Would not include repaving of parking areas  
                    • Would not provide ADA access to restroom or parking facilities  
                    • Loss of greater number of slips than project                                  | • Improvements to existing recreation facilities and continuation of the useful life of the Marina by providing upgraded docks and slips, ADA-compliant facilities, renovated restrooms, and dredged basins to ensure safe navigation  
                    • Loss of greater number of slips than project  
                    • Provision of approximately 150 dry stack storage spaces to offset loss of slips |
| Transportation    | • No significant impacts related to transportation and circulation  
                    • No parking impacts  
                    • No operational traffic impacts  
                    • Mitigation measures                                                       | • No change from existing conditions                                               | • Fewer construction traffic impacts  
                    • No parking impacts  
                    • No operational traffic impacts  
                    • Mitigation measures are proposed to ensure                                   | • Same as project                                                               |
| and Circulation   |                                                                                   |                                                                                               |                                                                                                           |                                                                                                           |
Table 5.A: Alternatives Comparison Matrix

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