

## 7.0 MITIGATION MONITORING AND REPORTING PROGRAM

### 7.1 MITIGATION MONITORING REQUIREMENTS

Public Resources Code Section 21081.6 (enacted by the passage of Assembly Bill 3180) mandates that the following requirements shall apply to all reporting or mitigation monitoring programs:

- I. The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.
- II. The lead agency shall specify the location and custodian of the documents or other material which constitute the record of proceedings upon which its decision is based.
- III. A public agency shall provide the measures to mitigate or avoid significant effects on the environment that are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents which address required mitigation measures or in the case of the adoption of a plan, policy, regulation, or other project, by incorporating the mitigation measures into the plan, policy, regulation, or project design.
- IV. Prior to the close of the public review period for a draft environmental impact report or mitigated negative declaration, a responsible agency, or a public agency having jurisdiction over natural resources affected by the project, shall either submit to the lead agency complete and detailed performance objectives for mitigation measures which would address the significant effects on the environment identified by the responsible agency or agency having jurisdiction over natural resources affected by the project, or refer the lead agency to appropriate, readily available guidelines or reference documents. Any mitigation measures submitted to a lead agency by a responsible agency or an agency having jurisdiction over natural resources affected by the project shall be limited to measures which mitigate impacts to resources which are subject to the statutory authority of, and definitions applicable to, that agency. Compliance or noncompliance by a responsible agency or agency having jurisdiction over natural resources affected by a project with that requirement shall not limit that authority of the responsible agency or agency having jurisdiction over natural resources affected by a project, or the authority of the lead agency, to approve, condition, or deny projects as provided by this division or any other provision of law.

## **7.2 MITIGATION MONITORING PROCEDURES**

The mitigation monitoring and reporting program has been prepared in compliance with Public Resources Code Section 21081.6. It describes the requirements and procedures to be followed by the City of Long Beach to ensure that all mitigation measures adopted as part of the proposed Colorado Lagoon Restoration Project will be carried out as described in this EIR.

Table 7.A lists each of the mitigation measures specified in this EIR and identifies the party or parties responsible for implementation and monitoring of each measure.

**Table 7.A: Mitigation and Monitoring Reporting Program**

Mitigation Measures		Responsible Party	Timing for Mitigation Measure
<b>4.1 AESTHETICS</b>			
<b>AES-1</b>	Prior to issuance of a grading permit, the City of Long Beach Director of Development Services designee shall require the construction contractor to provide screened construction fencing around construction area boundaries to temporarily screen views of construction activities.	City of Long Beach Director of Development Services	Prior to issuance of grading permits
<b>AES-2</b>	Prior to the issuance of a building permit, an Exterior Lighting Plan for the proposed restroom structures shall be prepared. The Lighting Plan shall indicate the location, type, and wattage of all light fixtures and include catalog sheets for each fixture. The Lighting Plan shall demonstrate that all exterior lighting has been designed and located so that all direct rays are confined to the property. The Lighting Plan shall be subject to review and approval by the City of Long Beach Director of Development Services.	City of Long Beach Director of Development Services	Prior to issuance of building permits
<b>4.2 AIR QUALITY</b>			
<b>AQ-1</b>	<p>Prior to issuance of a grading permit, the City of Long Beach Building Official (or designee) and the City of Long Beach Director of Public Works shall review and approve final grading plans and contractor agreements to ensure that the following dust suppression measures are incorporated. The following dust suppression measures in the South Coast Air Quality Management District (SCAQMD) CEQA Air Quality Handbook are included to further reduce the likelihood of air quality impacts:</p> <ul style="list-style-type: none"> <li>• Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour (mph).</li> <li>• Sweep all streets once per day if visible soil materials are carried to adjacent streets (recommend water sweepers with reclaimed water).</li> <li>• Install wheel washers or steel plate rumble strips where vehicles enter and exit unpaved roads onto paved roads, or wash trucks and any equipment leaving the site.</li> <li>• Pave, water, or chemically stabilize all on-site roads as soon as feasible.</li> <li>• Minimize at all time the area disturbed by clearing, grading, earthmoving, or excavation operations.</li> <li>• All trucks hauling dirt, sand, soil, or other loose materials are to be tarped with a fabric cover and maintain a freeboard height of 12 inches.</li> <li>• Limit on-site vehicle speeds (on unpaved roads) to 15 mph.</li> </ul>	City of Long Beach Building Official (or designee) and the City of Long Beach Director of Public Works	Prior to issuance of grading permits

<b>Mitigation Measures</b>		<b>Responsible Party</b>	<b>Timing for Mitigation Measure</b>
<b>AQ-2</b>	Prior to issuance of a grading permit, the Construction Contractor shall provide evidence to the City of Long Beach Building Official (or designee) that the construction equipment to be used on site is based on low-emission factors and high energy efficiency. The City of Long Beach Building Official (or designee) and the City of Long Beach Director of Public Works shall ensure that the grading plans include a statement that all construction equipment will be tuned and maintained in accordance with the manufacturer's specifications.	City of Long Beach Building Official (or designee) and City of Long Beach Director of Public Works/ Construction Contractor	Prior to issuance of grading permits
<b>AQ-3</b>	During construction and as noted on construction plans, the Construction Contractor shall ensure that construction equipment is shut off when not in use and idle for more than five minutes.	Construction Contractor	Ongoing during construction
<b>AQ-4</b>	Prior to issuance of a grading permit, the Construction Contractor shall provide evidence to the City of Long Beach Building Official (or designee) that the Construction Contractor will time the construction activities so as to not interfere with peak-hour traffic and minimize obstruction of through traffic lanes adjacent to the site. If necessary, a flagperson shall be retained to maintain safety adjacent to existing roadways	Construction Contractor/City of Long Beach Building Official (or designee)	Prior to issuance of grading permits
<b>AQ-5</b>	Prior to issuance of a grading permit, the Construction Contractor shall provide evidence to the City of Long Beach Building Official (or designee) that the Construction Contractor will support and encourage ridesharing and transit incentives for the construction crew.	Construction Contractor/City of Long Beach Building Official (or designee)	Prior to issuance of grading permits
<b>AQ-6</b>	During construction and as noted on construction plans, the Construction Contractor shall ensure that on-road construction trucks and other vehicles greater than 10,000 pounds shall be shut off when not in use and shall not idle for more than 5 minutes.	Construction Contractor	Ongoing during construction
<b>AQ-7</b>	Prior to issuance of a grading permit, the Construction Contractor shall provide evidence to the City of Long Beach Building Official (or designee) that on-site sensitive land uses, such as the on-site preschool center and the beaches, shall be closed or relocated when construction activities occur within 250 feet.	Construction Contractor/City of Long Beach Building Official (or designee)	Prior to issuance of grading permits
<b>AQ-8</b>	Prior to issuance of a grading permit, the Construction Contractor shall provide evidence to the City of Long Beach Building Official (or designee) that dredged material that shall be dried on site shall be located as far as feasible from the residential, school, and daycare land uses within the project area.	Construction Contractor/City of Long Beach Building Official (or designee)	Prior to issuance of grading permits
<b>4.3 BIOLOGICAL RESOURCES</b>			
<b>BIO-1</b>	The Director of Parks, Recreation, and Marine shall ensure that the project biologist work with the contractor to preserve the one specimen of estuary sea-blite on site, if feasible. If the original plant cannot be preserved, then cuttings and/or any other propagules of the plant shall be collected from this specimen or a close genetic source (e.g. Seal Beach National Wildlife Refuge) prior to the removal of the specimen. These cuttings and/or propagules shall be used in the revegetation process for the project.	City of Long Beach Director of Parks, Recreation and Marine/Project Biologist	During project implementation

<b>Mitigation Measures</b>	<b>Responsible Party</b>	<b>Timing for Mitigation Measure</b>
<p><b>BIO-2</b> The Director of Parks, Recreation, and Marine shall ensure that the presence or absence of Western yellow bats is investigated by a qualified biologist prior to the removal of any palms or cottonwoods from the project area. If bats are present, a memo shall be submitted to the CDFG to determine appropriate action.</p>	<p>City of Long Beach Director of Parks, Recreation and Marine/qualified biologist</p>	<p>Prior to the removal of any palms or cottonwoods from the project area</p>
<p><b>BIO-3</b> The Director of Parks, Recreation, and Marine shall ensure that a field survey to investigate the presence of the invasive algae <i>Caulerpa taxifolia</i> is conducted 30 to 60 days prior to commencement of construction, by qualified divers certified by the California Department of Fish and Game (CDFG) and National Marine Fisheries Service (NMFS) to conduct such surveys. The pre-construction <i>Caulerpa</i> surveys will be conducted according to the accepted criteria of the Southern California <i>Caulerpa</i> Action Team (SCCAT) for conducting surveys for the invasive algae and in accordance with the NMFS and CDFG <i>Caulerpa</i> survey protocols. In accordance with the recommendations of the SCCAT and according to the NMFS <i>Caulerpa</i> Control Protocol (Version 3, adopted March 12, 2007 [NMFS 2007]), a survey must be conducted in harbor areas that may be disturbed. In areas that are expected to be free of <i>Caulerpa</i>, such as Colorado Lagoon, a 20% visual Surveillance Level survey is required to prior to any dredging. The survey will also identify any other marine vegetation in the proposed construction area, including eelgrass. The Director of Parks, Recreation, and Marine, or his/her designee, will transmit the survey results via <i>Caulerpa</i> Survey Reporting Form to NMFS and the CDFG within 48 hours of completion of the survey. If <i>Caulerpa</i> is identified in the project area, the City, NMFS, and the CDFG will be notified within 24 hours of completion of the survey. In the event that <i>Caulerpa</i> is detected, disturbance shall not be conducted until such time as the infestation has been isolated, treated, or the risk of spread from the proposed Disturbing Activity is eliminated in accordance with Section F of the <i>Caulerpa</i> Control Protocol.</p>	<p>City of Long Beach Director of Parks, Recreation and Marine/Department of Fish and Game (CDFG) and National Marine Fisheries Service (NMFS) certified divers</p>	<p>30 to 60 days prior to commencement of construction or dredging activities</p>
<p><b>BIO-4</b> The Director of Parks, Recreation, and Marine shall ensure that a pre-construction eelgrass survey is conducted of the entire Lagoon and within 100 ft from the opening of the culvert into Marine Stadium during the period of March through October. The survey is considered valid by NMFS for a period of no more than 60 days, with the exception that surveys conducted in August through October will be valid until the following March 1. Pre-construction survey results will be provided by the Director of Parks, Recreation, and Marine to NMFS and the CDFG in an appropriate data format for the information to be mapped on the project drawings.</p>	<p>City of Long Beach Director of Parks, Recreation, and Marine</p>	<p>During the period of March through October and prior to any construction activities</p>
<p><b>BIO-5</b> The Director of Parks, Recreation, and Marine shall ensure that a post-construction survey is conducted within 30 days of the cessation of construction activities to determine the actual area of eelgrass affected for mitigation purposes. If loss of eelgrass is noted in the post-dredge survey, the City of Long Beach will be required to mitigate the loss of eelgrass in accordance with the Southern California Eelgrass Mitigation Policy (SCEMP). As per the SCEMP Revision 11 (NMFS 1991), the loss of eelgrass habitat must be mitigated at a</p>	<p>City of Long Beach Director of Parks, Recreation, and Marine</p>	<p>Within 30 days of the cessation of construction activities</p>

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p>minimum 1.2:1 ratio.</p> <p><b>BIO-6</b> The Director of Parks, Recreation, and Marine shall ensure that eelgrass mitigation be initiated within 135 days of project inception; projects requiring more than 135 days to complete may result in additional mitigation. A mitigation plan with a schedule is required 30 days prior to any construction or dredge activities. The amount of mitigation necessary will be determined by the difference between a pre-construction and post-construction survey.</p>	<p>City of Long Beach Director of Parks, Recreation, and Marine</p>	<p>Within 135 days of project inception; 30 days prior to any construction or dredge activities</p>
<p><b>BIO-7</b> The Director of Parks, Recreation, and Marine shall ensure that an eelgrass transplant report is completed following construction (Initial Report) and monitoring reports conducted at 6, 12, 24, 36, 48, and 60 months post-transplant. The Director of Parks, Recreation, and Marine shall ensure that project achievement of specific milestones and criteria for success, as directed in the SCEMP along with guidelines for remedial actions, are documented. If the success criteria are not met, construction of a Supplementary Transplant Area and monitoring, for an additional five years may be required by NMFS.</p> <p>Prior to issuance of any demolition or construction permits, the Director of Parks, Recreation, and Marine shall verify that the following measures have been incorporated into project plans in order to further reduce any potential impacts to sea turtles and marine mammals. The following measures are part of the United States Army Corps of Engineers permitting process under Section 404 of the Clean Water Act, and are above and beyond those required under the California Environmental Quality Act (CEQA) to mitigate biological resource impacts to a less than significant level.</p>	<p>City of Long Beach Director of Parks, Recreation, and Marine</p>	<p>Following construction and at 6, 12, 24, 36, 48, and 60 months post-transplant</p>
<p><b>BIO-8</b> A qualified biologist shall be on site during the construction period to monitor the presence of sea turtles and marine mammals. The onsite biological monitor shall have the authority to halt construction operations if it is determined that sea turtles or marine mammals are present and may be adversely affected, and shall determine when construction operations can proceed.</p>	<p>Qualified Marine Biologist selected by the Director of Recreation, Parks and Marine.</p>	<p>Ongoing during construction activities</p>
<p><b>BIO-9</b> Construction crews and work vessel crews shall be briefed on the potential for marine mammal and sea turtle species to be present, the legal protection of these species, and will be provided with identification characteristics of these animals</p>	<p>Qualified Marine Biologist selected by the Director of Recreation, Parks and Marine.</p>	<p>Prior to any construction activities</p>
<p><b>BIO-10</b> In the event that a sea turtle is sighted within 500 meters of the construction zone, all construction activity shall be temporarily stopped until the sea turtle(s) is safely outside the 500 meter buffer zone. In the event that a marine mammal is sighted within 500 meters of the construction zone, all construction activity shall be temporarily stopped until the marine mammal(s) is safely outside the 500 meter buffer zone. The onsite biological monitor shall have the authority to halt construction operation and shall determine when construction operations can proceed.</p>	<p>Qualified Marine Biologist selected by the Director of Recreation, Parks and Marine.</p>	<p>Ongoing during construction activities</p>

<b>Mitigation Measures</b>	<b>Responsible Party</b>	<b>Timing for Mitigation Measure</b>
<p><b>BIO-11</b> The biological monitor shall prepare an incident report of any marine mammal or sea turtle activity in the project area and shall advise the construction manager to have his crews be aware of the potential for additional sightings. The report shall be provided within 24 hours to the CDFG and the NMFS.</p>	<p>Qualified Marine Biologist selected by the Director of Recreation, Parks and Marine.</p>	<p>Ongoing during construction activities and within 24 hours of any marine mammal or sea turtle sighting</p>
<p><b>BIO-12</b> The Director of Parks, Recreation, and Marine will endeavor to conduct vegetation clearing and grading outside of the nesting season. If construction is proposed between February 1 and August 31 the Director of Parks, Recreation, and Marine shall ensure that a qualified biologist familiar with local avian species and the requirements of the MBTA and the California Fish and Game Code shall conduct a preconstruction survey for nesting birds no more than one week prior to construction. The survey will include the area of impact and suitable habitat up to 300 feet from the area of impact (as appropriate, given the anticipated nature of project impacts). The results of the survey will be recorded in a memo and submitted to the City within 48 hours. If the survey is positive, and the nesting species are subject to the MBTA or California Fish and Game Code, the memo shall be submitted to the CDFG to determine appropriate action. If the survey is negative or inconclusive, either due to ambiguous behavior by birds or overly dense vegetation, a qualified biologist shall be retained to monitor the site during initial vegetation clearing and grading, as well as during other activities that would have the potential to disrupt nesting behavior. The monitor shall be empowered by the City to halt construction work in the vicinity of the nesting birds if the monitor believes the nest is at risk of failure or the birds are excessively disturbed.</p>	<p>City of Long Beach Director of Parks, Recreation and Marine and the Director of Planning and Building.</p>	<p>One week prior to any construction activities if construction occurs between February 1 and August 31</p>
<p><b>BIO-13</b> The Director of Parks, Recreation and Marine shall ensure that the Project Biologist identifies, maps, and measures all trees that will be removed as a result of project activities. Ornamental trees removed as a result of open channel construction and reconfiguring of the sports fields within Marina Vista Park will be replaced on a 1:1 basis with California (or western) sycamores (<i>Platanus racemosa</i>). The replacement trees to be installed will be incorporated into the areas used as native upland restoration areas for the overall project improvements. The Director of Parks, Recreation and Marine will obtain the services of a qualified biologist to monitor and document the mitigation effort. Over the five-year period following tree installation, the following performance standards shall be included in the compensatory habitat maintenance plan for the Colorado Lagoon Improvement Project, which will be prepared concurrent with permit applications and subject to agency approval:</p> <ul style="list-style-type: none"> <li>• Increase in height by a minimum of 24 inches per year for the first five years.</li> <li>• Trees determined to be in good health annually by an ISO Certified arborist for the first five years following installation.</li> </ul>	<p>City of Long Beach Director of Parks, Recreation and Marine in conjunction with the Project Biologist and Contractor</p>	<p>Prior to any construction activities; five years following tree installation</p>

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<b>4.4 CULTURAL AND PALEONTOLOGICAL RESOURCES</b>		
<p><b>CULT-1</b> In conjunction with the submittal of applications for rough grading permits, the Director of Development Services, shall verify that a Los Angeles County certified archaeologist has been retained, shall be present at the pregrading conference, and shall establish procedures for temporarily halting or redirecting work if unrecorded archaeological resources are discovered during grading to permit the sampling, identification, and evaluation of archaeological materials as appropriate. If archaeological materials are identified during construction, standard professional archaeological practices shall be initiated to characterize the resources and mitigate any impacts to those resources. Included within this approach will be the development of a curation agreement for the permanent care of materials collected from the project. This agreement would be negotiated with a suitable repository.</p>	<p>City of Long Beach Director of Development Services</p> <p>Certified project archaeologist</p>	<p>Verification: Prior to issuance of grading permits</p> <p>Implementing Action: Ongoing during grading or ground disturbance activities</p>
<p><b>CULT-2</b> If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American, the County Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.</p>	<p>Construction Contractor</p>	<p>Ongoing during grading or ground disturbance activities</p>
<p><b>CULT-3</b> In accordance with the recommendations of the Gabrielino Tongva Indians of California Tribal Council and the Gabrielino/Tongva San Gabriel Band of Mission Indians, monitoring by a qualified Native American from either one or both of these groups shall take place when, and if, ground-disturbing activities occur in undisturbed native soil. The project archaeologist will notify the Director of Development Services immediately upon exposure of native soils, so that a qualified Native American monitor can be retained to monitor further excavation and/or grading.</p>	<p>City of Long Beach Director of Development Services</p> <p>Qualified Native American Monitor</p>	<p>Verification: Prior to issuance of grading permits</p> <p>Implementing Action: Ongoing during ground disturbance activities in undisturbed native soils</p>
<b>4.5 GEOLOGY AND SOILS</b>		
<p><b>GEO-1</b> Prior to issuance of building permits for the structural components of the proposed project, such as channel and bridge development and slope recontouring, the City of Long Beach Building Official (or designee) and the City of Long Beach Director of Public Works are required to review and approve final design plans to ensure that geotechnical hazard-resistant designs have been incorporated into the final engineering drawings in accordance with the most current California Building Code and the recommended seismic design parameters of the Structural Engineers Association of California. Ultimate site seismic design acceleration shall be determined by the project structural engineer during the project design phase.</p>	<p>City of Long Beach Building Official (or designee) and the City of Long Beach Director of Public Works</p>	<p>Prior to issuance of building permits for structural project components</p>



Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p><b>GEO-2</b> A project geotechnical report shall be submitted to the City of Long Beach Building Official prior to the issuance of permits to construct the proposed bridges and open channel. The geotechnical recommendations shall be incorporated into the design plans to the satisfaction of the Building Official and Director of Public Works.</p>	<p>City of Long Beach Building Official</p>	<p>Prior to issuance of building permits for construction of the proposed bridges and open channel</p>
<b>4.6 HAZARDS AND HAZARDOUS MATERIALS</b>		
<p><b>HAZ-1</b> <b>Pre-Demolition Surveys:</b> Prior to issuance of any demolition, grading, or street work permits for the project, a pre-demolition survey for polychlorinated biphenyls (PCBs) and lead-based paints (LBPs) will be performed. All inspections, surveys, and analyses shall be performed by appropriately licensed and qualified individuals in accordance with applicable regulations (e.g., ASTM E 1527-00, and 40 CFR, Subchapter R, Toxic Substances Control Act [TSCA], Part 716). All identified PCBs and LBPs shall be removed, handled, and properly disposed of by appropriately licensed contractors according to all applicable regulations during demolition of structures (40 CFR, Subchapter R, TSCA, Parts 745, 761, 763). Air monitoring shall be completed by appropriately licensed and qualified individuals in accordance with applicable regulations both to ensure adherence to applicable regulations and to provide safety to workers and the adjacent community (e.g., South Coast Air Quality Management District [SCAQMD]). The City of Long Beach Public Works Department shall provide documentation (including all required waste manifests, sampling and air monitoring analytical results, etc.) to the Department of Human and Health Services that abatement of any LBPs has been completed in full compliance with all applicable regulations and approved by the appropriate regulatory agency(ies) (40 CFR, Subchapter R, TSCA, Parts 716, 745, 761, 763, 795).</p>	<p>City of Long Beach Public Works Department /City of Long Beach Department of Human and Health Services; and licensed and qualified hazardous materials contractor(s)</p>	<p>Prior to issuance of any demolition, grading, or street work permits</p>
<p><b>HAZ-2</b> The City of Long Beach or their designated consultant will ensure that all utility pole-mounted transformers or pad mounted transformers within the project area will be inspected for leaks prior to disturbance or removal. Leaking transformers should be considered a potential for PCB hazard, unless tested, and should be handled accordingly.</p>	<p>City of Long Beach (or designated consultant)</p>	<p>Prior to disturbance/removal of any utility transformers</p>
<p><b>HAZ-3</b> <b>Health and Safety Plan:</b> Prior to issuance of any demolition, grading, or street work permits for the project, a Health and Safety Plan shall be prepared by the designated contractor and reviewed by the City of Long Beach or their designated consultant to ensure that all workers are in compliance with federal, State, and local regulations during construction. The Health and Safety Plan shall include:</p> <ul style="list-style-type: none"> <li>• A summary of all potential risks to construction workers, monitoring programs, maximum exposure limits for all site chemicals, and emergency procedures.</li> <li>• The identification of a Site Health and Safety Officer.</li> <li>• Methods of contact and the phone number, office location, and responsibilities of the Site Health and Safety Officer.</li> </ul>	<p>City of Long Beach (or designated consultant)/Construction contractor</p>	<p>Prior to issuance of any demolition, grading, or street work permits</p>

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<ul style="list-style-type: none"> <li>• Specification that the Site Health and Safety Officer shall be contacted immediately by the contractor should any potentially toxic chemical, other than the chemicals already disclosed, be detected above the exposure limits or if evidence of undocumented soil contamination is encountered during site preparation and construction.</li> <li>• Any potentially contaminated groundwater encountered during construction activities must be properly characterized and removed in accordance to all applicable State and federal policies.</li> </ul> <p>The Health and Safety Plan is to be provided to all contractors on the project site. The Health and Safety Plan is required to be amended as needed if different site conditions are encountered by the Site Health and Safety Officer.</p>		
<p><b>HAZ-4</b> <b>Soil Management Plan:</b> The Office of Environmental Health Hazard Assessment (OEHHA) shall review the removal workplan and shall list any additional requirements. Implementation of the workplan shall be overseen by the OEHHA for compliance with local, State, and federal regulations. Any additional sampling or contaminant material removal shall be subject to these same regulations. As part of the soil management plan, all disposal material will be characterized prior to disposal at a State landfill site. All hazardous waste will be disposed of in a Class I landfill. All other soils or solid waste will be disposed of at an unclassified landfill. In addition, during construction activities of the potentially impacted soils on site, monitoring will be required by the SCAQMD. This on-site monitoring will be performed in conformance with the SCAQMD Site Specific Rule 1166 Permit obtained by the City of Long Beach prior to commencement of grading activities. Typically a field instrument such as an organic vapor analyzer (OVA) will be used to record the concentrations of volatile organic compounds (VOCs) detected in potentially impacted soils while these soils are being excavated and/or treated on site. A daily log of the OVA readings, in addition to a copy of the Site-Specific Rule 1166 Permit, will be kept on site by the construction team for the duration of the work performed with these potentially impacted soils.</p> <p>The Site Health and Safety Officer shall contact the City of Long Beach if evidence of potential soil contamination is encountered during site preparation, demolition, or construction activities. Evidence of potential soil contamination may include discolored soils, soils that behave differently when compacted, and/or soils with an odor.</p> <p>After inspection by personnel from the City of Long Beach, these potentially impacted soils may be segregated. Soil samples collected and submitted for appropriate analyses and the soils may either be transported off site for appropriate disposal or may be treated on site with appropriate regulatory agency oversight.</p>	<p>The Office of Environmental Health Hazard Assessment (OEHHA)</p> <p>Site Health and Safety Officer</p>	<p>Verification: Prior to issuance of grading permits</p> <p>Implementing Action: Ongoing during construction activities of potentially impacted soils</p>

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p>If excavation of potentially impacted soils is necessary, the excavated sediments/soil will be passed through a sieve to ensure that debris 4-inches circumference and greater is removed from the material. During the sieving process a mixture of Simple Green and water (10:1) will be lightly applied to the excavated sediments/soils. The excavated sediments/soils will be evenly spread to facilitate the efforts of workers as they manually pick through the material to remove any debris 4-inches circumference and greater that managed to pass through the sieve. Upon completion of debris removal this material will be stockpiled and covered with plastic sheeting to comply with the Rule 1166 permit, if warranted, i.e., if the volatile organic compound (VOC) monitoring of the excavation, sieving process and stockpiles exceeds 50 milligrams per kilogram (mg/kg).</p>		
<b>4.7 HYDROLOGY AND WATER QUALITY</b>		
<p><b>WQ-1</b> During demolition, grading, and construction, the construction contractor shall ensure that the project complies with the requirements of the State General Construction Activity National Pollution Discharge Elimination System (NPDES) Permit. Prior to issuance of demolition and grading permits, the construction contractor shall demonstrate to the City that coverage has been obtained under the State General Construction Activity NPDES Permit by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board (SWRCB) and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) number or other proof of filing to the City Building Official.</p>	Construction Contractor	Ongoing during demolition, grading, and construction activities
<p><b>WQ-2</b> Prior to issuance of a grading permit, the City of Long Beach Building Official shall ensure that construction plans for the project include features meeting the applicable construction activity best management practices (BMPs) and erosion and sediment control BMPs published in the <i>California Storm water BMP Handbook–Construction Activity</i> or equivalent. The construction contractor shall submit a Storm Water Pollution Prevention Plan (SWPPP) to the City that includes the BMP types listed in the handbook or equivalent. The SWPPP shall be prepared by a civil or environmental engineer and will be reviewed and approved by the City Building Official prior to the issuance of any grading or building permits. The SWPPP shall reduce the discharge of pollutants to the maximum extent practicable using BMPs, control techniques and systems, design and engineering methods, and such other provisions as appropriate. A copy of the SWPPP shall be kept at the project site.</p> <p>The construction contractor shall be responsible for performing and documenting the application of BMPs identified in the SWPPP. The construction contractor shall inspect BMP facilities before and after every rainfall event predicted to produce observable runoff and at 24-hour intervals during extended rainfall events, except on days when no ongoing site activity takes place. Prestorm activities will include inspection of the major storm drain</p>	<p>City of Long Beach Building Official</p>          <p>Construction Contractor, to the satisfaction of the City Building Official</p>	<p>Verification: Prior to issuance of grading permits</p>          <p>Implementing Action: Ongoing during construction activities until all areas are vegetated</p>

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p>grate inlets and examination of other on-site surface flow channels and swales, including the removal of any debris that blocks the flow path. Poststorm activities will include inspection of the grate inlets for evidence of unpermitted discharges. The construction contractor shall implement corrective actions specified by the City Building Official, as necessary, at the direction of the City Director of Public Works. Inspection records and compliance certification reports shall be submitted to the City Director of Public Works on a monthly basis and shall be maintained for a period of three years. Inspections shall be scheduled monthly during the dry season and weekly during the wet season for the duration of project construction or until all areas are revegetated.</p>		
<p><b>WQ-3</b> The Construction Contractor shall ensure, and the Director of Development Services shall verify, that during cleaning/clearing of the culvert, the culvert shall be opened once every 2 weeks during the period of the greatest tidal fluctuations for 2 to 3 consecutive days to allow for maximum tidal exchange between Marine Stadium and Colorado Lagoon. The tidal exchange will occur during spring tides, if feasible, to allow for exchange during the period of greatest tidal fluctuation to achieve maximum water quality benefit. If, for erosion, flooding, or other engineering reasons, the Project Engineer determines that tidal exchange during spring tides is not feasible, an alternative tidal exchange regime will be implemented subject to approval by the Directors of Development Services and Parks, Recreation, and Marine Services. In addition to coordination with the tidal regime, two subsurface aeration systems shall be installed and utilized during construction activities that close off the tidal flow of the culvert. The use of silt screen around each end of the culvert shall be implemented during culvert flushing to minimize sediment/turbidity impacts to the adjacent receiving waters.</p>	<p>City of Long Beach Director of Development Services/Construction Contractor</p>	<p>Ongoing during cleaning/clearing of the culvert</p>
<p><b>WQ-4</b> The Director of Director of Health and Human Services shall continue to monitor bacteria levels in the Colorado Lagoon on a daily basis during cleaning of the culvert and during construction of the open channel in order to ensure the integrity of the water is maintained for swimming in Colorado Lagoon during construction activities associated with the culvert and open channel. If water quality exceeds the water contact recreational beneficial use water quality standards, the Directors of the Health and Human Services, Recreation and Marine Services, shall post the site and close the beach, if necessary.</p>	<p>City of Long Beach Director of the Health and Human Services and Director of Parks, Recreation and Marine Services</p>	<p>During construction activities associated with the culvert cleaning and open channel construction.</p>
<p><b>WQ-5</b> Prior to commencement of grading activities, the construction contractor shall determine, and report to the Director of Development Services and Public Works, whether dewatering of groundwater will be necessary during project construction and whether dewatering activities will require discharge to the storm drain system or surface waters. Discharge of dewatered groundwater to the storm drain system or surface waters will require compliance with the <i>Waste Discharge Requirement for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties</i> (Order No. R4-2003-0111, NPDES No. CAG994004), or subsequent</p>	<p>Construction contractor/ City of Long Beach Director of Development Services and Public Works</p>	<p>Prior to issuance of grading permits</p>

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p>permit. This will include submission of a Report of Waste Discharge (ROWD) and an application for coverage under the permit to the Los Angeles Regional Water Quality Control Board at least 45 days prior to the start of dewatering and compliance with all applicable provisions in the permit, including water sampling, analysis, and reporting of dewatering-related discharges.</p>		
<p><b>WQ-6</b> During dredging, the City Director of Development Services shall require that the contractor employs measures to control dispersion of contaminated sediments. Equipment used for dredging shall be modified or specifically designed to control the dispersion of sediments. In addition, the City shall require that contractor to implement specific measures as required by the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (RWQCB), and other regulatory agencies during the permitting process. The operations could include the use automatic rather than manual monitoring of the dredging operations, which would allow continuous data logging with automatic interpretation and automatic adjustments to the dredging operations for real-time feedback for the dredge operator. Automatic systems could also be used to monitor turbidity and other water quality conditions in the vicinity of the dredging operations and allow real-time adjustments by the dredging operators to control temporary water quality effects. The specific measures to be implemented would be subject to approval by the Corps, RWQCB, and other regulatory agencies during the permitting process.</p>	<p>City of Long Beach Director of Development Services</p> <p>Construction Contractor</p>	<p>Verification: During permitting process with regulatory agencies</p> <p>Implementing Action: Ongoing during dredging activities</p>
<p><b>WQ-7</b> Prior to the issuance of any construction permits, the City Director of Development Services shall verify that Best Management Practices (BMPs) for all dredging activities, such as a silt curtain, have been incorporated into project plans in order to reduce impacts to water quality to the maximum extent practicable. The construction contractor shall be responsible for performing and documenting the application of the BMPs.</p>	<p>City of Long Beach Director of Development Services</p> <p>Construction Contractor</p>	<p>Verification: Prior to issuance of construction permits</p> <p>Implementing Action: Ongoing during dredging activities</p>
<p><b>WQ-8</b> Prior to the issuance of any construction permits, the Director of Development Services shall demonstrate in the record that silt curtains for all construction activities involving excavation and grading directly adjacent to or within the Lagoon waters, have been incorporated into project plans in order to reduce impacts to water quality to the maximum extent practicable. The construction contractor shall be responsible for performing and documenting the application of BMPs, such as the silt curtain, identified in this document.</p>	<p>City of Long Beach Director of Development Services</p> <p>Construction Contractor</p>	<p>Verification: Prior to issuance of construction permits</p> <p>Implementing Action: Ongoing during excavation and grading activities</p>
<p><b>WQ-9</b> The Director of Health and Human Services shall continue to monitor bacteria levels in the Colorado Lagoon on a weekly basis. If water quality exceeds the water contact recreational beneficial use water quality standards, the Directors of the Health and Human Services, and Parks, Recreation and Marine Services, shall post the site and close the beach, if necessary.</p>	<p>City of Long Beach Director of Health and Human Services and Director of Parks,</p>	<p>Ongoing during and after construction activities</p>

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
In addition, the Directors of the Department of Health and Parks, Recreation and Marine Services, and Development Services shall review the monitoring data on an annual basis and evaluate the water contact recreational beneficial use of the Lagoon.	Recreation and Marine Services	
<b>4.8 LAND USE</b>		
None required		
<b>4.9 NOISE</b>		
<b>NOI-1</b> The City of Long Beach (City) Noise Control Officer shall ensure that the construction contractor limits construction activity, which produces loud or unusual noise that annoys or disturbs a reasonable person of normal sensitivity to between the hours of 7:00 p.m. and 7:00 a.m. Monday through Friday and 9:00 a.m. and 6:00 p.m. on Saturdays and no construction activities on Sundays and federal holidays in accordance with City standards.	City of Long Beach Noise Control Officer	Ongoing during construction activities
<b>NOI-2</b> During all site excavation and grading, the project contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards, as documented in construction plans and verified by the City Building Official.	Construction Contractor/City of Long Beach Building Official	Ongoing during site excavation and grading
<b>NOI-3</b> The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site, as documented in construction plans and verified by the City Building Official.	Construction Contractor/City of Long Beach Building Official	Ongoing during all construction activities
<b>NOI-4</b> The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction, as documented in construction plans and verified by the City Building Official.	Construction Contractor/City of Long Beach Building Official	Ongoing during all construction activities
<b>NOI-5</b> Prior to issuance of a grading permit, the Construction Contractor shall provide evidence to the City of Long Beach Building Official (or designee) that on-site sensitive land uses, such as the on-site preschool and the beaches, shall be closed or relocated when construction activities occur within 315 feet or pile driving occurs within 706 feet.	City of Long Beach Building Official (or designee)  Construction Contractor	Verification: Prior to issuance of grading permits  Implementing Action: Ongoing during construction activities
<b>NOI-6</b> Prior to issuance of a grading permit, the Director of Parks, Recreation, and Marine shall hold a community pre-construction meeting, in concert with the Construction Contractor, to provide information regarding the construction schedule. The construction schedule information shall include the duration of each construction activity and the specific location, days, frequency, and duration of the pile driving that will occur during both Phase 1 and Phase 2 of the project construction. Public notification of this meeting shall be done in the same manner as the Notice of Availability mailings for this Draft Environmental Impact Report (EIR).	City of Long Beach Director of Parks, Recreation, and Marine  Construction Contractor	Prior to issuance of grading permits

Mitigation Measures		Responsible Party	Timing for Mitigation Measure
<b>4.10 PUBLIC SERVICES AND UTILITIES</b>			
<b>PSU-1</b>	Upon completion of construction of the open channel within Marina Vista Park, the Long Beach Fire Department and the Long Beach Department of Parks, Recreation, and Marine shall assess and monitor lifeguard services, and re-allocate staff as warranted, at the Lagoon and Marina Vista Park to ensure adequate staffing.	City of Long Beach Fire Department and the City of Long Beach Department of Parks, Recreation, and Marine	Upon completion of the construction of the open channel
<b>PSU-2</b>	During the irrigation and establishment of newly vegetated areas at the Lagoon, the Long Beach Department of Parks, Recreation, and Marine shall coordinate with the Long Beach Water Department (LBWD) to develop a schedule for the use of reclaimed water for temporary irrigation purposes at the Colorado Lagoon. The temporary irrigation of Lagoon areas shall occur during non-peak water usage times so as to ensure that the proposed project does not exacerbate the existing intermittent nighttime reclaimed water pressure decreases.	City of Long Beach Department of Parks, Recreation, and Marine/ City of Long Beach Water Department	During irrigation and establishment of newly vegetated areas
<b>PSU-3</b>	A solid waste management plan for the proposed project shall be developed by the City of Long Beach Department of Parks, Recreation, and Marine, and submitted to the City of Long Beach Environmental Services Bureau for review and approval prior to issuance of permits. The plan shall identify methods to promote recycling and reuse of construction materials as well as safe disposal consistent with the policies and programs outlined by the City of Long Beach. The plan shall identify methods of incorporating source reduction and recycling techniques into project construction and operation in compliance with State and local requirements such as those described in Chapter 14 of the California Code of Regulations and AB 939.	City of Long Beach Department of Parks, Recreation, and Marine, and City of Long Beach Environmental Services Bureau	Prior to the issuance of permits
<b>4.11 RECREATION</b>			
<b>REC-1</b>	The City of Long Beach Director of Parks, Recreation, and Marine will ensure that during construction activities affecting Colorado Lagoon (Lagoon) (e.g., dredging, recontouring the Lagoon side slopes, revegetation, storm drain improvements, and development of the walking trail and viewing platform), City Department of Parks, Recreation, and Marine staff will provide local residents and neighborhood groups with information regarding the availability of other nearby City parks and facilities that offer swimming, picnicking, and other passive recreation opportunities enjoyed at the Lagoon. Information regarding Lagoon closures will also be made available on the City's Web site, through outreach to the neighborhood groups, and other means as appropriate.	City of Long Beach Director of Parks, Recreation, and Marine	Ongoing during construction activities affecting Colorado Lagoon
<b>REC-2</b>	The City of Long Beach Director of Parks, Recreation, and Marine will ensure that during construction activities affecting Marina Vista Park (such as culvert improvements, channel construction, and activities affecting the sports fields), City Department of Parks, Recreation, and Marine staff will determine what specific neighborhood groups and/or league uses of Marina Vista Park will be temporarily affected by construction activity, and will coordinate with these groups and local residents to identify other nearby available City parks and other facilities to meet the temporarily displaced recreation uses, including the Summer Concert	City of Long Beach Director of Parks, Recreation, and Marine	Ongoing during construction activities affecting Marina Vista Park

<b>Mitigation Measures</b>	<b>Responsible Party</b>	<b>Timing for Mitigation Measure</b>
Series. City staff also will provide information to City residents when swimming is closed at the Lagoon as a result of project construction activities on the City's Web site, through outreach with neighborhood groups, and other means as appropriate.		
<b>4.12 TRAFFIC AND CIRCULATION</b>		
<b>TR-1</b> Prior to the issuance of a grading permit for each of the two construction phases, the City of Long Beach shall, under the direction of the City of Long Beach Traffic Engineer, design and implement a construction area traffic management plan. The plan shall be designed by a registered Traffic Engineer and shall address traffic control for any street closure, detour, or other disruption to traffic circulation and public transit routes. The plan shall identify the routes that construction vehicles will use to access the site, the hours of construction traffic, traffic controls and detours, and off-site vehicle staging areas. The plan shall also require the City to keep all haul routes clean and free of debris including, but not limited to, gravel and dirt.	City of Long Beach Traffic Engineer	Prior to issuance of grading permits for each construction phase



## **8.0 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS**

### **8.1 INTRODUCTION**

Section 15126.2(b) of the State California Environmental Quality Act (CEQA) Guidelines requires that an Environmental Impact Report (EIR) describe significant environmental impacts that cannot be avoided, including those effects that can be mitigated but not reduced to a less than significant level. The following is a summary of the impacts that are considered significant and unavoidable. These impacts are also described in detail in Section 4.2, Air Quality, and Section 4.9, Noise. No other impacts resulting from the proposed project have been determined to be significant unavoidable adverse impacts.

### **8.2 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS**

#### **8.2.1 Air Quality**

After compliance with South Coast Air Quality Management District (SCAQMD) rules and regulations and the implementation of all feasible mitigation measures, the proposed project would have significant unavoidable short-term construction air quality impacts (odors and nitrogen oxides [NO<sub>x</sub>, a precursor to ozone (O<sub>3</sub>)]). The primary source of the emissions is the operation of construction equipment and the decomposition of organic material dredged from the Colorado Lagoon (Lagoon).

While the adherence to SCAQMD rules and regulations would reduce impacts from construction activity, construction equipment/vehicle emissions would exceed the SCAQMD-established daily emissions threshold for NO<sub>x</sub>. Therefore, impacts would remain significant and adverse. No feasible mitigation measures beyond compliance with SCAQMD rules and regulations are available to offset this significant impact. However, the emissions from the proposed project's construction activities would not exceed SCAQMD's localized significance thresholds (LSTs), and significant adverse air quality impacts related to LSTs would not occur.

Heavy-duty equipment in the project area during construction would emit odors. These odors would be limited to the time that construction equipment is operating during the construction period for the project. Implementation of the mitigation measures listed in Section 4.2 would reduce impacts associated with objectionable odors from the operation of diesel-powered construction equipment. However, given the duration of construction activity and the proximity of the sensitive receptors, these impacts may still be considered significant after mitigation.

During the dredging phases of the proposed project, the dredged materials will be spread out on site to dry before being hauled off site. It is anticipated that the dredged sediment and materials from the culvert cleaning activities will contain organic materials and that the decomposition of the organic matter when exposed to air may generate unpleasant odors. Therefore, the dredged and culvert material may result in odor impacts at the adjacent and nearby sensitive land uses. Implementation of Mitigation Measure HAZ-4 (in Section 4.6) requires the application of a mixture of Simple Green and

water to the excavated sediment as part of an overall Soil Management Plan. Simple Green accelerates the decomposition process and will have the overall result of shortening the duration of odor emissions. However, since it is difficult to predict the nature and duration of odor emissions from decomposition, it is concluded that the odor impacts would remain significant and unavoidable.

The proposed project would also contribute to adverse cumulative air quality impacts because construction activity would result in additional emissions of pollutants, which may exacerbate ambient levels currently in excess of applicable national ambient air quality standards (NAAQS) or California ambient air quality standards (CAAQS) for O<sub>3</sub>. Therefore, the project-level and cumulative short-term construction impacts of the proposed project would remain significant and unavoidable.

### 8.2.2 Noise

Construction of the proposed project improvements would result in a temporary periodic increase in existing ambient noise levels in the project area. Pile driving will be the noisiest activity on site, generating up to 93 dBA L<sub>max</sub> (maximum sound level measured in A-weighted decibels) at a distance of 50 feet (ft). Other construction equipment used on site, such as loaders and backhoes, would generate up to 86 dBA L<sub>max</sub> at a distance of 50 ft. Both pile driving and standard construction activities would generate noise levels in excess of the City of Long Beach (City) daytime exterior noise standards within 315 ft of standard construction activities and within 706 ft of pile driving. Therefore, due to the proximity between construction activities and the existing sensitive receptors (on-site preschool and adjacent residential land uses), project-related construction activities would result in a short-term significant noise impact that would be intermittent and temporary. The City of Long Beach Municipal Code allows elevated construction-related noise levels as long as the construction activities are limited to the hours specified. Hence, adherence to the City's noise regulations and implementation of the mitigation measures provided in Section 4.9 of the EIR would reduce construction noise impacts to sensitive receptors; however, the construction activities would still generate noise levels in excess of the City's daytime exterior noise standard of 70 dBA L<sub>max</sub>. Therefore, the project-related construction noise impacts, although short-term in duration, would remain significant and unavoidable.