Little Corona Infiltration Project

LEAD AGENCY:

City of Newport Beach
100 Civic Center Drive
Newport Beach, CA 92660
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PREPARED BY:

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This document is designed for double-sided printing to conserve natural resources.
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1.0 INTRODUCTION

The proposed Little Corona Infiltration System (herein referenced as the “project”) involves the addition of a subsurface infiltration system on Little Corona Beach at the outlet of Buck Gully, within the City of Newport Beach (City). Over the years, the City has noted unpleasant nuisance flow accumulation at the Little Corona Beach during dry weather immediately where Buck Gully Creek discharges onto the beach. Buck Gully Creek is listed on the State Water Resources Control as being impaired due to bacteria, specifically total coliform and fecal coliform. According to the City’s Newport Coast Watershed Management Plan, Buck Gully Creek Reach 1 (the project area) had the highest impact score resulting in this subwatershed being the focus of key project integration strategies. The Plan identified that Reach 1, with an impact score of 240, required the most significant and focused works including targeted outreach, aggressive street sweeping, and a significant erosion control project at the mouth of Buck Gully. Since the Plan was prepared in 2007, the City has accomplished many of its goals in terms of outreach and the successful installation of the Buck Gully Restoration Project. As a key anchor to the City’s overall water quality program, the City has proposed the Little Corona Infiltration System in order to help to eliminate these nuisance flows that are discharged from the creek and flow across the popular Little Corona Beach. As such, the system would capture and infiltrate nuisance water (dry weather) surface flows diverted from Buck Gully at the existing weir structure. The proposed project would result in water quality benefits including a reduction of trash, debris, sediment, pollutant levels, and hydrocarbons flowing onto Little Corona Beach. Additional benefits include a reduction of undesirable odors and an increase of aesthetic quality of Little Corona Beach. Following a preliminary review of the proposed project, the City has determined that it is subject to the guidelines and regulations of the California Environmental Quality Act (CEQA). This Initial Study addresses the direct, indirect, and cumulative environmental effects of the project, as proposed.

1.1 STATUTORY AUTHORITY AND REQUIREMENTS

In accordance with Sections 15051 and 15367 of the California Code of Regulations (CCR), the City is identified as the Lead Agency for the proposed project. Under the CEQA (Public Resources Code Section 21000-21177) and pursuant to Section 15063 of the CCR, the City is required to undertake the preparation of an Initial Study to determine if the proposed project would have a significant environmental impact. If, as a result of the Initial Study, the Lead Agency finds that there is evidence that any aspect of the project may cause a significant environmental effect, the Lead Agency shall further find that an Environmental Impact Report (EIR) is warranted to analyze project-related and cumulative environmental impacts. Alternatively, if the Lead Agency finds that there is no evidence that the project, either as proposed or as modified to include the mitigation measures identified in the Initial Study, may cause a significant effect on the environment, the Lead Agency shall find that the proposed project would not have a significant effect on the environment and shall prepare a Negative Declaration. Such determination can be made only if “there is no substantial evidence in light of the whole record before the Lead Agency” that such impacts may occur (Section 21080(c), Public Resources Code).

The environmental documentation, which is ultimately selected by the City in accordance with CEQA, is intended as an informational document undertaken to provide an environmental basis for subsequent discretionary actions upon the project. The resulting documentation is not, however, a policy document and its approval and/or certification neither presumes nor mandates any actions on the part of those agencies from whom permits and other discretionary approvals would be required.

The environmental documentation and supporting analysis is subject to a public review period. During this review, public agency comments on the document relative to environmental issues should be addressed to the City. Following review of any comments received, the City will consider these
LITTLE CORONA INFILTRATION PROJECT
Initial Study/Mitigated Negative Declaration

comments as a part of the project’s environmental review and include them with the Initial Study documentation for consideration by the City.

1.2 PURPOSE

Section 15063 of the CEQA Guidelines identifies specific disclosure requirements for inclusion in an Initial Study. Pursuant to those requirements, an Initial Study shall include:

- A description of the project, including the location of the project;
- Identification of the environmental setting;
- Identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries;
- Discussion of ways to mitigate significant effects identified, if any;
- Examination of whether the project is compatible with existing zoning, plans, and other applicable land use controls; and
- The name(s) of the person(s) who prepared or participated in the preparation of the Initial Study.

1.3 CONSULTATION

As soon as the Lead Agency (in this case, the City) has determined that an Initial Study would be required for the project, the Lead Agency is directed to consult informally with all Responsible Agencies and Trustee Agencies that are responsible for resources affected by the project, in order to obtain the recommendations of those agencies as to whether an EIR or Negative Declaration should be prepared for the project. Following receipt of any written comments from those agencies, the Lead Agency considers any recommendations of those agencies in the formulation of the preliminary findings. Following completion of this Initial Study, the Lead Agency initiates formal consultation with these and other governmental agencies as required under CEQA and its implementing guidelines.

1.4 INCORPORATION BY REFERENCE

The following documents were utilized during preparation of this Initial Study, and are incorporated into this document by reference. These documents are available for review at the City of Newport Beach Community Development Department located at 100 Civic Center Drive, Newport Beach, California, 92660.

- City of Newport Beach General Plan (adopted on July 25, 2006). The City of Newport Beach General Plan (General Plan) provides a general long-term approach for maintaining and improving the quality of life in the community and the resources of the community, whether man-made or natural. It serves as a tool and frame of reference for use by City officials and citizens. Other public agencies use the General Plan in determining the required capacity and location of public facilities and services needed to serve the City’s population. The General Plan includes a total of 10 different elements that incorporate specific goals and policies to guide growth and preserve the qualities within the City that define the natural and built environment. These 10 elements consist of:
Since original adoption of the General Plan in 2006, the City has amended or updated elements to further refine the City's vision for its own long-term physical development. The elements contained in the General Plan are those required by the California Government Code Section 65302, in addition to four optional elements (Harbor and Bay, Historical Resources, Recreation, and Arts and Cultural) as permitted by California Government Code Section 65303.

- City of Newport Beach General Plan Final Environmental Impact Report (July 2006). The City of Newport Beach General Plan Final Environmental Impact Report (General Plan EIR) reviews the existing conditions of the City, analyzes potential environmental impacts from implementation of the General Plan, identifies policies from the proposed General Plan that serve to reduce and minimize impacts, and identifies additional mitigation measures, if necessary, to reduce potentially significant impacts of the General Plan. Based on analysis provided within the General Plan EIR, buildout of the General Plan was found to result in significant and unavoidable impacts related to aesthetics and visual quality, air quality, cultural resources, noise, population and housing, and transportation/traffic.

- City of Newport Beach Municipal Code and Zoning Ordinance. The City of Newport Beach Municipal Code provides regulations for governmental operations, development, infrastructure, public safety, and business operations within the City. Title 20, Planning and Zoning, of the City of Newport Beach Municipal Code represents the City's Zoning Ordinance. The Zoning Ordinance is intended to promote the growth of the City in an orderly manner and to promote and protect the public health, safety, peace, comfort and general welfare within the City. It is also intended to protect the character and social and economic vitality of all districts within the City, and to assure the orderly and beneficial development of such areas.

- City of Newport Beach Local Coastal Program Coastal Land Use Plan. The City of Newport Beach Local Coastal Program Coastal Land Use Plan (CLUP), approved by the California Coastal Commission on October 13, 2005 and adopted on December 13, 2005 by Resolution Number 2005-64, sets forth goals, objectives, and policies that govern the use of land use and water in the coastal zone within the City of Newport Beach and its sphere of influence, with the exception of Newport Coast and Banning Ranch. The provisions and standards contained in this Plan are cited throughout this Initial Study/Environmental Checklist.
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2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION

Regionally, the project site is located in the City of Newport Beach, County of Orange; refer to Exhibit 1, Regional Vicinity. Locally, the project site is located immediately adjacent to the Pacific Ocean on Little Corona Beach at the lower mouth of Buck Gully Canyon; refer to Exhibit 2, Site Vicinity. The project is bound by East Coast Highway (PCH) to the north, Evening Canyon Road to the east, and Hazel Drive to the west. The proposed infiltration system would be installed underground near the existing beach access path.

2.2 ENVIRONMENTAL SETTING

Located within Corona del Mar State Beach, Little Corona del Mar Beach offers a tranquil environment for residents and visitors alike. Access to the beach is provided via a beach access path (also known as Glen Drive) trending southeast from the intersection of Poppy Avenue and Ocean Boulevard. Public vehicular access is not provided via Glen Drive, rather Glen Drive is used by various departments associated with the City of Newport Beach including lifeguards, emergency, and maintenance vehicles. Little Corona del Mar beach is relatively small and secluded and is flanked on both sides with rocky reefs that offer the spectacular diving well known to local divers. The area also offers tide pools which are a primary attraction for beach users.

The proposed project would consist of the installation of a subsurface infiltration system on Little Corona Beach at the outlet of Buck Gully, as part of the City’s Watershed Management Plan; refer to Exhibit 3, Project Site. The project will help to eliminate nuisance water flows that are discharged across Little Corona Beach during the dry season. In addition, the proposed project would result in water quality benefits including a reduction of trash, debris, sediment, pollutant levels, and hydrocarbons flowing onto Little Corona Beach. Access to Little Corona Beach is provided from Poppy Avenue, which is a 15 foot wide asphalt concrete (AC) access road that runs at approximately 10 percent grade down and ends immediately west of the existing weir wall. The existing weir wall was built as part of the City of Newport Beach’s Buck Gully/Little Corona Beach Outlet modification performed in 1998. The existing concrete weir spans across the entire Buck Gully channel outlet providing protection against damage from both small and large storm events. Additional protection is provided by rock riprap installed on the downstream side of the low flow weir notch and on the upstream and downstream sides of the ends of the weir wall. The wall is constructed with a 10 foot low flow notch centered at the channel low flow thalweg. There is additional existing rock riprap in the area downstream of the low flow notch, which serves to provide additional scour protection. Water flows across the Buck Gully Channel weir wall into Little Corona Beach.

Surrounding uses include:

- Buck Gully (undeveloped land) to the north;
- Little Corona Beach and the Pacific Ocean to the south; and
- Little Corona Beach and Single family residential to the east and west.
2.3 EXISTING GENERAL PLAN AND ZONING

The City’s General Plan designated the project site area as Parks and Recreation (PR), and the City’s Zoning Code designated the project site as Parks and Recreation (PR). Surrounding uses are primarily designated by the General Plan and Zoning Code as Single-Unit Residential Detached.

2.4 PROJECT BACKGROUND

Over the years, the City of Newport Beach has noted unpleasant nuisance flow accumulation at the Little Corona Beach during dry weather immediately where Buck Gully Creek discharges onto the beach. Buck Gully Creek is listed on the State Water Resources Control as being impaired due to bacteria, specifically total coliform and fecal coliform. According to the City’s Newport Coast Watershed Management Plan, Buck Gully Creek Reach 1 (the project area) had the highest impact score resulting in this subwatershed being the focus of key project integration strategies. The Plan identified that Reach 1, with an impact score of 240, required the most significant and focused works including targeted outreach, aggressive street sweeping, and a significant erosion control project at the mouth of Buck Gully. Since the Plan was prepared in 2007, the City has accomplished many of its goals in terms of outreach and the successful installation of the Buck Gully Restoration Project. As a key anchor to the City’s overall water quality program, the City has proposed the Little Corona Infiltration System in order to help to eliminate these nuisance flows that are discharged from the creek and flow across the popular Little Corona City Beach during the dry season. As such, this project is an integral part of the City’s Newport Coast Watershed Management Plan and water quality improvement efforts.

2.5 PROJECT CHARACTERISTICS

The proposed project would consist of the installation of a diversion structure at the upstream side of the existing concrete weir at the Buck Gully Channel discharge. The diverted water flow will be conveyed through a proposed 8 inch (") polyvinyl chloride (PVC) pipe into a 48" continuous deflection system (CDS) that will serve to remove sediment. The flows from the CDS unit will be directed into a proposed 5,202 square-foot underground infiltration system. Nearly all improvements would be located below ground surface. The primary components of the project are as follows:

- **Diversion Vault**: A reinforced concrete vault is proposed upstream of the existing Buck Gully concrete weir wall; refer to Exhibit 4, Site Plan. The system will be designed with a capacity to divert dry season flow of approximately 0.77 cubic feet per second (cfs). The structure will include a 15-foot long concrete wall located 2 feet upstream, parallel to the existing weir wall and two side walls joining the existing wall at the limits of the existing low flow weir notch. The vault bottom will be 12-foot thick reinforced concrete slab. The proposed vault will be 2 feet deep on the upstream side and 3.5 feet deep on the downstream side. The vault top will be an upstream slanting stainless steel grate. Water flowing from the channel will fall through the screen and large debris will slide down and fall upstream of the proposed 2-foot wall to be washed out during large storm events.

A 4-foot wide by 1.5-foot high opening on the downstream side of the vault will be added by saw-cutting through the existing wall. The opening will be sealed using a removable slide gate that can be opened as needed, to remove accumulated sand from inside the vault. Flow that enters the vault will be conveyed through an 8-inch PVC pipe that will run west along the upstream side of the existing weir wall. The invert of the 8-inch pipe will be set at 1-foot above the vault bottom to allow for sand that passes through the grated top to fall to the bottom below the pipe invert, to be swept downstream through the 4-foot by 1.5 foot opening when the slide gate is opened as part of regular vault maintenance.
CONSTRUCTION NOTES

1. Construct concrete excavation vault with top grating per Spring Std. Plan No. 391-2 and details on Sheet 0
2. Install 8" schedule PVC diversion line
3. Construct Atlantic single fluid tank infiltration system per manufacturer's specifications and details on Sheet 0
4. Install continuous deflection system (CDS) unit per manufacturer's specifications and details on Sheet 7
5. Protect in place
6. Install 8" PVC Schedule 40 intake line
7. Construct Interim's 6000 series slide gate per manufacturer's specifications and details on Sheet 7
8. Construct CDS unit concrete pad per details on Sheet 7
9. Construct 8" "Type 6" PPC Corp. per City of Newport Beach Standard CDS, No. 725
10. Core drill circular hole for 8 PVC on existing west wall
11. Remove invasive plants & restore native plants

NOT TO SCALE
Michael Baker International
0076-JR 140143

LITTLE CORONA INFILTRATION SYSTEM PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION
Site Plan
Exhibit 4
• **Continuous Deflection System (CDS):** Dry season flows diverted from Buck Gully Channel will be directed into the CDS. The CDS hydrodynamic separator uses swirl concentration and patented continuous deflective separation to screen, separate and trap trash, debris, sediment, and hydrocarbons from stormwater runoff. CDS captures and retains 100% of floatables and neutrally buoyant debris 2.4 millimeters (mm) or larger, and effectively removes sediment. The treated dry weather flows will be conveyed through a proposed 8-inch PVC downstream into a proposed filtration system. The system was sized in consultation with the manufacturer and has a capacity above the proposed dry weather flows.

- **Flo-tank Filtration System:** This is the underground filtration system that receives the debris free dry season flows, conveyed using the 8-inch PVC from the CDS unit. The system will serve as an underground storage that allows water to infiltrate into the ground. The system is designed to infiltrate dry season flows within 24 hours. The flow tank infiltration system provides a void space of over 90% and achieves the same storage capacity as other underground tank systems with a smaller footprint. The system is made of Polypropylene (PP), and the lightweight design will make installation comparatively quicker, safer and cheaper. The system will be installed with inspection ports to allow for flushing out of any sediment, if needed. The proposed module for use is the double flo-tank modular system that measures 16 inches by 26.77 inches. Installation will be located on the south side of the existing life guard tower, and will provide storage of approximately 8,432 cubic feet. The total beach area used by the system is approximately 3,182 square feet. Based on the geotechnical investigation, the existing soils have an infiltration rate of 2.48 inches/hour at the installation depth, which is high enough to allow infiltration of the entire tank capacity at design flow rate within less than 14 hours.

The City examined various alternatives and determined that the project is the least damaging feasible alternative for several reasons. First, as noted in the Section 2.4, Project Background, the purpose of the proposed project is to significantly reduce, divert, and treat dry weather flows that discharge onto Little Corona Beach that are known to contain elevated levels of bacteria including total coliform and fecal coliform. Thus, a no project alternative and project locations outside of Buck Gully Canyon would not address the purpose and need of the proposed project. As for the specific location of the diversion structure (attached to the upstream side of the existing concrete weir), the City examined alternative designs including shifting the weir to the west as well as adding to the downstream side of the concrete weir structure to reduce impacts to on-site wetlands. It was determined that shifting the diversion structure to the west would not be least damaging to the environment in terms of jurisdictional impacts as it would result in more modifications to the existing concrete weir, a larger construction footprint, and significantly elevated project costs. Therefore, the proposed project is the least damaging feasible alternative.

With implementation of the improvements described above, existing nuisance flows at Little Corona Beach from the Buck Gully Channel discharge would be reduced significantly and allowed to infiltrate into the ground within an underground filtration system. Water quality benefits of the proposed project include a reduction of trash, debris, sediment, pollutant levels, and hydrocarbons flowing onto Little Corona Beach. Additional benefits include a reduction of undesirable odors and an increase of aesthetic quality of Little Corona Beach.

2.5.1 **CONSTRUCTION/PHASING**

It is anticipated that storm, surface, ground, and other waters would be encountered at various times and locations during construction. Such waters may interfere with the Contractor’s operations and may cause damage to adjacent or downstream private and/or public property by flooding, lateral erosion, sedimentation, or pollution if not properly controlled by the Contractor. The Contractor shall conduct all operations in such a manner that storm, surface, ground, or other waters may proceed along the existing drainage course and across the existing Buck Gully Channel weir wall. This flow into the ocean
would be maintained at all times and diversion of water around the construction site would be required in order to protect construction in progress. The diversion would include the construction of a small cofferdam at the upstream limits of the work area, and the use of a plastic storm drain pipe to convey flows through the site. The diversion pipe would be sized to convey the anticipated daily flow through the site.

Surface runoff water, including all water used during operations, containing mud, silt or other deleterious material due to the construction of this project, would be treated by filtration or retention in settling basin(s) sufficient to prevent such material from migrating onto the beach or into the ocean. During the course of water control, the Contractor would conduct construction operations to protect waters from being polluted with fuels, oils, bitumens, or other harmful materials, and would be responsible for removing said materials in the event protective measures are not effective. Construction staking would occur within the limits of the construction/temporary easement.

Currently, the existing access path off of Poppy Court provides public pedestrian access to Little Corona Beach; however, it does not provide public vehicular access. Staging of equipment and materials would occur within the construction easement, which would be located within the vicinity of the project site; refer to Exhibit 5, Construction Staging Plan. Construction and permanent access would be taken from the existing access road off of Poppy Court. During construction, pedestrian access to the public beach would be maintained at all times. Vehicular access would also be maintained during construction. Upon completion of construction, the access road would be unaffected. The construction period is anticipated to take place within a 3 month period and endure approximately 45 working days. Construction will occur within the City's allowable hours for construction activities, Monday through Friday from 8:00 A.M. to 5:00 P.M.

2.5.2 REQUIRED MAINTENANCE

Maintenance of the infiltration project is anticipated to occur a minimum of four (4) times per year on a regularly scheduled basis. The maintenance will include cleaning the intake rack and flushing any sediment from the diversion vault. The CDS unit will have all trash removed, and sediment vacuumed from the well. The Flo-Tank vaults will be flushed with water and vacuumed to remove any sediment in the system. All other components will be inspected to ensure that there are no visible problems with the system. Additional maintenance to clear the intake rack and flush the diversion vault may be required after large storm events.

2.6 PERMITS AND APPROVALS

The proposed project would require permits and approvals from the City of Newport Beach and other agencies prior to construction. These permits and approvals are described below, and may change as the project entitlement process proceeds.
CONSTRUCTION NOTES & QUANTITIES

<table>
<thead>
<tr>
<th>CONSTRUCTION NOTES</th>
<th>UNIT</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Construct concrete diversion vault with top grating per SPPWC STD. PLAN NO. 371-7 and details on Sheet 7.</td>
<td>EA</td>
<td>1</td>
</tr>
<tr>
<td>2. Install 8&quot; schedule PVC diversion line</td>
<td>LF</td>
<td>78</td>
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<tr>
<td>3. Construct all plants to single flow tank infiltration system per manufacturer's specifications and details on Sheet 6.</td>
<td>EA</td>
<td>1</td>
</tr>
<tr>
<td>4. Install continuous deflection system (CDS) unit per manufacturer's specifications and details on Sheet 7.</td>
<td>EA</td>
<td>1</td>
</tr>
<tr>
<td>5. Protect in place</td>
<td>EA</td>
<td>8</td>
</tr>
<tr>
<td>6. Install 8&quot; PVC schedule 40 intake line</td>
<td>LF</td>
<td>13</td>
</tr>
<tr>
<td>7. Construct Waterman's 90050 series slide gate per manufacturer's specifications and details on Sheet 6.</td>
<td>EA</td>
<td>1</td>
</tr>
<tr>
<td>8. Construct CDS unit concrete pad per details on Sheet 7.</td>
<td>CT</td>
<td>3</td>
</tr>
<tr>
<td>9. Construct 6&quot; &quot;Type B&quot; P.C.C. curb per City of Newport Beach standard Dwg. No. 10504.</td>
<td>LF</td>
<td>35</td>
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<tr>
<td>10. Core drill circular hole for 6&quot; PVC on existing weir wall.</td>
<td>EA</td>
<td>1</td>
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<tr>
<td>11. Remove non-native plants &amp; restore native plants</td>
<td>EA</td>
<td>1</td>
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LITTLE CORONA INFILTRATION SYSTEM PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION
Construction Staging Plan
Exhibit 5
City of Newport Beach:

- California Environmental Quality Act Clearance
- Grading/Building Permits

U.S. Army Corps of Engineers:

- Section 404 Nationwide Permit

Regional Water Quality Control Board

- Section 401 Water Quality Certification

California Department of Fish and Wildlife

- Section 1602 Streambed Alteration Agreement

California Coastal Commission:

- Coastal Development Permit
3.0 INITIAL STUDY CHECKLIST

3.1 BACKGROUND

1. Project Title: Little Corona Infiltration Project

2. Lead Agency Name and Address:
   City of Newport Beach
   100 Civic Center Drive
   Newport Beach, CA 92660

3. Contact Person and Phone Number:
   John Kappeler, P.E.
   Senior Civil Engineer
   949.644.3218

4. Project Location: Regionally, the project site is located in the City of Newport Beach, County of Orange. Locally, the project site is located immediately adjacent to the Pacific Ocean, on Little Corona Beach at the lower mouth of Buck Gully Canyon. The project site is bound by East Coast Highway to the north, Evening Canyon Road to the east, and Hazel Drive to the west. The proposed infiltration system would be installed underground near the existing beach access path.

5. Project Sponsor’s Name and Address:
   City of Newport Beach
   100 Civic Center Drive
   Newport Beach, CA 92660

6. General Plan Designation: The General Plan designation is Parks and Recreation (PR) under the City of Newport Beach General Plan.

7. Zoning: The zoning designation is Parks and Recreation (PR), under the City of Newport Beach Zoning Code.

8. Description of the Project:
   The proposed project would consist of the installation of a diversion structure at the upstream side of the concrete weir. The diverted water flow will be conveyed through a proposed 8 inch PVC pipe into a 48 inch continuous deflection system (CDS) that will serve to remove sediment. The sediment flows from the CDS unit will be directed into a proposed 5,202 square-foot underground infiltration system. Nearly all improvements would be located below ground surface. The primary components of the project are as follows:

   - **Diversion Vault:** A reinforced concrete vault is proposed upstream of the existing Buck Gully concrete weir wall. The system will be designed with a capacity to divert dry season flow of approximately 0.77 cubic feet per second (cfs). The structure will include a 15-foot long concrete wall located 2 feet upstream, parallel to the existing weir wall and two side walls joining the existing wall at the limits of the existing low flow weir notch. The vault bottom will be 12-foot thick reinforced concrete slab. The proposed vault will be 2 feet deep on the upstream side and 3.5 feet...
deep on the downstream side. The vault top will be an upstream slanting stainless steel grate. Water flowing from the channel will fall through the screen and large debris will slide down and fall upstream of the proposed 2-foot wall to be washed out during large storm events.

A 4-foot wide by 1.5-foot high opening on the downstream side of the vault will be added by sawcutting through the existing wall. The opening will be sealed using a removable slide gate that can be opened as needed, to remove accumulated sand from inside the vault. Flow that enters the vault will be conveyed through an 8-inch PVC pipe that will run west along the upstream side of the existing weir wall. The invert of the 8-inch pipe will be set at 1-foot above the vault bottom to allow for sand that passes through the grated top to fall to the bottom below the pipe invert, to be swept downstream through the 4-foot by 1.5 foot opening when the slide gate is opened as part of regular vault maintenance.

- **Continuous Deflection System**: Dry season flows diverted from Buck Gully Channel will be directed into the CDS. The CDS hydrodynamic separator uses swirl concentration and patented continuous deflective separation to screen, separate and trap trash, debris, sediment, and hydrocarbons from stormwater runoff. CDS captures and retains 100% of floatables and neutrally buoyant debris 2.4 millimeters (mm) or larger, and effectively removes sediment. The treated dry weather flows will be conveyed through a proposed 8-inch PVC downstream into a proposed filtration system. The system was sized in consultation with the manufacturer and has a capacity above the proposed dry weather flows.

- **Flo-tank Filtration System**: This is the underground filtration system that receives the debris free dry season flows, conveyed using the 8-inch PVC from the CDS unit. The system will serve as an underground storage that allows water to infiltrate into the ground. The system is designed to infiltrate dry season flows within 24 hours. The flow tank infiltration system provides a void space of over 90% and achieves the same storage capacity as other underground tank systems with a smaller footprint. The system is made of Polypropylene (PP), and the lightweight design will make installation comparatively quicker, safer and cheaper. The system will be installed with inspection ports to allow for flushing out of any sediment, if needed. The proposed module for use is the double flo-tank modular system that measures 16 inches by 26.77 inches. Installation will be located on the south side of the existing life guard tower, and will provide storage of approximately 8,432 cubic feet. The total beach area used by the system is approximately 3,182 square feet. Based on the geotechnical investigation, the existing soils have an infiltration rate of 2.48 inches/hour at the installation depth, which is high enough to allow infiltration of the entire tank capacity at design flow rate within less than 14 hours.

Currently, the existing access road off of Poppy Court provides public pedestrian access to Little Corona Beach; however, it does not provide public vehicular access. Staging of equipment and materials would occur within the construction easement, which would be located within the vicinity of the project site; refer to Exhibit 5, Construction Staging Plan. Construction and permanent access would be taken from the existing access road off of Poppy Court. During construction, pedestrian access to the public beach would be maintained at all times. Vehicular access would also be maintained during construction. Upon completion of construction, the access road would be unaffected. The construction period is anticipated to take place within a 3-month period and endure approximately 45 working days. Construction will occur Monday through Friday from 8 A.M. to 5 P.M. Additional details regarding the project are provided in Section 2.5, Project Characteristics.
9. Surrounding Land Uses and Setting:

Surrounding uses along the project site include:

- Buck Gully (undeveloped land) to the north;
- Little Corona Beach and the Pacific Ocean to the south; and
- Little Corona Beach and single family residential to the east and west.

10. Other public agencies whose approval is required (e.g., permits, financing approval or participation agreement).

Refer to Section 2.6, Permits and Approvals, for a description of the range of local, regional, and State approvals anticipated to be required for the project. Additional approvals may be required as the project entitlement process moves forward.

3.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” or “Less Than Significant Impact with Mitigation Incorporated,” as indicated by the checklist on the following pages.

| ✓ | Aesthetics | Land Use and Planning |
|   | Agriculture and Forestry Resources | Mineral Resources |
| ✓ | Air Quality | ✓ | Noise |
| ✓ | Biological Resources | Population and Housing |
| ✓ | Cultural Resources | Public Services |
| ✓ | Geology and Soils | Recreation |
|   | Greenhouse Gas Emissions | Transportation/Traffic |
| ✓ | Hazards & Hazardous Materials | Utilities & Service Systems |
| ✓ | Hydrology & Water Quality | ✓ | Mandatory Findings of Significance |

3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts associated with the proposed project. The issue areas evaluated in this Initial Study include:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities and Service Systems
The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the CEQA Guidelines and used by the City of Newport Beach in its environmental review process. For the preliminary environmental assessment undertaken as part of this Initial Study’s preparation, a determination that there is a potential for significant effects indicates the need to more fully analyze the development’s impacts and to identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the development. To each question, there are four possible responses:

- **No Impact.** The development will not have any measurable environmental impact on the environment.

- **Less Than Significant Impact.** The development will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.

- **Less Than Significant Impact With Mitigation Incorporated.** The development will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the development’s physical or operational characteristics can reduce these impacts to levels that are less than significant.

- **Potentially Significant Impact.** The development will have impacts which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.
4.0 ENVIRONMENTAL ANALYSIS

The following is a discussion of potential project impacts as identified in the Initial Study/Environmental Checklist. Explanations are provided for each item.

4.1 AESTHETICS

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Have a substantial adverse effect on a scenic vista?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>c. Substantially degrade the existing visual character or quality of the site and its surroundings?</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

a) Have a substantial adverse effect on a scenic vista?

**Less Than Significant Impact.** The City of Newport Beach General Plan (General Plan) identifies the conservation of sensitive lands and natural resources, and enhancement of the City’s visual resources as important goals. The General Plan designates visual resources, scenic corridors, public view points, ocean views, cliffs, and hillsides as important scenic resources with the City of Newport Beach. The project is located near the community of Corona del Mar on Little Corona Beach. According to the Natural Resources Element of the General Plan, Ocean Boulevard is designated as a Coastal View Road. As such, construction activities associated with the project would be visible from a scenic vista. In addition, project construction activities would alter views and potentially obstruct views of the canyon for the surrounding residents; however, construction is temporary and would cease upon project completion.

The infiltration system would not result in long-term visual impacts due to the fact that the CDS unit and infiltration system will be located underground. The only above ground facilities would consist of a very small portion of the diversion vault (less than 10 square feet) that would tie in to the existing concrete weir structure. The proposed project would be compatible with surrounding uses. As such, project implementation would not substantially alter the appearance of the landscape in the project area, and would not obstruct or visually impact any scenic vistas or resources. Therefore, a less than significant impact would occur in this regard.

**Mitigation Measures:** No mitigation is required.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

**No Impact.** State Route 1 (SR-1) is an eligible scenic highway, located approximately 0.5-mile to the north of the project site.¹ Views to the project area from SR-1 are not afforded due to topographic

conditions and intervening structures. As such, the proposed project would not affect scenic resources along SR-1. Additionally, there will be no impacts to rock outcroppings or historic buildings. Thus, no impact would occur.

**Mitigation Measures:** No mitigation is required.

c) **Substantially degrade the existing visual character or quality of the site and its surroundings?**

**Less Than Significant Impact With Mitigation Incorporated.**

**Short-Term Impacts**

Construction of the proposed project would take place at Little Corona Beach within an approximate 3-month period. Improvements associated with the proposed project would expose sensitive viewers to construction activities (approximately 3 months) at the project site and Ocean Boulevard, a popular viewpoint in Corona del Mar State Park. This location is surrounded by residential uses.

Construction of the project would result in construction debris, equipment, and truck traffic to nearby sensitive viewers (in the vicinity of Little Corona Beach and Ocean Boulevard). Construction activities would be visible from motorists, bicyclists, pedestrians, and residents located in the project vicinity. The construction staging area temporarily located on Little Corona Beach and near the public restrooms would be visible. To minimize impacts during construction, implementation of Mitigation Measure AES-1 would require temporary construction fencing to minimize public views of the construction site, and would also require that any equipment/materials storage and vehicle parking is sited such that visibility from adjacent receptors is reduced to the greatest extent feasible. Trucks hauling materials to the construction site would be required to comply with the City’s Municipal Code to minimize impacts to sensitive uses, and therefore, would not result in significant visual impacts. As these impacts would be temporary, and would cease upon completion, the potential impacts to the visual character and quality in the surrounding area are considered to be less than significant.

**Long-Term Impacts**

The proposed project would result in minor above ground improvements that consist of a diversion vault which is an addition to the existing concrete weir. All other improvements would be located below the ground surface and would not affect the long term visual character and quality of the project site or surrounding area. Thus, long-term operational visual character/quality impacts would be less than significant.

**Mitigation Measures:**

AES-1 Prior to final plan approval, the City of Newport Beach Public Works Department shall ensure that project specifications require that all construction and construction staging areas are sited and/or screened with temporary fencing in order to minimize impacts to public views of the construction site to the maximum extent feasible. The fencing shall be comprised of opaque material to shield views from surrounding sensitive viewers. In addition, equipment/materials storage and any vehicle parking shall be sited such that their visibility from adjacent receptors is reduced to the greatest extent feasible.
d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

**No Impact.** No construction or operational lighting would be necessary for the proposed project. Thus, there will be no impacts.

**Mitigation Measures:** No mitigation is required.
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### 4.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

<table>
<thead>
<tr>
<th>Impact Category</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Result in the loss of forest land or conversion of forest land to non-forest use?</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

**No Impact.** The proposed project site is located on Little Corona Beach and is surrounded by developed, urbanized uses. No farmland exists within the site vicinity. In addition, based on the Orange County Important Farmland 2010 Map prepared by the California Department of Conservation, the proposed project site does not occur upon any area designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Thus, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation is required.

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b) **Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

**No Impact.** The project site is located within a Parks and Recreation zone (P-R), surrounded by urbanized development. No existing agricultural uses and no Williamson Act contracts are within the site vicinity. Thus, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation is required.

c) **Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**

**No Impact.** Refer to Response 4.2(b), above. No zoning for forest land or timberland exists within the project area, and no impacts would occur in this regard.

**Mitigation Measures:** No mitigation is required.

d) **Result in the loss of forest land or conversion of forest land to non-forest use?**

**No Impact.** Refer to Response 4.2(b), above.

**Mitigation Measures:** No mitigation is required.

e) **Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

**No Impact.** As stated above in Responses 4.2(a) through 4.2(c), the project site consists of parks and recreation uses surrounded by urbanized development. The project site is void of agricultural or forest resources. Thus, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation is required.
4.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

<table>
<thead>
<tr>
<th>Determination</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
</table>
a. Conflict with or obstruct implementation of the applicable air quality plan? |                                 |                                          |                             | ✓         |
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | ✓                              |                                           |                             |           |
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | ✓                              |                                           |                             |           |
d. Expose sensitive receptors to substantial pollutant concentrations?         | ✓                              |                                           |                             |           |
e. Create objectionable odors affecting a substantial number of people?        |                                 |                                          | ✓                           |           |

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. The project is located within the South Coast Air Basin (Basin), which is governed by the South Coast Air Quality Management District (SCAQMD). Consistency with the SCAQMD 2012 Air Quality Management Plan (2012 AQMP) means that a project is consistent with the goals, objectives, and assumptions in the respective plan to achieve the Federal and State air quality standards. According to the SCAQMD CEQA Air Quality Handbook, in order to determine consistency with the 2012 AQMP, two main criteria must be addressed:

Criterion 1:

With respect to the first criterion, SCAQMD methodologies require that an air quality analysis for a project include forecasts of project emissions in relation to contributing to air quality violations and delay of attainment.

a) Would the project result in an increase in the frequency or severity of existing air quality violations?

Since the consistency criteria identified under the first criterion pertain to pollutant concentrations, rather than to total regional emissions, an analysis of the project’s pollutant emissions relative to localized pollutant concentrations is used as the basis for evaluating project consistency. As discussed in Response 4.3(d), below, localized concentrations of carbon monoxide (CO), nitrous oxides (NOx), and fugitive dust (PM10 and PM2.5) would be less than significant. Therefore, the proposed project would not result in an increase in the frequency or severity of existing air quality violations. Because reactive organic gases (ROGs) are not a criteria pollutant, there is no ambient standard or localized threshold for ROGs. Due to the role ROG plays in ozone formation, it is classified as a precursor pollutant and only a regional emissions threshold has been established.
b) Would the project cause or contribute to new air quality violations?

As discussed in Checklist Item 4.3(b) below, the proposed project would result in emissions that would be below the SCAQMD thresholds. Therefore, the proposed project would not have the potential to cause or affect a violation of the ambient air quality standards.

c) Would the project delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP?

The proposed project would result in less than significant impacts with regard to localized concentrations during project construction and operations. As such, the proposed project would not delay the timely attainment of air quality standards or AQMP emissions reductions.

Criterion 2:

With respect to the second criterion for determining consistency with SCAQMD and Southern California Association of Governments (SCAG) air quality policies, it is important to recognize that air quality planning within the South Coast Air Basin (Basin) focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD’s second criterion for determining project consistency focuses on whether or not the proposed project exceeds the assumptions utilized in preparing the forecasts presented in the 2012 AQMP. Determining whether or not a project exceeds the assumptions reflected in the 2012 AQMP involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria.

a) Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the AQMP?

In the case of the 2012 AQMP, three sources of data form the basis for the projections of air pollutant emissions: the City of Newport Beach General Plan (General Plan), SCAG’s Growth Management Chapter of the Regional Comprehensive Plan (RCP), and SCAG’s 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The RTP/SCS also provides socioeconomic forecast projections of regional population growth. According to the General Plan, the project site is designated as Parks and Recreation (PR). The project proposes the installation of a subsurface infiltration system on Little Corona Beach at the outlet of Buck Gully, as part of the City’s Watershed Management Plan. Thus, the proposed project would not induce any population growth, and would be consistent with the types, intensity, and patterns of land use envisioned for the site vicinity in the RCP and SCS. The population, housing, and employment forecasts, which are adopted by SCAG’s Regional Council are based on the local plans and policies applicable to the City; these are used by SCAG in all phases of implementation and review. Additionally, as the SCAQMD has incorporated these same projections into the 2012 AQMP, it can be concluded that the proposed project would be consistent with the projections.

b) Would the project implement all feasible air quality mitigation measures?

The proposed project would not generate a significant amount of air quality emissions nor exceed SCAQMD thresholds. During construction activities, the project would also be required to comply with standard SCAQMD regulations, such as Rule 403 (Dust Control). As such, the proposed project meets this AQMP consistency criterion.
c) *Would the project be consistent with the land use planning strategies set forth in the AQMP?*

The proposed project would result in less than significant air quality impacts. Compliance with emission reduction measures identified by the SCAQMD would be required as identified in Checklist Items 4.3(b) and 4.3(c) below. In addition, the proposed project would not result in a change in land use, nor does it propose structures that would change the overall character of the project site. As such, the proposed project meets this 2012 AQMP consistency criterion.

In conclusion, the determination of 2012 AQMP consistency is primarily concerned with the long-term influence of a project on air quality in the Basin. The proposed project would not result in a long-term impact on the region’s ability to meet State and Federal air quality standards. Also, the proposed project would be consistent with the goals and policies of the 2012 AQMP for control of fugitive dust.

*Mitigation Measures:* No mitigation is required.

b) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

*Less Than Significant Impact with Mitigation Incorporated.*

**SHORT-TERM (CONSTRUCTION) EMISSIONS**

**Construction Emissions**

As discussed in Section 2.0, *Project Description*, the proposed project would take approximately 3 months to complete. Construction of the project would include the installation of an infiltration system consisting of a diversion vault, a continuous deflection system (CDS) unit, and a flo-tank filtration system. The project’s construction air emissions have been modeled using the California Emissions Estimator Model (CalEEMod) Version 2013.2.2. Construction of the proposed project is anticipated to commence in early 2016 and be completed by mid-2016. Construction activities would require the export of approximately 214 cubic yards of soil, and hauling of approximately 0.2 cubic yards of demolished material from saw cutting an opening on an existing concrete wall.

*Table 4.3-1, Construction Air Emissions,* depicts the construction emissions associated with the project. Emitted pollutants would include ROG, CO, NOX, PM10, and PM2.5. The largest amount of ROG, CO and NOX emissions would occur during construction of the infiltration system. PM10 (particulate matter smaller than 10 microns) and PM2.5 (particulate matter smaller than 2.5 microns) emissions would occur from fugitive dust (due to earthwork and excavation) and from construction equipment exhaust. Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from the project site, emissions produced on-site as the equipment is used, and emissions from trucks transporting materials to and from the site.

As depicted in *Table 4.3-1*, construction-related emissions would not exceed the established SCAQMD thresholds for criteria pollutants; therefore, short-term construction impacts would be less than significant. During construction activities, the project would also be required to comply with standard SCAQMD regulations, such as Rule 403 (Dust Control); refer to Mitigation Measure AQ-1.
Table 4.3-1

Construction Air Emissions

<table>
<thead>
<tr>
<th>Construction Emissions Source</th>
<th>Pollutant (pounds/day)</th>
<th>ROG</th>
<th>NO\textsubscript{X}</th>
<th>CO</th>
<th>SO\textsubscript{2}</th>
<th>PM\textsubscript{10}</th>
<th>PM\textsubscript{2.5}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unmitigated Emissions</td>
<td></td>
<td>2.95</td>
<td>32.63</td>
<td>19.72</td>
<td>0.03</td>
<td>6.45</td>
<td>4.08</td>
</tr>
<tr>
<td>Mitigated Emissions</td>
<td></td>
<td>2.95</td>
<td>32.63</td>
<td>19.72</td>
<td>0.03</td>
<td>2.63</td>
<td>2.02</td>
</tr>
<tr>
<td>SCAQMD Thresholds</td>
<td></td>
<td>75</td>
<td>100</td>
<td>550</td>
<td>150</td>
<td>150</td>
<td>55</td>
</tr>
<tr>
<td>Is Threshold Exceeded?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

ROG = reactive organic gases; NO\textsubscript{X} = nitrogen oxides; CO = carbon monoxide; SO\textsubscript{2} = sulfur dioxide; PM\textsubscript{10} = particulate matter up to 10 microns; PM\textsubscript{2.5} = particulate matter up to 2.5 microns

Notes:
1. Emissions were calculated using the California Emissions Estimator Model, as recommended by the SCAQMD.
2. Refer to Appendix B, Air Quality/Greenhouse Gas Data, for assumptions used in this analysis.

Naturally Occurring Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals that are a human health hazard when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by State, Federal, and international agencies and was identified as a toxic air contaminant by the California Air Resources Board in 1986.

Asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. All of these activities may have the effect of releasing potentially harmful asbestos into the air. Natural weathering and erosion processes can act on asbestos bearing rock and make it easier for asbestos fibers to become airborne if such rock is disturbed. According to the Department of Conservation Division of Mines and Geology, A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report (August 2000), serpentinite and ultramafic rocks are not known to occur within the project area. Thus, there would be no impact in this regard.

LONG-TERM (OPERATIONAL) EMISSIONS

Long-term air quality impacts would not occur as a result of the proposed project as no energy would be required post construction. The proposed project is self-operating and utilizes gravity-fed flows to operate the CDS unit. Other than occasional minor maintenance activities, the project would not result in any trip generating activities that would produce a substantial amount of mobile source emissions. Therefore, impacts in this regard would be less than significant.

Mitigation Measures:

AQ-1 Prior to the initiation of construction, the City of Newport Beach shall confirm that the proposed project stipulates that, in compliance with SCAQMD Rule 403, fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD’s Rules and Regulations. In addition, SCAQMD Rule 402
requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures (among others required by Rules 402 and 403) would reduce short-term fugitive dust impacts on nearby sensitive receptors:

- All active portions of the construction site shall be watered every three hours during daily construction activities and when dust is observed migrating from the project site to prevent excessive amounts of dust;
- Pave or apply water every three hours during daily construction activities or apply non-toxic soil stabilizers on all unpaved access roads, parking areas, and staging areas. More frequent watering shall occur if dust is observed migrating from the site during site disturbance;
- Any on-site stockpiles of debris, dirt, or other dusty material shall be enclosed, covered, or watered twice daily, or non-toxic soil binders shall be applied;
- All grading and excavation operations shall be suspended when wind speeds exceed 25 miles per hour;
- Disturbed areas shall be replaced with ground cover or paved immediately after construction is completed in the affected area;
- Visible dust beyond the property line which emanates from the project shall be prevented to the maximum extent feasible;
- All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site; and
- Reroute construction trucks away from congested streets or sensitive receptor areas to the extent feasible.

Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less Than Significant Impact with Mitigation Incorporated.

CUMULATIVE CONSTRUCTION IMPACTS

With respect to the proposed project’s construction related air quality emissions and cumulative Basin-wide conditions, the SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the 2012 AQMP pursuant to Federal Clean Air Act mandates. As stated above in Checklist Item 4.3(b), the project would result in construction emissions that would not exceed SCAQMD thresholds and would not contribute to a cumulative net increase in air quality levels. Other cumulative projects in the Basin would be required to undergo environmental review, and comply with SCAQMD Rule 403 requirements, adopted 2012 AQMP emissions control measures, and implement all feasible mitigation measures, which would reduce cumulative project contribution of emissions. Therefore, as the project would not result in project-level air quality impacts with implementation of Mitigation Measure AQ-1, the project would not contribute to cumulative air quality levels in the Basin. Thus, a less than significant impact would occur in this regard.
CUMULATIVE LONG-TERM IMPACTS

As discussed previously, the proposed project would not result in long-term air quality impacts. Additionally, adherence to SCAQMD rules and regulations would alleviate potential impacts related to cumulative conditions on a project-by-project basis. Emission reduction technology, strategies, and plans are constantly being developed. As a result, the proposed project would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant. Therefore, cumulative operational impacts associated with implementation of the proposed project would be less than significant.

Mitigation Measures: Refer to Mitigation Measure AQ-1.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact with Mitigation Incorporated. Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. The California Air Resources Board (CARB) has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

Sensitive uses surrounding the project site include residential uses to the east and west. In order to identify impacts to sensitive receptors, the SCAQMD recommends addressing localized significance thresholds for construction and operations impacts (area sources only). A carbon monoxide hot-spot analysis is recommended for the analysis of localized mobile source impacts. However, a carbon monoxide hot-spot analysis was not prepared as the project would not increase the volume of traffic in the project area.

Localized Significance Thresholds (LST)

Localized Significance Thresholds (LSTs) were developed in response to SCAQMD Governing Board’s Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the Final Localized Significance Threshold Methodology (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with project-specific level proposed projects. The SCAQMD provides the LST lookup tables for one, two, and five acre projects emitting CO, NOX, PM2.5, or PM10. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. The SCAQMD recommends that any project over five acres should perform air quality dispersion modeling to assess impacts to nearby sensitive receptors. The project is located within Sensitive Receptor Area (SRA) 18, North Coastal Orange County.

The project would disturb no more than one acre of land per day; therefore, the LST thresholds for the smallest acreage (one acre) was utilized for the construction LST analysis. It is noted that an operational LST analysis was not prepared, as the project would not result in operational emissions. The closest sensitive receptors are residential uses that adjoin the project site to the east and west. These sensitive land uses may be potentially affected by air pollutant emissions generated during on-site construction activities. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. As the nearest sensitive uses surround the project site, the LST value for 25 meters was used.
Table 4.3-2, *Localized Significance of Construction Emissions*, shows the construction-related emissions for NO\textsubscript{X}, CO, PM\textsubscript{10}, and PM\textsubscript{2.5} compared to the LSTs for SRA 18. As shown in Table 4.3-2, construction emissions would not exceed the LSTs for SRA 18. Therefore, localized significance impacts would be less than significant.

**Table 4.3-2**
Localized Significance of Construction Emissions

<table>
<thead>
<tr>
<th>Source</th>
<th>Pollutant (pounds/day)\textsuperscript{1,2}</th>
<th>NO\textsubscript{X}</th>
<th>CO</th>
<th>PM\textsubscript{10}</th>
<th>PM\textsubscript{2.5}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mitigated On-Site Emissions\textsuperscript{3}</td>
<td></td>
<td>32.06</td>
<td>18.54</td>
<td>2.47</td>
<td>1.97</td>
</tr>
<tr>
<td>Localized Significance Threshold\textsuperscript{4}</td>
<td></td>
<td>92</td>
<td>647</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Thresholds Exceeded?</td>
<td></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Note:
1. Emissions were calculated using the California Emissions Estimator Model, as recommended by the SCAQMD.
2. Refer to Appendix B, *Air Quality/Greenhouse Gas Data*, for assumptions used in this analysis.
3. Construction emissions include the worst-case on-site emissions.
4. The Localized Significance Threshold was determined using Appendix C of the SCAQMD Final Localized Significant Threshold Methodology guidance document for pollutants NO\textsubscript{X}, CO, PM\textsubscript{10}, and PM\textsubscript{2.5}. The Localized Significance Threshold was based on the anticipated daily acreage disturbance for construction, the total acreage for operational, the distance to sensitive receptors, and the source receptor area (SRA 18).

**Mitigation Measures:** Refer to Mitigation Measure AQ-1.

e) *Create objectionable odors affecting a substantial number of people?*

**Less Than Significant Impact.** According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project does not include any uses identified by the SCAQMD as being associated with odors.

Construction activities associated with the project may generate detectable odors from heavy-duty equipment exhaust. Construction-related odors would be short-term in nature and cease upon project completion. Any impacts to existing adjacent land uses would be short-term and are less than significant.

**Mitigation Measures:** No mitigation is required.
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4.4 BIOLOGICAL RESOURCES

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant Impact With Mitigation Incorporated. Special status plant and wildlife species have been given recognition by federal and/or State agencies and private conservation organizations because of a perceived or documented decline in the population size or geographic range of the species. Several special status plant and wildlife species are known to occur in the project area. Based on the Little Corona Infiltration Project Habitat Assessment (Habitat Assessment) prepared for the proposed project by Michael Baker International, 76 sensitive animal species, 43 sensitive plant species, and seven sensitive habitats have potential to occur in the project area; refer to Appendix B, Habitat Assessment, of this document for a list of these species and habitats.

As part of the Habitat Assessment, an analysis was conducted to determine which sensitive biological species have the potential to occur in the project vicinity. The Habitat Assessment included a literature review, and a field survey of the project area. The literature review included a records search for sensitive biological resources with potential to occur on or within the vicinity of the project site. The resources used for the literature reviewed included, but were not limited to, the Natural Resources...
Conservation Service (NRCS) Soil Survey, California Department of Fish and Wildlife’s (CDFW) California Natural Diversity Database (CNDDB) Rarefind 5, and the California Native Plant Society (CNPSs) Rare and Endangered Vascular Plants of California. Literature detailing biological resources previously observed on or near the project site and historical land uses of the project site were reviewed to understand the extent of disturbances to the habitats on-site. This information provided background information needed for inventorying the biological resources potentially occurring on the project site. The field survey provided information of the existing conditions within the project vicinity and potential for sensitive biological resources to occur.

A field survey of the project site and surrounding area was conducted on April 16, 2015. It was determined that one sensitive plant species, woolly seablite was observed in the northwest section of the survey area. It was determined that the project site has a moderate potential to support certain sensitive wildlife species, including great egret (Ardea alba), great blue heron (Ardea herodias), Costa’s hummingbird (Calypte costae), American peregrine falcon (Falco peregrinus anatum), long-billed curlew (Numenius americanus), and mimic tryonia (Tryonia imitator). Three sensitive wildlife species were detected during the habitat assessment including snowy egret, brown pelican (off-shore) and Allen’s hummingbird off-site. All other sensitive wildlife species have a low potential to occur or are presumed absent. All three of the NCCP/HCP’s “Target Species” (coastal California gnatcatcher, coastal cactus wren, and orange-throated whiptail) are presumed absent within the boundaries of the survey area based on a lack of suitable habitat.

Based on the results of the Habitat Assessment, the survey area is continuously disturbed by human recreation activities and supports sparse patches of native habitat. Even though the majority of the project site consists of sandy beach, which limits the site’s viability to provide suitable habitat for sensitive biological resources, the site has the potential to support a small number of sensitive avian species, most of which are not listed, fully protected, or covered by the NCCP/HCP. American peregrine falcon, a fully protected and NCCP/HCP “Identified” species that is somewhat common in coastal areas, has the potential to forage within the survey area but would not nest on-site. Under the Implementing Agreement and the 10(a) permits distributed to participating landowners by the USFWS, peregrine falcon is authorized for take if present.

Vegetation removal will be limited to an approximate 0.003 acre area of freshwater marsh habitat consisting primarily of yerba mansa (Anemopsis californica). Construction activities are not anticipated to impact the areas of coastal sage scrub or the woolly seablite that were documented within the survey area. Thus, adverse impacts to sensitive plants or wildlife are not expected as a result of the proposed project.

Essential Fish Habitat and Fish Management Plans

Based on the Essential Fish Habitat Study (EFH Study) prepared for the proposed project by Tierra Data, Inc., the project site is not located within a federally designated Critical Habitat for any federally listed species; refer to Appendix C, Essential Fish Habitat Study. In addition, the project area near the Pacific Ocean will not extend into any area that will affect bottom substrate essential to fish habitat. The sandy bottom and kelp forests existing near shore adjacent to the project area are outside of any construction activities and will not be disturbed. Further, the sandy bottom in adjacent waters does not provide substrate to support eelgrass (Zostera marina), therefore construction activities are not expected to affect eelgrass beds.

There are two Fish Management Plans (FMPs) that include waters adjacent to the proposed project site: the Coastal Pelagic FMP covering six species and the Pacific Groundfish FMP covering 89 species. In addition the Crystal Cove Marine Conservation Area (SMCA) is located adjacent to the project site and includes a limited recreational and limited take area.
The potential impacts resulting from construction of the infiltration system and associated structures are expected to be minimal and temporary to the managed fish species occurring in this near shore coastal habitat. During construction activities, should any individuals of these managed pelagic or groundfish species occur within the adjacent vicinity of the project area, they would most likely relocate to another area of open water or other shallow water habitat, to avoid any disturbances caused by construction activities. No adverse effects are expected from construction activities that will impact recruitment or populations of the protected species within Crystal Cove SMCA. A review of the current habitat data shows no sign of Eelgrass (Zostera marina) adjacent to the proposed construction site, and kelp forest outside the direct influences of the project area, which further reduces the potential for managed species at the site. Long-term, the infiltration system will reduce dry weather flows from the mouth of Buck Gully channel while retaining transported sediments and reducing sedimentation. The net effect of the infiltration system construction on biological resources will be positive, as the project will improve water quality that is currently impacting localized water quality conditions within the Crystal Cove SMCA. As such, no impacts to EFH or FMPs are anticipated.

Nesting Birds

Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and Fish and Game Code (Sections 3503, 3503.3, 3511, and 3513 of the Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs). In order to protect migratory bird species, Mitigation Measures BIO-1 and BIO-2 would be implemented. This measure requires nesting bird clearance surveys prior to any vegetation removal or development that may disrupt migratory birds during the nesting season. Consequently, if avian nesting behaviors are disrupted, such as nest abandonment and/or loss of reproductive effort, it is considered “take” and is potentially punishable by fines and/or imprisonment.

No active bird nests were observed within the survey area during the April 16, 2015 field survey. On-site vegetation within the survey area provides few, if any, nesting opportunities. However, the adjacent area, including coastal sage scrub, riparian forest in Buck Gully, and ornamental vegetation in surrounding neighborhoods, provides suitable nesting opportunities for avian species. Therefore, in compliance with the MBTA, the proposed project shall comply with Mitigation Measures BIO-1 and BIO-2 to ensure impacts to migratory bird species would not occur.

Upon implementation of recommended mitigation measures, impacts to sensitive biological resources would be less than significant.

Mitigation Measures:

BIO-1 A pre-construction clearance survey for nesting birds shall be conducted within three (3) days prior to any ground disturbing activities to ensure that no nesting birds will be disturbed during construction. As long as development does not cause direct take of a bird or egg(s) or disrupt nesting behaviors, immediate protections would not be required. The biologist conducting the clearance survey should document a negative survey report indicating that no impacts to active avian nests will occur.

BIO-2 If an active avian nest is discovered during the pre-construction clearance survey, construction activities may have to be rerouted, a no-work buffer might have to be established around the nest, or construction may be delayed until the nest is inactive. A biological monitor shall be present to delineate the boundaries of the buffer area if an active nest is observed, and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the qualified biologist has determined that young birds have successfully fledged or the nest has otherwise become
inactive, a monitoring report shall be prepared and submitted to the City of Newport Beach for review and approval prior to initiating construction activities can proceed within the buffer area without jeopardizing the survival of the young birds. Construction within the designated buffer area shall not proceed until written authorization is received by the applicant from the CDFW.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

**Less Than Significant Impact With Mitigation Incorporated.** The Habitat Assessment and EFH Study prepared for the project examined potential impacts to riparian habitat and other sensitive natural communities; refer to Response 4.4(a), above. As noted above, the proposed project would be required to implement Mitigation Measures BIO-1 and BIO-2 to ensure impacts to migratory bird species would not occur.

The Little Corona Infiltration Project Delineation of State and Federal Jurisdictional Waters (JD) by Michael Baker International, was conducted to determine potential project-related impacts to jurisdictional waters of the U.S. or State; refer to Appendix D, *Jurisdictional Delineation*. Based on the JD, portions of the project site are considered “Waters of the U.S.” and “Waters of the State” and would be subject to regulation by the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (RWQCB), the California Department of Fish and Wildlife (CDFW) and the California Coastal Commission (CCC). Impacts to jurisdictional areas would occur as a result of the proposed project and are listed in *Table 4.4-1, Jurisdictional Impact Summary*.

**Table 4.4-1**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Corps/Regional Board</th>
<th>CDFW</th>
<th>Coastal Commission</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-Wetland (acres / linear feet)</td>
<td>Wetland (acres)</td>
<td>Vegetated Streambed (acres / linear feet)</td>
</tr>
<tr>
<td>Buck Gully</td>
<td>Perm: 0.01 / 32</td>
<td>Perm: 0.0003</td>
<td>Perm: 0.002 / 7</td>
</tr>
<tr>
<td>Pacific Ocean</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

As such, Mitigation Measure BIO-3 would be implemented. This measure would require that the City of Newport Beach coordinate with the Corps, RWQCB, CDFW, and CCC to obtain the necessary approvals prior to any construction activities in jurisdictional areas. With implementation of Mitigation Measure BIO-3, Corps wetland impacts (0.003 acre) would be mitigated at a 27:1 ratio. CDFW vegetated streambed and CCC wetland impacts (both 0.002 acre) would be mitigated at a 4:1 ratio. With implementation of Mitigation Measure BIO-3, the proposed project is consistent with Coastal Land Use Policy 4.1.1-14, which states “Require mitigation in the form of habitat creation or substantial restoration for allowable impacts to ESHA and other sensitive resources that cannot be avoided through the implementation of siting and design alternatives. Priority shall be given to on-site mitigation. Off-site mitigation measures shall only be approved when it is not feasible to fully mitigate impacts on-site. Mitigation shall not substitute for implementation of the project alternative that would avoid impacts to ESHA.” The mitigation will more than compensate for impacts associated with the proposed project with its 27:1 ratio. Further, the existing wetland area near the weir structure is degraded due to the presence of non-native species and the proposed mitigation will promote the functional capacity of the wetland and help preserve the larger wetland system.
Upon implementation of Mitigation Measures BIO-1, BIO-2, and BIO-3, impacts in this regard would be less than significant.

**Mitigation Measures:** Refer to Mitigation Measures BIO-1, BIO-2, and the following Mitigation Measure BIO-3.

**BIO-3**

Prior to any construction activity within the project site, the City of Newport Beach shall consult with the appropriate responsible resource agency (i.e., U.S. Army Corps of Engineers, Regional Water Quality Control Board, California Department of Fish and Wildlife, and California Coastal Commission) to verify delineation results, determine permanent losses and temporary impact areas, and identify compensatory mitigation, as applicable. Prior to undertaking ground-disturbing activities on or immediately adjacent to any aquatic resource areas, the City of Newport Beach and/or their consultant shall obtain all obligatory discretionary permits/authorizations. The City proposes to compensate for permanent impacts to 0.0003 acres of Corps jurisdictional wetlands, as well as 0.002 acres of CDFW vegetated streambed/CCC jurisdictional wetlands, as a result of the Little Corona Infiltration Project. The City proposes to conduct 0.008 acre of freshwater marsh enhancement activities in the form of non-native species removal within the mitigation site. Invasive species removal would be conducted via hand pulling.

c) **Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

**Less Than Significant Impact With Mitigation Incorporated.** Based on the JD for the proposed project, approximately 0.0003 acre of Corps wetlands will be permanently impacted by the proposed project. Implementation of BIO-3 will ensure no permanent loss of wetlands will occur due to the proposed project. Thus, impacts in this regard would be less than significant.

**Mitigation Measures:** Refer to Mitigation Measure BIO-3.

d) **Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

**Less Than Significant Impact.** Habitat linkages provide links between larger undeveloped habitat areas that are separated by development. Wildlife corridors are similar to linkages, but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species but inadequate for others. Wildlife corridors are significant features for dispersal, seasonal migration, breeding, and foraging. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The project site is located immediately adjacent to and south of Buck Gully, a perennial creek that begins at Signal Peak in the San Joaquin Hills and drains after approximately 3.5 miles into the Pacific Ocean at the southern end of the survey area. Buck Gully provides a movement corridor and a coastal linkage for wildlife. In addition, a portion of Buck Gully is located within the NCCP/HCP Reserve System beginning at Newport Coast Drive and terminating approximately 0.6 mile upstream of the project site. However, Buck Gully does not flow at a level grade into the Pacific Ocean. Instead, it is separated from the beach by a concrete weir, meaning that any organisms in the water must breach the top of the weir to continue downstream, and that no aquatic-restricted organisms can move upstream.
past the beach side of the weir. The proposed project will not impact the function of the upstream movement corridor. As such, the project would not have the capability to interfere with wildlife movement, nor would it impede the use of wildlife nursery sites. Thus, impacts in this regard would be less than significant.

**Mitigation Measures:** No mitigation is required.

e) **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

**Less Than Significant Impact.** The proposed project would not conflict with local policies or ordinances protecting biological resources. The primary documents applicable to the proposed project are the Natural Resources Element of the City’s General Plan and the City’s Coastal Land Use Plan (CLUP). Both of these documents contain policies regarding the preservation of natural and biological resources that apply to the proposed project. Table 4.4-2, General Plan and Coastal Land Use Plan Consistency Analysis, provides a consistency analysis of the applicable Natural Resources Element and CLUP policies and the proposed project.

As seen below in Table 4.4-2, the proposed project would be consistent with all policies regarding biological resources within the City’s Natural Resources Element, and the CLUP with implementation of Mitigation Measures BIO-1 through BIO-3.

### Table 4.4-2
General Plan and Coastal Land Use Plan Policy Consistency Analysis

<table>
<thead>
<tr>
<th>Policy</th>
<th>Consistency of Proposed Project with Current Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL PLAN</td>
<td></td>
</tr>
<tr>
<td>NR 10.1 Terrestrial and Marine Resource Protection: Cooperate with the state and federal resource protection agencies and private organizations to protect terrestrial and marine resources.</td>
<td>Consistent. As discussed above, Mitigation Measure BIO-3 would require the project to consult with the appropriate responsible resource agency (i.e., U.S. Army Corps of Engineers, Regional Water Quality Control Board, California Department of Fish and Wildlife, and California Coastal Commission) to verify delineation results, determine permanent losses and temporary impact areas, and identify compensatory mitigation, as applicable. In addition, the project would not impact essential fish habitat.</td>
</tr>
<tr>
<td>NR 10.2 Orange County Natural Communities Conservation Plan: Comply with the policies contained within the Orange County Natural Communities Conservation Plan.</td>
<td>Consistent. As discussed below in Response 4.4(f), the proposed project would not result in significant impacts to biological resources, and would not conflict with the provisions of the NCCP with implementation of Mitigation Measures BIO-1 through BIO-3.</td>
</tr>
<tr>
<td>NR 10.3 Analysis of Environmental Study Areas: Require a site-specific survey and analysis prepared by a qualified biologist as a filing requirement for any development permit applications where development would occur within or contiguous to areas identified as ESAs.</td>
<td>Consistent. As discussed above, the City has conducted a detailed Habitat Assessment, EFH Assessment, and JD to determine project impacts to sensitive environmental resources. Pre-construction surveys will ensure there are no impacts to migratory birds.</td>
</tr>
<tr>
<td>NR 10.4 New Development Siting and Design: Require that the siting and design of new development, including landscaping and public access, protect sensitive or rare resources against any significant disruption of habitat values.</td>
<td>Consistent. Compliance with Mitigation Measures BIO-1 through BIO-3 would ensure that sensitive and/or rare species and other biological resources are not significantly affected as a result of construction and operation of the proposed project.</td>
</tr>
</tbody>
</table>
### Table 4.4-2 [continued]

<table>
<thead>
<tr>
<th>Policy</th>
<th>Consistency of Proposed Project with Current Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>NR 10.7 Exterior Lighting: Shield and direct exterior lighting away from significant or rare biological resources to minimize impacts to wildlife.</td>
<td>Consistent. As discussed in Section 4.1, Aesthetics, operational and long-term lighting are not required nor proposed for the proposed project.</td>
</tr>
<tr>
<td>NR 11.3 Eelgrass Protection: Avoid impacts to eelgrass (<em>Zostera marina</em>) to the extent feasible. Mitigate losses of eelgrass in accordance with the Southern California Eelgrass Mitigation Policy. Encourage the restoration of eelgrass in Newport Harbor at appropriate sites, where feasible.</td>
<td>Consistent. As discussed above, the proposed project is not located within an area that has the potential for eelgrass and no impacts will occur in this regard.</td>
</tr>
<tr>
<td>NR 11.4 Interagency Coordination on Establishing Eelgrass Restoration Sites. Cooperate with the County of Orange, the U.S. Army Corps of Engineers, and resource agencies to establish eelgrass restoration sites.</td>
<td>Consistent. As discussed above, the proposed project is not located within an area that has the potential for eelgrass and no impacts will occur in this regard.</td>
</tr>
<tr>
<td>NR 11.5 Eelgrass Mitigation: Allow successful eelgrass restoration sites to serve as mitigation sites for City projects and as a mitigation bank from which eelgrass mitigation credits will be issued to private property owners for eelgrass removal resulting from dock and channel dredging projects.</td>
<td>Consistent. As discussed above, the proposed project is not located within an area that has the potential for eelgrass and no impacts will occur in this regard.</td>
</tr>
</tbody>
</table>

### COASTAL LAND USE PLAN

| 4.1.1-2: Require a site-specific survey and analysis prepared by a qualified biologist as a filing requirement for coastal development permit applications where development would occur within or adjacent to areas identified as a potential ESHA. Identify ESHA as habitats or natural communities listed in Section 4.1.1 that possess any of the attributes listed in Policy 4.1.1-1. The ESA's depicted on Map 4-1 shall represent a preliminary mapping of areas containing potential ESHA. | Consistent. As noted above, the City has conducted a detailed Habitat Assessment, JD, and EFH Assessment to determine project impacts to sensitive environmental resources. The Habitat Assessment identified potential ESHA areas. Implementation of BIO-3 would ensure consistency with the CLUP. |
| 4.1.4-1: Continue to protect eelgrass meadows for their important ecological function as a nursery and foraging habitat within the Newport Bay ecosystem. | Consistent. As discussed above, the proposed project is not located within an area that has the potential for eelgrass and no impacts will occur in this regard. |
| 4.1.4-3: Site and design boardwalks, docks, piers, and other structures that extend over the water to avoid impacts to eelgrass meadows. Encourage the use of materials that allow sunlight penetration and the growth of eelgrass. | Consistent. As discussed above, the proposed project is not located within an area that has the potential for eelgrass and no impacts will occur in this regard. |
| 4.1.4-5: Where applicable require eelgrass and Caulerpa taxifolia surveys to be conducted as a condition of City approval for projects in Newport Bay in accordance with operative protocols of the Southern California Eelgrass Mitigation Policy and Caulerpa taxifolia Survey protocols. | Consistent. As discussed above, the proposed project is not located within an area that has the potential for eelgrass and no impacts will occur in this regard. |
### Table 4.4-2 [continued]

**General Plan and Coastal Land Use Plan Policy Consistency Analysis**

<table>
<thead>
<tr>
<th>Policy</th>
<th>Consistency of Proposed Project with Current Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2.3-1: Permit the diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes in accordance with other provisions of the LCP, where there is no feasible less environmental damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects.</td>
<td>Consistent. The proposed project is a grant-funded water quality enhancement project for incidental public service purposes as it will serve to significantly reduce, divert, and treat nuisance flows that currently flow across the popular Little Corona Beach and discharge near sensitive tide pools. In addition, sufficient mitigation measures are proposed to minimize adverse environmental effects. Implementation of BIO-3 would ensure consistency with the CLUP.</td>
</tr>
<tr>
<td>4.2.5-1: Avoid impacts to eelgrass (<em>Zostera marina</em>) to the greatest extent possible. Mitigate losses of eelgrass at a 1.2 to 1 mitigation ratio and in accordance with the Southern California Eelgrass Mitigation Policy. Encourage the restoration of eelgrass throughout Newport Harbor where feasible.</td>
<td>Consistent. As discussed above, the proposed project is not located within an area that has the potential for eelgrass and no impacts will occur in this regard.</td>
</tr>
</tbody>
</table>

In addition, the only local tree ordinance that would apply to the project would be Local Council Policy G-1 (Retention or Removal of City Trees), and Chapter 7.26 (Protection of Natural Habitat for Migratory and Other Waterfowl) of the Municipal Code also provides guidance for tree maintenance and preservation. Nominal vegetation removal would be required for the proposed project and would not require the permanent removal of any trees. As such, the proposed project would be consistent with the City’s Local Council Policy G-1 (Retention or Removal of City Trees), and Chapter 7.26 (Protection of Natural Habitat for Migratory and Other Waterfowl) of the Municipal Code.

As described above, the project would not result in conflicts with local policies or ordinances protecting biological resources. Impacts in this regard would be less than significant upon implementation of Mitigation Measures BIO-1 through BIO-3.

**Mitigation Measures:** Refer to Mitigation Measures BIO-1 through BIO-3.

f) **Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

**Less Than Significant Impact.** According to the California Department of Fish and Wildlife’s *California Regional Conservation Plans* map, the proposed project is located within the Orange County Central/Coastal Natural Community Conservation Plan (NCCP). However, as discussed above within Responses 4.4(a) through 4.4(e), the proposed project would not result in significant impacts to biological resources, and would not result in conflicts with provisions of the NCCP. As such, impacts in this regard would be less than significant.

**Mitigation Measures:** No mitigation is required.
### 4.5 CULTURAL RESOURCES

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Disturb any human remains, including those interred outside of formal cemeteries?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

#### a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?

**No Impact.** According to Figure HR1, Historical/Archeological Landmarks, in the City of Newport Beach General Plan, the project site is not identified as a historically significant site or landform site, nor was there a formerly existing historical/archaeological land mark site identified within the project area or vicinity.

As part of the Cultural Resources Assessment prepared for the proposed project (refer to Appendix E, Cultural Resources Assessment, of this document), a cultural resources records search was performed at the South Central Coastal Information Center (SCCIC) in order to obtain information regarding any potential historical resources within a one-mile radius surrounding the project site. According to the Cultural Resources Assessment, there are no known historical resources located within the boundaries of the project site. The records search indicated that one historic resource has been documented previously within a half-mile radius of the project site; however, the resource would not be affected by construction activities. As these resources would not be affected by the proposed project, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation is required.

#### b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?

**Less Than Significant Impact With Mitigation Incorporated.** Over 50 archeological sites have been documented within the City. According to the Cultural Resources Assessment, at least two distinct cultural groups inhabited the City of Newport Beach, and later period sites indicate that the City was heavily populated at the time of European contact. Thus, the potential exists for buried archeological resources to be disturbed or destroyed during project activities and grading.

The Cultural Resources Assessment prepared for the project also included a detailed analysis of potential impact to archaeological resources. Based on the archaeological records search performed at the SCCIC, a total of two archaeological sites have been formally recorded within a one-mile radius of the site. However, no archaeological resources have been recorded within or immediately adjacent to the project site.
In addition, the Cultural Resources Assessment included an intense-level cultural resources survey of the project site and immediately surrounding areas that was conducted on April 3, 2015. Based on the field survey, no archeological resources were identified within or immediately adjacent to the project site.

A review of the Native American Heritage Commission’s (NAHC) Sacred Lands database did not find any Native American sacred sites or resources within a half-mile radius of the project site. Although no resources were observed on the survey of the project site, intended construction may encounter sensitive cultural or paleontological resources due to the planned excavation depth of four feet. Compliance with Mitigation Measure CUL-1 would result in a less than significant impact in this regard.

In compliance with Assembly Bill (AB) 52, the City of Newport Beach consulted with the Gabrieleño Band of Mission Indians – Kizh Nation. On November 16, 2015, Mr. Andy Salas expressed his concern regarding the cultural sensitivity of the area surrounding the project. Through consultation, the City and Mr. Salas came to an agreement regarding proposed project mitigation measures which satisfied his concerns. As a result, the City has determined that AB 52 consultations are now complete.

**Mitigation Measure:**

CUL-1 All construction personnel (in addition to the City of Newport Beach project manager(s) and construction inspectors) shall receive archaeological resources sensitivity training prior to construction. If evidence of archeological resources is found during construction, excavation or other activity, the project shall halt work in the vicinity of the find (minimum 50-foot radius) and the construction contractor shall contact the City of Newport Beach Community Development Director. With direction from the Community Development Director, an archaeologist certified by the County of Orange shall be retained to evaluate the discovery prior to resuming grading in the vicinity of the find. If warranted, the archaeologist shall collect the resource and prepare a technical report describing the results of the investigation. The test-level report shall evaluate the site including discussion of significance (depth, nature, condition and extent of the resources), final mitigation recommendations, and cost estimates. If Native American resources are found, a notice will be sent to affected tribes as determined appropriate by the Community Development Director.

c) **Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

**Less Than Significant Impact With Mitigation Incorporated.** Project implementation has the potential to directly and/or indirectly destroy a unique paleontological resource. Based on the Paleontological Resources Assessment prepared for the proposed project (refer to Appendix F, Paleontological Resources Assessment, of this document), the Monterey Formation, which underlies the project site, has a moderate sensitivity for fossil resources, and the beach deposits have a low potential for fossil resources; however, no paleontological resources are known from within the Project Area. Additionally, during the intensive cultural and paleontological resources survey on April 3, 2015, no paleontological resources were observed within or immediately adjacent to the Project Area. Although no resources were observed on the survey of the Project Area, intended construction may encounter sensitive paleontological resources due to their planned excavation depth of four feet. Mitigation Measure CUL-2 has been included in order to minimize impacts in the event an unexpected discovery occurs. Upon implementation of recommended mitigation, impacts would be less than significant in this regard.
**Mitigation Measures:**

**CUL-2**  
If, during ground disturbance, potentially significant paleontological evidence becomes apparent, work in that location shall be stopped; if not present, a qualified paleontologist (approved by the City) shall be notified immediately to evaluate the find. Should evaluation conclude that important cultural resources exist and would be negatively impacted by project construction, recommendations shall present further mitigation measures necessary to lessen those impacts to less than significant.

**d) Disturb any human remains, including those interred outside of formal cemeteries?**

**Less Than Significant Impact.** No on-site conditions exist that suggest human remains are likely to be found on the project site. It is not anticipated that human remains, including those interred outside of formal cemeteries, would be encountered during earth removal or disturbance activities. If human remains are found, they would require proper treatment, in accordance with applicable laws. State of California Public Resources Health and Safety Code Section 7050.5-7055 describe the general provisions for human remains. Specifically, Health and Safety Code Section 7050.5 describes the requirements if any human remains are accidentally discovered during excavation of a site. As required by State law, the requirements and procedures set forth in Section 5097.98 of the California Public Resources Code would be implemented, including notification of the County Coroner, notification of the Native American Heritage Commission and consultation with the individual identified by the Native American Heritage Commission to be the “most likely descendant.” If human remains are found during excavation, excavation must stop in the vicinity of the find and any area that is reasonably suspected to overlay adjacent remains until the County coroner has been called out, and the remains have been investigated and appropriate recommendations have been made for the treatment and disposition of the remains. Following compliance with existing State regulations, which detail the appropriate actions necessary in the event human remains are encountered, impacts in this regard would be considered less than significant.

**Mitigation Measures:** No mitigation is required.
### 4.6 GEOLOGY AND SOILS

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>2) Strong seismic ground shaking?</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Seismic-related ground failure, including liquefaction?</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) Landslides?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Result in substantial soil erosion or the loss of topsoil?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

a) **Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:**

1) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?** Refer to Division of Mines and Geology Special Publication 42.

**No Impact.** Southern California, including the project area, is subject to the effects of seismic activity due to the active faults that traverse the area. Active faults are defined as those that have experienced surface displacement within Holocene time (approximately the last 11,000 years) and/or are in a State-designated Alquist-Priolo Earthquake Fault Zone.

According to the California Department of Conservation Alquist-Priolo Fault Zones Earthquake Map, no Alquist-Priolo Earthquake Fault Zones traverse the project area.¹ Thus, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation is required.

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2) **Strong seismic ground shaking?**

**Less Than Significant Impact.** Southern California has numerous active seismic faults subjecting residents to potential earthquake and seismic-related hazards. Seismic activity poses two types of potential hazards for residents and structures, categorized either as primary or secondary hazards. Primary hazards include ground rupture, ground shaking, ground displacement, subsidence, and uplift from earth movement. Primary hazards can also induce secondary hazards such as ground failure (lurch cracking, lateral spreading, and slope failure), liquefaction, water waves (seiches), movement on nearby faults (sympathetic fault movement), dam failure, and fires.

Although no active faults are known to be present within the project vicinity, there are four major fault zones in the surrounding area that have the highest potential to impact the project. These faults are listed in Table 4.6-1, *Principal Faults Affecting the Project Area*.

### Table 4.6-1
**Principal Faults Affecting the Project Area**

<table>
<thead>
<tr>
<th>Fault Name</th>
<th>Approximate Distance From Site (Miles)</th>
<th>Maximum Credible Earthquake Magnitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newport-Inglewood Fault Zone</td>
<td>0.6</td>
<td>7.4</td>
</tr>
<tr>
<td>San Joaquin Hills Blind Thrust</td>
<td>5.5</td>
<td>N/A</td>
</tr>
<tr>
<td>Whittier Fault Zone</td>
<td>25</td>
<td>6.0-7.2</td>
</tr>
<tr>
<td>Elysian Park Fault Zone</td>
<td>36</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Notes:
1. Distances were measured using Google Earth, May 5, 2015.

Given the proximity of these earthquake faults to the project area, the proposed project could be subjected to seismic shaking; however, no habitable structures are proposed within the project site. Even with strong seismic ground shaking, the project would not have the potential to adversely affect people or structures, given the nature of proposed improvements. Therefore, impacts in this regard would be less than significant.

**Mitigation Measures:** No mitigation is required.

3) **Seismic-related ground failure, including liquefaction?**

**Less Than Significant Impact.** Liquefaction of cohesionless soils can be caused by strong vibratory motion due to earthquakes. Liquefaction is characterized by a loss of shear strength in the affected soil layers, thereby causing the soils to behave as a viscous liquid. Susceptibility to liquefaction is based on geologic and geotechnical data. River channels and floodplains are considered most susceptible to liquefaction, while alluvial fans have a lower susceptibility. Depth to groundwater is another important element in the susceptibility to liquefaction. Groundwater shallower than 30 feet results in high to very high susceptibility to liquefaction, while deeper water results in low and very low susceptibility.

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2 City of Newport Beach, *City of Newport Beach Safety Element*, July 2006.
Based upon Figure S2, Seismic Hazards, of the General Plan, the project area is subject to the potential for liquefaction. Although the potential for liquefaction exists within the project area, the risk for loss, injury, or death due to project implementation is low as the project would not include any housing or habitable structures. As such, impacts in this regard would be less than significant.

*Mitigation Measures:* No mitigation is required.

4) Landslides?

*Less Than Significant Impact.* Landslides are a serious geologic hazard, with some moving slowly and causing damage gradually, and others moving rapidly and causing unexpected damage. Gravity is the force driving landslide movement. Factors that commonly allow the force of gravity to overcome the resistance of earth material to landslide movement include saturation by water, steepening of slopes by erosion or construction, alternate freezing or thawing, and seismic shaking. Landslides are typically associated with periods of heavy rainfall or rapid snow melt and tend to worsen the effects of flooding that often accompanies these events.

According to Figure S2 of the General Plan, the project site is not located within an area with landslide potential; however, the adjoining Buck Gully Canyon slopes have landslide potential. Although the potential exists for landslides within the project area, the risk of loss, injury, or death is considered minimal as the project would not include housing or any other habitable structures. Thus, impacts in this regard would be less than significant.

*Mitigation Measures:* No mitigation is required.

b) Result in substantial soil erosion or the loss of topsoil?

*Less Than Significant Impact.* Refer to Response 4.9(a) for a detailed response regarding the potential for water quality impacts (including soil erosion and the loss of topsoil) during the short-term construction process and long-term operations. The proposed project would alter the drainage pattern along Buck Gully. The project would capture and divert water from the existing drainage during the dry weather flows, convey them to an infiltration basin, after which flows would ultimately be discharged to the Pacific Ocean. While the proposed project would result in an alteration to the course of dry weather flows within Buck Gully, the project would not result in substantial erosion or siltation on- or off-site. Further, during-construction BMPs will be utilized to minimize impacts to water quality resulting from soil erosion. Thus, impacts in this regard would be less than significant.

*Mitigation Measures:* No mitigation is required.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in an on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

*Less Than Significant Impact.* Refer to Responses 4.6(a)(3) and 4.6(a)(4), above. Given that the project would not introduce housing or other habitable structures, impacts related to unstable soils (including landslides, lateral spreading, subsidence, liquefaction, or collapse) would be less than significant.

*Mitigation Measure:* No mitigation is required.
d) **Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**

*Less Than Significant Impact.* Refer to Response 4.6(c), above. The project area is underlain by sandy alluvial soils and these soils could be subject to settlement and/or instability. Although expansive soils may exist within the project area, the proposed project would not include the development of any structures that would jeopardize property or human health. Thus, impacts in this regard would be less than significant.

*Mitigation Measures:* No mitigation is required.

e) **Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**

*No Impact.* No septic tanks or alternative wastewater systems would be constructed as part of the project, and no impacts would occur in this regard.

*Mitigation Measures:* No mitigation is required.
4.7 GREENHOUSE GAS EMISSIONS

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

*Less Than Significant Impact.*

**GLOBAL CLIMATE CHANGE**

California is a substantial contributor of global greenhouse gases (GHGs), emitting over 400 million tons of carbon dioxide (CO$_2$) per year.\(^1\) Climate studies indicate that California is likely to see an increase of three to four degrees Fahrenheit (°F) over the next century. Methane is also an important GHG that potentially contributes to global climate change. GHGs are global in their effect, which is to increase the earth’s ability to absorb heat in the atmosphere. As primary GHGs have a long lifetime in the atmosphere, accumulate over time, and are generally well-mixed, their impact on the atmosphere is mostly independent of the point of emission.

The impact of human activities on global climate change is apparent in the observational record. Air trapped by ice has been extracted from core samples taken from polar ice sheets to determine the global atmospheric variation of CO$_2$, methane (CH$_4$), and nitrous oxide (N$_2$O) from before the start of industrialization (approximately 1750), to over 650,000 years ago. For that period, it was found that CO$_2$ concentrations ranged from 180 parts per million (ppm) to 300 ppm. For the period from approximately 1750 to the present, global CO$_2$ concentrations increased from a pre-industrialization period concentration of 280 ppm to 379 ppm in 2005, with the 2005 value far exceeding the upper end of the pre-industrial period range.

**REGULATIONS AND SIGNIFICANCE CRITERIA**

The Intergovernmental Panel on Climate Change (IPCC) developed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of GHGs at 400 to 450 ppm carbon dioxide-equivalent (CO$_2$eq)\(^2\) concentration is required to keep global mean warming below 2 degrees Celsius (°C), which in turn is assumed to be necessary to avoid dangerous climate change.

Executive Order S-3-05 was issued in June 2005, which established the following GHG emission reduction targets:

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\(^2\) Carbon Dioxide Equivalent (CO$_2$eq) – A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.
- 2010: Reduce GHG emissions to 2000 levels;
- 2020: Reduce GHG emissions to 1990 levels; and
- 2050: Reduce GHG emissions to 80 percent below 1990 levels.

Assembly Bill (AB) 32 requires that the California Air Resources Board (CARB) determine what the statewide GHG emissions level was in 1990, and approve a statewide GHG emissions limit that is equivalent to that level, to be achieved by 2020. CARB has approved a 2020 emissions limit of 427 million metric tons (MMT) of CO$_{2}$eq.

Due to the nature of global climate change, it is not anticipated that any single development project would have a substantial effect on global climate change. In actuality, GHG emissions from the proposed project would combine with emissions emitted across California, the United States, and the world to cumulatively contribute to global climate change.

In June 2008, the California Governor’s Office of Planning and Research (OPR) published a Technical Advisory, which provides informal guidance for public agencies as they address the issue of climate change in CEQA documents. This is assessed by determining whether a proposed project is consistent with or obstructs the 39 Recommended Actions identified by CARB in its Climate Change Scoping Plan which includes nine Early Action Measures (qualitative approach). The Attorney General’s Mitigation Measures identify areas where GHG emissions reductions can be achieved in order to achieve the goals of AB 32. As set forth in the OPR Technical Advisory and in the proposed amendments to the CEQA Guidelines Section 15064.4, this analysis examines whether the project's GHG emissions are significant based on a qualitative and performance based standard (Proposed CEQA Guidelines Section 15064.4(a)(1) and (2)).

SCAQMD THRESHOLDS

The SCAQMD has formed a GHG CEQA Significance Threshold Working Group (Working Group) to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. As of the last Working Group meeting (Meeting No. 15) held in September 2010, the SCAQMD is proposing to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency.

With the tiered approach, the project is compared with the requirements of each tier sequentially and would not result in a significant impact if it complies with any tier. Tier 1 excludes projects that are specifically exempt from Senate Bill (SB) 97 from resulting in a significant impact. Tier 2 excludes projects that are consistent with a GHG reduction plan that has a certified final CEQA document and complies with AB 32 GHG reduction goals. Tier 3 excludes projects with annual emissions lower than a screening threshold. The SCAQMD is proposing a screening threshold of 10,000 MTCO$_{2}$eq per year and for all non-industrial projects, the SCAQMD is proposing a screening threshold of 3,000 MTCO$_{2}$eq per year. SCAQMD concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact.

Tier 4 consists of three decision tree options. Under the Tier 4 first option, the project would be excluded if design features and/or mitigation measures resulted in emissions 30 percent lower than business as usual emissions. Under the Tier 4 second option the project would be excluded if it had early compliance with AB 32 through early implementation of CARB's Scoping Plan measures. Under the Tier 4 third option, the project would be excluded if it was below an efficiency-based threshold of 4.8

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3 Governor’s Office of Planning and Research, CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review, 2008.
4 The most recent SCAQMD GHG CEQA Significance Threshold Working Group meeting was held on September 2010.
MTCO₂eq per service population (SP) per year. Tier 5 would exclude projects that implement offsite mitigation (GHG reduction projects) or purchase offsets to reduce GHG emission impacts to less than the proposed screening level.

GHG efficiency metrics are utilized as thresholds to assess the GHG efficiency of a project on a per capita basis or on a “service population” basis (the sum of the number of jobs and the number of residents provided by a project) such that the project would allow for consistency with the goals of AB 32 (i.e., 1990 GHG emissions levels by 2020 and 2035). GHG efficiency thresholds can be determined by dividing the GHG emissions inventory goal of the State, by the estimated 2035 population and employment. This method allows highly efficient projects with higher mass emissions to meet the overall reduction goals of AB 32, and is appropriate, because the threshold can be applied evenly to all project types (residential or commercial/retail only and mixed use).

For the proposed project, the 3,000 MTCO₂eq per year non-industrial screening threshold is used as the significance threshold, in addition to the qualitative thresholds of significance set forth below from Section VII of Appendix G to the CEQA Guidelines.

**CITY OF NEWPORT BEACH ENERGY ACTION PLAN**

In July 2013, the City adopted its Energy Action Plan (EAP). The primary goal of the EAP is to provide a roadmap for the City to reduce GHG emission through reductions in energy used in facility buildings and operations. The EAP identifies past energy measures that have been implemented and present measures that currently in that process, all of which will contribute to the energy reduction goal. In addition, the EAP identifies other potential energy reductions measures that the City will consider for future implementation. The City’s long term vision for energy efficiency focuses around three primary objectives:

1. Reduce the City’s carbon footprint and its adverse effect on the environment;
2. Conserve energy at the local government facilities; and
3. Raise energy conservation awareness in local communities and improve the quality of life.

**PROJECT-RELATED SOURCES OF GREENHOUSE GASES**

Project-related GHG emissions would include direct emissions from construction activities only. Other direct source emissions (area source and mobile source) would not occur, as the project does not propose any new land uses and would not generate any new vehicle trips. No indirect GHG emissions would occur, as the project would not require electricity or water. Consequently, project-related GHG emissions of CO₂, N₂O, and CH₄ would only be from construction activities.

As shown in Table 4.7-1, Estimated Greenhouse Gas Emissions, construction of the proposed project would result in a total of 88.69 MTCO₂eq (2.96 MTCO₂eq amortized over 30 years) which is well below the 3,000 MTCO₂eq/year screening threshold. The California Emissions Estimator Model (CalEEMod) was used to calculate off-road construction emissions. The CalEEMod outputs are contained within the Appendix B, Air Quality/Greenhouse Gas Data. As GHG emissions from construction of the proposed project would be minimal and less than the non-industrial GHG emissions threshold proposed by the SCAQMD, a less than significant impact would occur in this regard.

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5 The project-level efficiency-based threshold of 4.8 MTCO₂eq per SP per year is relative to the 2020 target date. The SCAQMD has also proposed efficiency-based thresholds relative to the 2035 target date to be consistent with the GHG reduction target date of SB 375. GHG reductions by the SB 375 target date of 2035 would be approximately 40 percent. Applying this 40 percent reduction to the 2020 targets results in an efficiency threshold for plans of 4.1 MTCO₂eq per SP per year and an efficiency threshold at the project level of 3.0 MTCO₂eq/year.
### Table 4.7-1
Estimated Greenhouse Gas Emissions

<table>
<thead>
<tr>
<th>Source</th>
<th>CO₂</th>
<th>CH₄</th>
<th>N₂O</th>
<th>Total Metric Tons of CO₂eq¹</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Metric Tons/yr</td>
<td>Metric Tons/yr</td>
<td>Metric Tons of CO₂eq¹</td>
<td>Metric Tons of CO₂eq¹</td>
</tr>
<tr>
<td>Construction Emissions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total emissions (one time)</td>
<td>88.27</td>
<td>0.02</td>
<td>0.50</td>
<td>0.00</td>
</tr>
<tr>
<td>Total emissions (amortized over 30 years)</td>
<td>2.94</td>
<td>0.00</td>
<td>0.02</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Notes:
2. Totals may be slightly off due to rounding.

Refer to Appendix B, Air Quality/Greenhouse Gas Data, for detailed model input/output data.

**Mitigation Measures:** No mitigation is required.

**b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

**Less Than Significant Impact.** The City does not currently have an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. However, the City prepared an Energy Action Plan, created in partnership with Southern California Edison (SCE) and Southern California Gas Company (SCG). The Plan provides the City guidance in reducing GHG emissions by lowering municipal and community wide energy use. The Plan assists in identifying a clear path to successfully implementing goals, policies, and actions that will achieve the City’s reduction targets. Additionally, the City entered into the Orange County Cities Energy Leadership Partnership Program (OCCELP), a joint partnership with Southern California Edison (SCE), Southern California Gas Company and neighboring cities Fountain Valley, Westminster, and Costa Mesa to improve long term energy and sustainability throughout the local area.

The proposed project would result in minimal construction-related GHG emissions, and would not generate any operational GHG emissions. Thus, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Impacts are less than significant in this regard.

**Mitigation Measures:** No mitigation is required.
### 4.8 HAZARDS AND HAZARDOUS MATERIALS

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

#### a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

**Less Than Significant Impact.** The short-term construction process for the proposed project would not involve the routine transport, use, or disposal of hazardous materials. With the exception of utilizing gasoline, diesel fuel, and lubricants for construction equipment, no other hazardous materials would be transported to or from the project site, or used in the construction process. Fuels and solvents for construction would be stored and utilized pursuant to existing regulatory requirements. Therefore, short-term construction impacts would be less than significant in this regard.

Long-term operation of the proposed infiltration facility would not itself require the transport, use, or disposal of hazardous materials. Therefore, there would be no long-term operational impacts in this regard.

**Mitigation Measures:** No mitigation is required.
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

**Less Than Significant Impact With Mitigation Incorporated.**

**Short-Term Impacts**

One of the means through which human exposure to hazardous substance could occur is through accidental release. Incidents that result in an accidental release of hazardous substance into the environment can cause contamination of soil, surface water, and groundwater, in addition to any toxic fumes that might be generated. If not cleaned up immediately and completely, the hazardous substances can migrate into the soil or enter a local stream or channel causing contamination of soil and water. Human exposure of contaminated soil or water can have potential health effects on a variety of factors, including the nature of the contaminant and the degree of exposure.

During the short-term period of project construction, there is a possibility of accidental release of hazardous substances such as petroleum-based fuels or hydraulic fluid used for construction equipment. The level of risk associated with the accidental release of hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials utilized during construction. The construction contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for accidental release of such substances into the environment. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and Federal law.

The project site consists of Little Corona Beach, where Buck Gully is discharged into the Pacific Ocean. It is not anticipated that recognized environmental conditions (REC) or hazardous materials exist on the beach or within the canyon. During construction, storage and use of hazardous materials would be located outside of Little Corona Beach and the Buck Gully drainage. Given the condition of the site and the low potential for RECs from surrounding properties, hazardous materials are not anticipated to be encountered. In the unlikely event that hazardous materials are present on-site, Mitigation Measure HAZ-1 shall be implemented to reduce impacts to less than significant level.

**Long-Term Operational Impacts**

Refer to Response 4.8(a), above, for a description of impacts related to existing and proposed operations at the site. Impacts in this regard would be less than significant.

**Mitigation Measures:**

HAZ-1 During construction, if the contractor discovers unknown wastes or suspect materials that he/she believes may be hazardous, the contractor shall:

- Immediately stop work in the vicinity of the suspected contaminant, removing workers and the public from the area;
- Notify the Project Engineer of the implementing agency;
- Secure the areas as directed by the Project Engineer; and
- Notify the implementing agency’s hazardous and waste/materials coordinator.
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

**No Impact.** No schools are located within one-quarter mile of the project site. The closest school is located 0.75 miles north of the project site. Additionally, the proposed project does not have the capacity to emit hazardous emissions and does not involve handing hazardous materials. Thus, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation is required.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

**No Impact.** RBF Baker conducted a records search of the Cal EPA’s Cortese list, pursuant to Government Code Section 65962.5 on May 4, 2015. The database search results indicate that no regulatory property is located within the boundaries of the projects site. No known corrective action, restoration, or remediation has been planned, is currently taking place, or has been completed on the site. The project site has not been under investigation for violation of any environmental laws, regulations, or standards. As such, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation is required.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

**No Impact.** The nearest airport to the project site is the John Wayne Airport, located approximately 5.25 miles to the northeast. In addition, the project site is located outside of the boundaries of the Airport Environ Land Use Plan for John Wayne Airport. Therefore, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation is required.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

**No Impact.** No private airstrips exist in the project vicinity. Thus, no impacts would occur.

**Mitigation Measures:** No mitigation is required.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

**Less Than Significant Impact.** The proposed project would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. Construction equipment would be located in an area that would not obstruct roadways available to the surrounding residential uses. During construction activities, access to and from Little Corona Beach would remain open at all times. During long-term operations, the proposed project would not affect access to and from Little Corona Beach. Impacts in this regard would be less than significant.
Mitigation Measures: No mitigation is required.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. The proposed project site is located within an urbanized area, and no wildland areas exist in the project vicinity. Moreover, the proposed project would not include any habitable structures that would expose people to significant risk of loss, injury, or death involving wildland fires. No impacts would occur in this regard.

Mitigation Measures: No mitigation is required.
### 4.9 HYDROLOGY AND WATER QUALITY

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Violate any water quality standards or waste discharge requirements?</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>f. Otherwise substantially degrade water quality?</td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?</td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>j. Inundation by seiche, tsunami, or mudflow?</td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
</tbody>
</table>

**a) Violate any water quality standards or waste discharge requirements?**

**Less Than Significant Impact.**

**Short-Term Impacts**

The primary water quality concern related to the proposed project would be potential erosion impacts during construction activities. Grading and excavation activities associated with construction of the project would expose soils to potential short-term erosion by wind and water. Generally, construction activities within the City would be regulated under the National Pollutant Discharge Elimination System (NPDES) program, as administered by the Santa Ana Regional Water Quality Control Board (RWQCB). The RWQCB administers an NPDES Construction General Permit (CGP) for any construction project disturbing more than one acre of land. The project site is less than 1 acre, and therefore would not be subject to the requirements of the NPDES CGP.
However, construction of the proposed project would be required to comply with water quality control measures included in Chapter 15.10, *Excavation and Grading Code*, of the City’s *Municipal Code*. The *Excavation and Grading Code* includes measures to minimize water quality impacts related to erosion during the short-term construction process. Upon adherence to these requirements, impacts in this regard would be less than significant.

**Long-Term Impacts**

The proposed project will provide an overall net benefit in water quality by capturing and infiltrating the nuisance surface flows diverted from Buck Gully at the existing weir structure, conveying flows to a pre-treatment facility near the beach access path, and infiltrating the water through a subsurface gallery under the beach. The proposed improvements would not substantially alter drainage or water quality in comparison to existing conditions. Specific during- and post-construction Best Management Practices (BMPs) will be utilized to ensure that water quality impacts are reduced to a less than significant level during long-term operations.

**Mitigation Measures:** No mitigation is required.

- b) **Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?**

  **Less Than Significant Impact.** The project would not result in an increase in impervious area in comparison to existing conditions. Groundwater percolation at the project site would not be affected by the proposed project. As the proposed project consists of re-routing existing dry season flows to an adjacent infiltration basin, the proposed project would not result in a noticeable deficit in aquifer volume or a lowering of the groundwater table. The project would not involve or require the extraction of groundwater. As such, the project would not have the ability to substantially affect groundwater levels in the site vicinity, and impacts would be less than significant in this regard.

  **Mitigation Measures:** No mitigation is required.

- c) **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?**

  **Less Than Significant Impact.** The proposed project would alter existing drainage patterns of the area by capturing dry weather flows and re-routing them to an adjacent infiltration basin, which will result in a decrease in dry weather flow volumes. Storm flows would remain the same upon post-construction and therefore, existing erosion and siltation would not be affected. It is possible that drainage patterns would be altered during short-term construction activities. However, as noted above, construction of the project would be required to comply with water quality control measures included in Chapter 15.10, *Excavation and Grading Code*, of the City’s *Municipal Code*. The *Excavation and Grading Code* includes measures to minimize water quality impacts during the short-term construction process. Upon adherence to these requirements, impacts in this regard would be less than significant.

  **Mitigation Measures:** No mitigation is required.
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

**Less Than Significant Impact.** As stated in Response 4.9(c), the proposed project would not substantially alter the existing drainage patterns of the project site or in the surrounding area. Dry season flows would decrease and wet weather flows would be unaffected by the proposed project. As such, the project would not have the capacity to alter drainage patterns or increase the potential for flooding in the project area. Impacts in this regard would be less than significant.

**Mitigation Measures:** No mitigation is required.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

**Less Than Significant Impact.** The proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems, nor would the project provide substantial additional sources of water.

**Mitigation Measures:** No mitigation is required.

f) Otherwise substantially degrade water quality?

**No Impact.** The proposed project will have a beneficial impact in regard to water quality, as it would reduce the amount of sediment and other pollutants flowing through the site and into the ocean and associated sensitive marine life areas.

**Mitigation Measures:** No mitigation is required.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

**No Impact.** The proposed project does not involve the development of housing; therefore, no impacts would occur.

**Mitigation Measures:** No mitigation is required.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

**Less Than Significant Impact.** The proposed project includes the installation of a subsurface infiltration device, to eliminate nuisance surface flows during the dry season. As the infiltration devices will be underground, there will be no structures within the 100-year hazard area that would impede or redirect flood flows.

**Mitigation Measures:** No mitigation is required.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

**Less Than Significant Impact.** The project site is not located within a dam inundation area; therefore, no impacts would occur.
Mitigation Measures: No mitigation is required.

j) Inundation by seiche, tsunami, or mudflow?

Less Than Significant Impact. A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake, or storage tank. A tsunami is a great sea wave, commonly referred to as a tidal wave, produced by a significant undersea disturbance such as tectonic displacement of a sea floor associated with large, shallow earthquakes. Mudflows result from the downslope movement of soil and/or rock under the influence of gravity.

Although the project site is located near Newport Bay, according to the City's General Plan EIR, the probability that damaging seiches would develop in Newport Bay is considered low. In addition, mudflow potential in the project area is considered low, as there are no topographical features capable of producing mudflow adjacent to the project site.

The beach area can be impacted by a tsunami. The proposed project does not include new habitable structures, nor would it alter any existing structures in the project vicinity. The project does not include new habitable structures, nor would it alter the existing habitable structures in the project vicinity. The project would therefore not increase the likelihood of damage by a tsunami; therefore, there is no impact.

Mitigation Measures: No mitigation is required.
4.10 LAND USE AND PLANNING

Would the project:

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Physically divide an established community?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>c. Conflict with any applicable habitat conservation plan or natural community conservation plan?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

a) Physically divide an established community?

**No Impact.** The project site is located at the base of Buck Gully within Little Corona Beach, and is comprised of improvements that will primarily be located underground and/or are similar to the existing drainage infrastructure that currently exists. As such, the proposed project would be similar to existing conditions, and would not divide an established community. Rather, the project would result in a beneficial impact in this regard since it would provide a benefit to water quality in an area (Little Corona Beach) that is heavily used by the general public.

**Mitigation Measures:** No mitigation is required.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

**Less Than Significant Impact.** The proposed project will consist of drainage infrastructure improvements at the base of Buck Gully to improve water quality and eliminate unpleasant nuisance flows that travel across Little Corona Beach. The aboveground improvements would be concrete and would generally maintain the same architectural/visual characteristics as the existing concrete weir in the project location. The new improvements would improve the beach experience for all users of the site and surrounding area, and would not conflict with any City plan or policy.

In addition, the project will be required to comply with California Coastal Act (CCA) and the City’s Coastal Land Use Plan. The City would be responsible for acquisition of a Coastal Development Permit (CDP) through the California Coastal Commission (CCC). As part of the CDP application process, the CCC would perform a detailed review of the proposed project in relation to the CCA, and identify any measures required to achieve consistency. As such, impacts in this regard would be less than significant.

**Mitigation Measures:** No mitigation is required.
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The proposed project is located within the Orange County Central/Coastal Natural Community Conservation Plan (NCCP). However, as discussed within Responses 4.4(a) through 4.4(e), the proposed project would not result in significant impacts to biological resources, and would not result in conflicts with provisions of the NCCP. As such, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

1 California Department of Fish and Wildlife, HCP/NCCP California Regional Conservation Plans, October 2013.
## 4.11 MINERAL RESOURCES

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

**No Impact.** The proposed project would involve installing an underground infiltration system near the existing beach access path. The system would capture and infiltrate nuisance surface water flows. No mineral recovery activities currently occur in the project area, and the project site is not underlain by any known mineral resources of value to the region and residents of the state. Thus, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation is required.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

**No Impact.** Refer to Response 4.11(a), above.

**Mitigation Measures:** No mitigation is required.
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## 4.12 NOISE

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air, and is characterized by both its amplitude and frequency (or pitch). The human ear does not hear all frequencies equally. In particular, the ear deemphasizes low and very high frequencies. To better approximate the sensitivity of human hearing, the A-weighted decibel scale (dBA) has been developed. On this scale, the human range of hearing extends from approximately 3 dBA to around 140 dBA.

Noise is generally defined as unwanted or excessive sound, which can vary in intensity by over one million times within the range of human hearing; therefore, a logarithmic scale, known as the decibel scale (dB), is used to quantify sound intensity. Noise can be generated by a number of sources, including mobile sources such as automobiles, trucks, and airplanes, and stationary sources such as construction sites, machinery, and industrial operations. Noise generated by mobile sources typically attenuates (is reduced) at a rate between 3 dBA and 4.5 dBA per doubling of distance. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance. Noise generated by stationary sources typically attenuates at a rate between 6 dBA and about 7.5 dBA per doubling of distance.

There are a number of metrics used to characterize community noise exposure, which fluctuate constantly over time. One such metric, the equivalent sound level ($L_{eq}$), represents a constant sound that, over the specified period, has the same sound energy as the time-varying sound. Noise exposure over a longer period of time is often evaluated based on the Day-Night Sound Level ($L_{dn}$). This is a measure of 24-hour noise levels that incorporates a 10-dBA penalty for sounds occurring between 10:00 p.m. and 7:00 a.m. The penalty is intended to reflect the increased human sensitivity to noises occurring during nighttime hours, particularly at times when people are sleeping and there are lower ambient noise conditions. Typical $L_{dn}$ noise levels for light and medium density residential areas range from 55 dBA to 65 dBA.
Two of the primary factors that reduce levels of environmental sounds are increasing the distance between the sound source to the receiver and having intervening obstacles such as walls, buildings, or terrain features between the sound source and the receiver. Factors that act to increase the loudness of environmental sounds include moving the sound source closer to the receiver, sound enhancements caused by reflections, and focusing caused by various meteorological conditions.

**STATE OF CALIFORNIA**

The State Office of Planning and Research Noise Element Guidelines include recommended exterior and interior noise level standards for local jurisdictions to identify and prevent the creation of incompatible land uses due to noise. The Noise Element Guidelines contain a land use compatibility table that describes the compatibility of various land uses with a range of environmental noise levels in terms of the Community Noise Equivalent Level (CNEL).

**CITY OF NEWPORT BEACH**

Chapter 10.26, Community Noise Control, of the City’s Municipal Code contains all noise regulations implemented in the City; refer to Table 4.12-1, City of Newport Beach Exterior Noise Standards, and Table 4.12-2, City of Newport Beach Interior Noise Standards.

<table>
<thead>
<tr>
<th>Table 4.12-1</th>
<th>City of Newport Beach Exterior Noise Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Zone</strong></td>
<td><strong>Allowable Exterior Noise Level (L_{eq})^1</strong></td>
</tr>
<tr>
<td></td>
<td><strong>7:00 a.m. to 10 p.m.</strong></td>
</tr>
<tr>
<td>1- Single-, two- or multiple-family residential properties</td>
<td>55 dBA</td>
</tr>
<tr>
<td>2- Commercial properties</td>
<td>65 dBA</td>
</tr>
<tr>
<td>3- Residential portions of mixed-use properties</td>
<td>60 dBA</td>
</tr>
<tr>
<td>4- Industrial or manufacturing</td>
<td>70 dBA</td>
</tr>
<tr>
<td><strong>Note:</strong> If the ambient noise level exceeds the resulting standards, the ambient shall be the standard.</td>
<td></td>
</tr>
<tr>
<td><strong>Source:</strong> Chapter 10.26 (Community Noise Control) Section 10.26.025(A) of the City of Newport Beach Municipal Code, 2015.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 4.12-2</th>
<th>City of Newport Beach Interior Noise Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Zone</strong></td>
<td><strong>Allowable Interior Noise Level^1</strong></td>
</tr>
<tr>
<td></td>
<td><strong>7:00 a.m. to 10 p.m.</strong></td>
</tr>
<tr>
<td>1- Residential</td>
<td>45 dBA</td>
</tr>
<tr>
<td>2- Residential portions of mixed-use properties</td>
<td>45 dBA</td>
</tr>
<tr>
<td><strong>Note:</strong> If the ambient noise level exceeds the resulting standards, the ambient shall be the standard.</td>
<td></td>
</tr>
<tr>
<td><strong>Source:</strong> Chapter 10.26 (Community Noise Control) Section 10.26.030(A) of the City of Newport Beach Municipal Code, 2015.</td>
<td></td>
</tr>
</tbody>
</table>

The project would also be subject to the limitations imposed by the City regarding construction noise. The following outlines the City’s construction noise ordinance:

A. **Weekdays and Saturdays.** No person shall, while engaged in construction, remodeling, digging, grading, demolition, painting, plastering or any other related building activity, operate any tool, equipment or machine in a manner which produces loud noise that disturbs, or could disturb, a person...
of normal sensitivity who works or resides in the vicinity, on any weekday except between the hours of
seven a.m. and six-thirty p.m., nor on any Saturday except between the hours of eight a.m. and six p.m.

B. Sundays and Holidays. No person shall, while engaged in construction, remodeling, digging, grading,
demolition, painting, plastering or any other related building activity, operate any tool, equipment or
machine in a manner which produces loud noise that disturbs, or could disturb, a person of normal
sensitivity who works or resides in the vicinity, on any Sunday or any federal holiday.

C. No landowner, construction company owner, contractor, subcontractor, or employer shall permit or
allow any person or persons working under their direction and control to operate any tool, equipment or
machine in violation of the provisions of this section.

EXISTING NOISE SOURCES

The project area consists of a mix of coastal riparian habitat, beaches, and residential communities. The primary
sources of stationary ambient noise in the project vicinity are typical of coastal riparian habitats (i.e., ocean waves
and wildlife) and residential communities (i.e., mechanical equipment, parking areas, and pedestrians). The noise
associated with these sources may represent a single-event noise occurrence, short-term or long-term/continuous
noise. The majority of the existing mobile noise in the project area is generated from local traffic along residential
streets and East Coast Highway located approximately 0.25 miles to the north of the project site.

a) Exposure of persons to or generation of noise levels in excess of standards established in the
local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact With Mitigation Incorporated. It is difficult to specify noise levels that
are generally acceptable to everyone; what is annoying to one person may be unnoticed by another.
Standards may be based on documented complaints in response to documented noise levels, or based
on studies of the ability of people to sleep, talk, or work under various noise conditions. However, all
such studies recognize that individual responses vary considerably. Standards usually address the
needs of the majority of the general population.

Chapter 10.28, Loud and Unreasonable Noise, of the City’s Municipal Code sets forth all noise
regulations controlling unnecessary, excessive, and annoying noise within the City. As outlined in the
Municipal Code, maximum noise levels are based on land use.

SHORT-TERM NOISE IMPACTS

Construction of the proposed project would occur over approximately four months. Construction
activities would include minor demolition, grading, and construction of the infiltration system. Ground-
borne noise and other types of construction-related noise impacts typically occur during the initial site
preparation. This phase of construction has the potential to create the highest levels of noise; however,
it is generally the shortest of all construction phases. Typical noise levels generated by construction
equipment are shown in Table 4.12-3, Maximum Noise Levels Generated by Construction Equipment.
Operating cycles for these types of construction equipment may involve one or two minutes of full
power operation followed by three to four minutes at lower power settings. Other primary sources of
acoustical disturbance would be due to random incidents, which would last less than one minute (such
as dropping large pieces of equipment or the hydraulic movement of machinery lifts).
Table 4.12-3
Maximum Noise Levels Generated by Construction Equipment

<table>
<thead>
<tr>
<th>Type of Equipment</th>
<th>Acoustical Use Factor</th>
<th>L_{max} at 50 Feet (dBA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete Saw</td>
<td>20</td>
<td>90</td>
</tr>
<tr>
<td>Crane</td>
<td>16</td>
<td>81</td>
</tr>
<tr>
<td>Backhoe</td>
<td>40</td>
<td>78</td>
</tr>
<tr>
<td>Dozer</td>
<td>40</td>
<td>82</td>
</tr>
<tr>
<td>Excavator</td>
<td>40</td>
<td>81</td>
</tr>
<tr>
<td>Forklift</td>
<td>40</td>
<td>78</td>
</tr>
<tr>
<td>Tractor</td>
<td>40</td>
<td>84</td>
</tr>
<tr>
<td>General Industrial Equipment</td>
<td>50</td>
<td>85</td>
</tr>
</tbody>
</table>

Note: 1 – Acoustical Use Factor (percent): Estimates the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.


Sensitive uses surrounding the project site include residential uses surrounding the project site to the east and west. These sensitive uses may be exposed to elevated noise levels during project construction. The City’s Municipal Code does not establish quantitative construction noise standards. Instead, Chapter 10.28 of the City’s Municipal Code establishes allowable hours of 7:00 a.m. and 6:30 p.m. on weekdays, 8:00 a.m. and 6:00 p.m. on Saturdays, and at no time on Sundays or Federal holidays. Thus, construction activities would be conducted during allowable daytime hours, per the City’s Municipal Code. Further, implementation of Mitigation Measure N-1 would ensure that noise generated during construction of the project would be lessened to the maximum extent possible. Mitigation Measure N-1 includes the designation of a “Noise Disturbance Coordinator,” and orientation of stationary construction equipment away from nearby sensitive receivers, among other requirements. Impacts in this regard would be less than significant with implementation of Mitigation Measure N-1.

Refer to Response 4.12 (c) for a discussion of the proposed project’s long-term operational noise impacts.

**Mitigation Measures:**

**N-1**

Prior to the initiation of construction, the City of Newport Beach Public Works Department shall confirm that the proposed project stipulates that:

- All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other State required noise attenuation devices.

- The City shall provide a qualified “Noise Disturbance Coordinator.” The Disturbance Coordinator shall be responsible for responding to any local complaints about construction noise. When a complaint is received, the Disturbance Coordinator shall notify the City within 24-hours of the complaint and determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall implement reasonable measures to resolve the complaint, as deemed acceptable by the Community Development Department. The contact name and the telephone number for the Disturbance Coordinator shall be clearly posted on-site.

- During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.
Construction activities that produce noise shall not take place outside of the allowable hours specified by the City’s Municipal Code Section 10.28.040 (7:00 a.m. and 6:30 p.m. on weekdays, 8:00 a.m. and 6:00 p.m. on Saturdays; construction is prohibited on Sundays and/or federal holidays).

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

**Less Than Significant Impact.** Project construction can generate varying degrees of ground-borne vibration, depending on the construction procedure and the construction equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Ground-borne vibrations from construction activities rarely reach levels that damage structures.

The Federal Transit Administration (FTA) has published standard vibration velocities for construction equipment operations. In general, the FTA architectural damage criterion for continuous vibrations (i.e., 0.20 inch/second) appears to be conservative. The types of construction vibration impact include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Typical vibration produced by construction equipment is illustrated in Table 4.12-4, *Typical Vibration Levels for Construction Equipment*.

<table>
<thead>
<tr>
<th>Table 4.12-4</th>
<th>Typical Vibration Levels for Construction Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equipment</strong></td>
<td><strong>Approximate peak particle velocity at 25 feet (inches/second)</strong>&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Large bulldozer</td>
<td>0.089</td>
</tr>
<tr>
<td>Loaded trucks</td>
<td>0.076</td>
</tr>
<tr>
<td>Small bulldozer</td>
<td>0.003</td>
</tr>
<tr>
<td>Jackhammer</td>
<td>0.035</td>
</tr>
</tbody>
</table>

Notes:
2. Calculated using the following formula:

\[
PPV_{\text{eq}} = PPV_{\text{ref}} \times \left(\frac{25}{D}\right)^{1.5}
\]

where:  
PPV (equip) = the peak particle velocity in in/sec of the equipment adjusted for the distance  
PPV (ref) = the reference vibration level in in/sec from Table 12-2 of the FTA Transit Noise and Vibration Impact Assessment Guidelines  
D = the distance from the equipment to the receiver

Ground-borne vibration decreases rapidly with distance. The proposed project would not require pile driving. As indicated in Table 4.12-4, based on the FTA data, vibration velocities from typical heavy construction equipment operations that would be used during project construction range from 0.003 to 0.076 inch-per-second peak particle velocity (PPV) at 25 feet from the source of activity. The nearest sensitive receptors (residential surrounding the project site) are located approximately 50 feet from the project site. As noted in Table 4.12-4, vibration at 50 feet would range from 0.001 to 0.031 PPV.
Therefore, vibration from construction activities experienced at the nearest sensitive receptors would be well below the 0.20 inch-per-second PPV significance threshold. Thus, a less than significant impact would occur in this regard.

**Mitigation Measures:** No mitigation is required.

c) **A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

**Less Than Significant Impact.** The project proposes the installation of a subsurface infiltration system on Little Corona Beach at the outlet of Buck Gully, as part of the City’s Watershed Management Plan. Implementation of the proposed project would not result in a substantial permanent increase in ambient noise levels since noise increases would only be generated during construction. Other than occasional minor maintenance activities, the project would not result in long-term mobile noise impacts as the project does not propose any trip-generating land use. Additionally, long-term stationary noise impacts would not occur as all operation equipment, with the exception of the diversion vault, would be located underground. Thus, the proposed project’s long-term noise impact would be negligible. Impacts would be less than significant in this regard.

**Mitigation Measures:** No mitigation is required.

d) **Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above the levels existing without the project?**

**Less Than Significant With Mitigation Incorporated.** Refer to Responses 4.12(a) and 4.12(c), above. While the project may include a minor increase in noise levels during construction, any such increase would be short-term in nature and all impacts would cease upon project completion. Impacts in this regard would be less than significant with implementation of Mitigation Measure N-1.

**Mitigation Measures:** Refer to Mitigation Measure N-1.

e) **For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

**No Impact.** The project site is not located within an area subject to the requirements on an airport land use plan, as it is located approximately 5 miles from John Wayne Airport (SNA). The project consists solely of construction-related activities; thus, no impacts would occur.

**Mitigation Measures:** No mitigation is required.

f) **For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?**

**No Impact.** There are no private airstrips located in close proximity to the project area. Therefore, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation is required.
4.13 POPULATION AND HOUSING

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

a) **Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

*No Impact.* The proposed project would not involve the construction of any homes, businesses, or other uses that would result in direct population growth. The project consists of the installation of a subsurface infiltration system on the Little Corona Beach to capture and infiltrate nuisance surface water flows diverted from Buck Gully. As such, impacts in regards to growth inducement would not occur.

*Mitigation Measures:* No mitigation is required.

b) **Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

*No Impact.* No housing would be affected by the proposed project, and no impacts would occur in this regard.

*Mitigation Measures:* No mitigation is required.

c) **Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

*No Impact.* No people would be displaced by the proposed project, and no impacts would occur in this regard.

*Mitigation Measures:* No mitigation is required.
4.14 PUBLIC SERVICES

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Fire protection?</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) Police protection?</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Schools?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>4) Parks?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>5) Other public facilities?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

1) Fire protection?

*Less than Significant Impact.* The City of Newport Beach Fire Department provides fire protection within the City. The nearest station to the project site is Station #5, located at 410 Marigold Avenue, approximately 0.40 miles to the north of the project site. As a water quality improvement project, the proposed facility would not substantially increase the need for fire protection services. No habitable structures are proposed. Currently, the Little Corona Beach access path is not open to the public for vehicular travel but provides emergency vehicle access to Little Corona Beach. During construction of the proposed project, vehicular access for emergency vehicles would be maintained at all times. As such, impacts in this regard would be less than significant.

*Mitigation Measures:* No mitigation is required.

2) Police protection?

*Less than Significant Impact.* The Newport Beach Police Department provides police protection within the City. The Newport Beach Police Department is based at 870 Santa Barbara Drive, approximately 2.33 miles north of the project site. As a water quality improvement project, the proposed facility would not substantially increase the need for police protection services. No habitable structures are proposed. Currently, the Little Corona Beach access road provides emergency vehicle access to Little Corona Beach. During construction of the proposed project, vehicular access for emergency vehicles would be maintained at all times. As such, police response capability would be maintained at all times, and impacts in this regard would be less than significant.

*Mitigation Measures:* No mitigation is required.
3) Schools?

**No Impact.** The proposed project would not directly result in any student generation, as no homes are proposed. Moreover, as discussed in Response 4.13(a), the project would not directly or indirectly induce substantial population growth in the project area. Thus, no impacts are anticipated in this regard.

**Mitigation Measures:** No mitigation is required.

4) Parks?

**No Impact.** As a water quality improvement project, the facility would not generate the need for new or physically altered park facilities. No habitable structures are proposed as part of the project. Moreover, as discussed in Response 4.13(a), the project would not directly or indirectly induce substantial population growth in the project area. In addition, public access to the beach would be maintained at all times. Thus, no impacts are anticipated in this regard.

**Mitigation Measures:** No mitigation is required.

5) Other public facilities?

**No Impact.** As shown above in Responses 4.14(a)(1) through 4.14(a)(4), the proposed project would not result in significant impacts on public services or facilities. No other public facilities are anticipated to be affected by the project. No impacts would occur in this regard.

**Mitigation Measures:** No mitigation is required.
### 4.15 RECREATION

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?</td>
<td></td>
<td></td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?</td>
<td></td>
<td></td>
<td></td>
<td>✔️</td>
</tr>
</tbody>
</table>

**a)** Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

*No Impact.* As stated in Response 4.14(a)(4), the proposed project does not have the capacity to increase the demand on existing neighborhood or regional recreational facilities, and would not result in physical deterioration of these facilities. In addition, recreational access to Little Corona Beach will be maintained at all times during construction. No impacts would occur in this regard.

*Mitigation Measures:* No mitigation is required.

**b)** Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

*No Impact.* As stated in Response 4.14(a)(4), the proposed project would not result in an increase in demand on parks or other recreational facilities. During construction activities, pedestrian access to Little Corona Beach would remain open at all times. No impacts would occur in this regard.

*Mitigation Measures:* No mitigation is required.
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### TRANSPORTATION/TRAFFIC

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>e. Result in inadequate emergency access?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

a) **Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

**No Impact.** Currently, the existing public access road provides pedestrian access to Little Corona Beach but is not open to the public for vehicular travel. During construction of the proposed project, private and emergency vehicular access would be unaffected as construction vehicles will not need to park within the access path. As such, short-term construction impacts in this regard would not occur. Upon completion of construction, the access road would be unaffected. Therefore, long-term operational traffic impacts would not occur.

**Mitigation Measures:** No mitigation is required.

b) **Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?**

**No Impact.** Based on the Orange County Transportation Authority’s (OCTA) Congestion Management Program (CMP), there are no designated CMP roadways that would be affected by the proposed
The nearest CMP roadway is East Coast Highway (State Route 1), which is located approximately 0.5-mile to the north. No impacts would occur in this regard.

**Mitigation Measures:** No mitigation is required.

c) **Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?**

**No Impact.** The nearest airport to the project site is the John Wayne Airport, located approximately 5 miles to the north. The proposed project would not have the capacity to result in a change in air traffic patterns. No impact would occur in this regard.

**Mitigation Measures:** No mitigation is required.

d) **Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

**No Impact.** The proposed project does not include transportation design features or incompatible equipment. No impacts would occur in this regard.

**Mitigation Measures:** No mitigation is required.

e) **Result in inadequate emergency access?**

**No Impact.** Refer to Impact Statement 4.16(a) above.

**Mitigation Measures:** No mitigation is required.

f) **Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?**

**No Impact.** The project would have no conflicts with transit, bike, or pedestrian facilities as public access to the Little Corona Beach will not be impacted due to construction or long-term operation. Thus, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation is required.
### 4.17 UTILITIES AND SERVICE SYSTEMS

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>f. Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>g. Comply with federal, state, and local statutes and regulations related to solid waste?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

**a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**

**No Impact.** The proposed project would result in the installation of a subsurface infiltration system on Little Corona Beach at the outlet of Buck Gully. The project would not include the use of any habitable structures, and would not have the capability to produce wastewater. As such, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

**b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

**No Impact.** The proposed project is a water treatment facility, to help eliminate nuisance water flows during the dry season at Little Corona Beach. This will result in improved water quality of discharge at Buck Gully before entering the Pacific Ocean. The project would not include the use of any habitable structures, and would not have the capability to consume water or produce wastewater. As such, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation is required.
c) **Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

**No Impact.** The project includes installation of a subsurface infiltration system for the purposes of significantly reducing nuisance water flows during the dry season at Little Corona Beach, and would be similar to existing conditions. As the proposed project is not a development project, the project does not require new storm water drainage facilities or expansion of existing facilities in the area. As such, impacts would not occur in this regard.

**Mitigation Measures:** No mitigation is required.

d) **Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**

**No Impact.** Refer to Response 4.17(b), above.

**Mitigation Measures:** No mitigation is required.

e) **Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?**

**No Impact.** Refer to Responses 4.17(a) and 4.17(b), above.

**Mitigation Measures:** No mitigation is required.

f) **Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?**

**No Impact.** The project would not include the construction of any habitable structures, and would not have the capability to produce solid waste. Although the project may require the disposal of minimal construction debris (concrete, soil, etc.), the generation of these materials would be short-term in nature and would not have the capability to substantially affect the capacity of regional landfills. Thus, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation is required.

g) **Comply with federal, state, and local statutes and regulations related to solid waste?**

**No Impact.** Refer to response 4.17(f), above. In addition, the proposed project would comply with all Federal, State, and local statutes and regulations related to solid waste, including the U.S. Environmental Protection Agency’s Resource Conservation and Recovery Act (RCRA), which provides the federal government with “cradle to grave” authority over the disposal of solid waste and hazardous materials. The project would also be required to comply with Assembly Bills 939 and 1327, which require measures to enhance recycling and source reduction. Thus, impacts in this regard would not occur as a result of the proposed project.

**Mitigation Measures:** No mitigation is required.
4.18 MANDATORY FINDINGS OF SIGNIFICANCE

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td></td>
<td></td>
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<tr>
<td>Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</td>
<td></td>
<td>✓</td>
<td></td>
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<tr>
<td>b.</td>
<td></td>
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<td></td>
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<tr>
<td>Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td></td>
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<td></td>
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<tr>
<td>Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant Impact With Mitigation Incorporated. As noted in Section 4.4, Biological Resources, the only sensitive biological resources associated with the project site is the adjacent coastal sage scrub, woolly seablite, and riparian forest in Buck Gully, as well as the ornamental vegetation that provide suitable nesting opportunities for avian species, coastal environmentally sensitive habitat areas (ESHA), and jurisdictional waters. Mitigation Measures BIO-1 through BIO-3 would be implemented to minimize impacts in this regard to a level below significance. In addition, while no sensitive cultural resources are known to exist within site boundaries, Mitigation Measure CUL-1 would be implemented in the event archeological resources are found during construction activities. In addition, Mitigation Measure CUL-2 would be implemented in the event sensitive paleontological resources are discovered during ground-disturbing activities. Therefore, the project does not have the potential to significantly degrade the overall quality of the region’s environment, or substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population or drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?
**Less Than Significant Impact With Mitigation Incorporated.** The proposed project would not result in the construction of any new housing or other uses that would directly result in population growth. There would be no impact that would be individually limited, but cumulatively considerable for the environmental issues analyzed within this Initial Study. As indicated throughout Section 4.0, *Environmental Analysis*, impacts as a result of the proposed project would be less than significant with implementation of recommended mitigation measures. Therefore, the proposed project would result in less than significant impacts in this regard.

c) **Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

**Less Than Significant Impact With Mitigation Incorporated.** Previous sections of this Initial Study reviewed the proposed project’s potential impacts related to aesthetics, air quality, geology and soils, greenhouse gases, hydrology/water quality, noise, hazards and hazardous materials, traffic, and other issues. As concluded in these previous discussions, the proposed project would result in less than significant environmental impacts with implementation of the recommended mitigation measures. Therefore, the proposed project would not result in environmental impacts that would cause substantial adverse effects on human beings.
4.19 REFERENCES

The following references were utilized during preparation of this Initial Study/Environmental Checklist. These documents are available for review at the City of Newport Beach Community Development Department located at 100 Civic Center Drive, Newport Beach, CA 92660.


4.20 REPORT PREPARATION PERSONNEL

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Eddie Torres, Air Quality and Noise Manager
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Travis McGill, Biology
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Linda Bo, Graphic Artist

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714.751.3826

Dane Nicklaus, Staff Engineer
5.0 INVENTORY OF MITIGATION MEASURES

AESTHETICS

AES-1 Prior to final plan approval, the City of Newport Beach Public Works Department shall ensure that project specifications require that all construction and construction staging areas are sited and/or screened with temporary fencing in order to minimize impacts to public views of the construction site to the maximum extent feasible. The fencing shall be comprised of opaque material to shield views from surrounding sensitive viewers. In addition, equipment/materials storage and any vehicle parking shall be sited such that their visibility from adjacent receptors is reduced to the greatest extent feasible.

AIR QUALITY

AQ-1 Prior to the initiation of construction, the City of Newport Beach shall confirm that the proposed project stipulates that, in compliance with SCAQMD Rule 403, fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD’s Rules and Regulations. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures (among others required by Rules 402 and 403) would reduce short-term fugitive dust impacts on nearby sensitive receptors:

- All active portions of the construction site shall be watered every three hours during daily construction activities and when dust is observed migrating from the project site to prevent excessive amounts of dust;
- Pave or apply water every three hours during daily construction activities or apply non-toxic soil stabilizers on all unpaved access roads, parking areas, and staging areas. More frequent watering shall occur if dust is observed migrating from the site during site disturbance;
- Any on-site stockpiles of debris, dirt, or other dusty material shall be enclosed, covered, or watered twice daily, or non-toxic soil binders shall be applied;
- All grading and excavation operations shall be suspended when wind speeds exceed 25 miles per hour;
- Disturbed areas shall be replaced with ground cover or paved immediately after construction is completed in the affected area;
- Visible dust beyond the property line which emanates from the project shall be prevented to the maximum extent feasible;
- All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site; and
- Reroute construction trucks away from congested streets or sensitive receptor areas to the extent feasible.
BIOLOGICAL RESOURCES

BIO-1 A pre-construction clearance survey for nesting birds shall be conducted within three (3) days prior to any ground disturbing activities to ensure that no nesting birds will be disturbed during construction. As long as development does not cause direct take of a bird or egg(s) or disrupt nesting behaviors, immediate protections would not be required. The biologist conducting the clearance survey should document a negative survey report indicating that no impacts to active avian nests will occur.

BIO-2 If an active avian nest is discovered during the pre-construction clearance survey, construction activities may have to be rerouted, a no-work buffer might have to be established around the nest, or construction may be delayed until the nest is inactive. A biological monitor shall be present to delineate the boundaries of the buffer area if an active nest is observed, and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the qualified biologist has determined that young birds have successfully fledged or the nest has otherwise become inactive, a monitoring report shall be prepared and submitted to the City of Newport Beach for review and approval prior to initiating construction activities can proceed within the buffer area without jeopardizing the survival of the young birds. Construction within the designated buffer area shall not proceed until written authorization is received by the applicant from the CDFW.

BIO-3 Prior to any construction activity within the project site, the City of Newport Beach shall consult with the appropriate responsible resource agency (i.e., U.S. Army Corps of Engineers, Regional Water Quality Control Board, California Department of Fish and Wildlife, and California Coastal Commission) to verify delineation results, determine permanent losses and temporary impact areas, and identify compensatory mitigation, as applicable. Prior to undertaking ground-disturbing activities on or immediately adjacent to any aquatic resource areas, the City of Newport Beach and/or their consultant shall obtain all obligatory discretionary permits/authorizations. The City proposes to compensate for permanent impacts to 0.0003 acres of Corps jurisdictional wetlands, as well as 0.002 acres of CDFW vegetated streambed/CCC jurisdictional wetlands, as a result of the Little Corona Infiltration Project. The City proposes to conduct 0.008 acre of freshwater marsh enhancement activities in the form of non-native species removal within the mitigation site. Invasive species removal would be conducted via hand pulling.

CULTURAL RESOURCES

CUL-1 All construction personnel (in addition to the City of Newport Beach project manager(s) and construction inspectors) shall receive archaeological resources sensitivity training prior to construction. If evidence of archeological resources is found during construction, excavation or other activity, the project shall halt work in the vicinity of the find (minimum 50-foot radius) and the construction contractor shall contact the City of Newport Beach Community Development Director. With direction from the Community Development Director, an archaeologist certified by the County of Orange shall be retained to evaluate the discovery prior to resuming grading in the vicinity of the find. If warranted, the archaeologist shall collect the resource and prepare a technical report describing the results of the investigation. The test-level report shall evaluate the site including discussion of significance (depth, nature, condition and extent of the resources), final mitigation recommendations, and cost estimates. If Native American resources are found, a notice will be sent to affected tribes as determined appropriate by the Community Development Director.
CUL-2 If, during ground disturbance, potentially significant paleontological evidence becomes apparent, work in that location shall be stopped; if not present, a qualified paleontologist (approved by the City) shall be notified immediately to evaluate the find. Should evaluation conclude that important cultural resources exist and would be negatively impacted by project construction, recommendations shall present further mitigation measures necessary to lessen those impacts to less than significant.

HAZARDS AND HAZARDOUS MATERIALS

HAZ-1 During construction, if the contractor discovers unknown wastes or suspect materials that he/she believes may be hazardous, the contractor shall:

- Immediately stop work in the vicinity of the suspected contaminant, removing workers and the public from the area;
- Notify the Project Engineer of the implementing agency;
- Secure the areas as directed by the Project Engineer; and
- Notify the implementing agency’s hazardous and waste/materials coordinator.

NOISE

N-1 Prior to the initiation of construction, the City of Newport Beach Public Works Department shall confirm that the proposed project stipulates that:

- All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other State required noise attenuation devices.

- The City shall provide a qualified “Noise Disturbance Coordinator”. The Disturbance Coordinator shall be responsible for responding to any local complaints about construction noise. When a complaint is received, the Disturbance Coordinator shall notify the City within 24-hours of the complaint and determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall implement reasonable measures to resolve the complaint, as deemed acceptable by the Community Development Department. The contact name and the telephone number for the Disturbance Coordinator shall be clearly posted on-site.

- During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.

- Construction activities that produce noise shall not take place outside of the allowable hours specified by the City’s Municipal Code Section 10.28.040 (7:00 a.m. and 6:30 p.m. on weekdays, 8:00 a.m. and 6:00 p.m. on Saturdays; construction is prohibited on Sundays and/or federal holidays).
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6.0 CONSULTANT RECOMMENDATION

Based on the information and environmental analysis contained in the Initial Study/Environmental Checklist, we recommend that the City prepare a mitigated negative declaration for the Park Avenue Bridge Replacement Project. We find that the proposed project could have a significant effect on a number of environmental issues, but that mitigation measures have been identified that reduce such impacts to a less than significant level. We recommend that the second category be selected for the City’s determination (refer to Section 7.0, Lead Agency Determination).

January 2016

Date

Alan Ashimine, Project Manager
Michael Baker International
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7.0 LEAD AGENCY DETERMINATION

On the basis of this initial evaluation, the City of Newport Beach (lead agency for the proposed project) has made the following determination:

- The City finds that the proposed use COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

- The City finds that although the proposal could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in Section 5.0 have been added. A MITIGATED NEGATIVE DECLARATION will be prepared.

- The City finds that the proposal MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

- The City finds that the proposal MAY have a significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a “potentially significant impact” or “potentially significant unless mitigated.” An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.