Bay Bridge Pump Station and Force Mains Rehabilitation Project

(Project No. SP-178)

INITIAL STUDY/ENVIRONMENTAL CHECKLIST

PUBLIC REVIEW | NOVEMBER 2016

Prepared for:
Orange County Sanitation District

Prepared by:
Michael Baker International

PUBLIC REVIEW
INITIAL STUDY/ENVIRONMENTAL CHECKLIST

Bay Bridge Pump Station and Force Mains Rehabilitation Project

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1.0 INTRODUCTION

1.1 BACKGROUND

The Bay Bridge Pump Station and Force Mains Rehabilitation Project (project) proposes to upgrade the existing Bay Bridge Pump Station and associated force mains located within the southern portion of Newport Beach, along East Pacific Coast Highway near the Newport Bay Channel. The project is discussed in detail in Section 2.0, *Project Description*. Following preliminary review, Orange County Sanitation District (OCSD) determined that the project is subject to the guidelines and regulations of the California Environmental Quality Act (CEQA) (Public Resources Code Sections 21000 - 21177). This Initial Study addresses the potential for direct, indirect, and cumulative environmental effects associated with the project, as proposed.

1.2 PURPOSE

In accordance with Section 15367 of the California Code of Regulations, the OCSD is identified as the Lead Agency for the proposed project. Pursuant to Section 15063(a) of CEQA Guidelines, OCSD is required to undertake the preparation of an Initial Study to determine if the proposed action will have a significant effect on the environment. The purposes of this Initial Study are to: (1) identify potential environmental impacts, (2) provide the Lead Agency with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) or Negative Declaration, (3) enable the Lead Agency to modify the proposed project (through mitigation of adverse impacts), (4) facilitate assessment of potential environmental impacts early in the design of the proposed project, and (5) provide documentation for the potential finding that the proposed project will not have a significant effect on the environment or can be mitigated to a level of insignificance (CEQA Guidelines, Section 15063[c]). This Initial Study is also an informational document providing an environmental basis for subsequent discretionary actions that could be required from other Responsible Agencies.

1.3 STATUTORY REQUIREMENTS AND AUTHORITY

In the State of California CEQA Guidelines, Section 15063 identifies specific disclosure requirements for inclusion in an Initial Study. Pursuant to those requirements, an Initial Study shall include: (1) a description of the proposed project, including the location of the project site; (2) an identification of the environmental setting; (3) an 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 some evidence exists to support the entries; (4) a discussion of ways to mitigate significant effects identified, if any; (5) an examination of whether the proposed project is compatible with existing zoning, plans, and other applicable land-use controls; and (6) the name(s) of the person or persons who prepared or participated in the preparation of the Initial Study (CEQA Guidelines, Section 15063[d]).

1.4 PERMITS AND APPROVALS

Public agencies could use this Initial Study as the basis for their decisions to issue approvals and/or permits for the proposed project. Table 1-1, *Project Permits and Approvals*, provides a list of those entitlements and permits that could be required for the proposed project.

Table 1-1
Project Permits and Approvals

Agency Name	Permit or Approval
Orange County Sanitation District	• CEQA Clearance
U.S. Army Corps of Engineers	• Clean Water Act Section 404 Permit
California Coastal Commission	• Coastal Development Permit • Exemptions/Waivers for potholes/test wells
California Department of Transportation District 12	• Encroachment Permit • Approval of Potholing Plan • Approval of Traffic Control Plan
Santa Ana Regional Water Quality Control Board	• Clean Water Act Section 401 Water Quality Certification • NPDES Construction General Permit • NPDES Dewatering Permit (if groundwater is treated for discharge to storm drain)
South Coast Air Quality Management District	• Permit to Construct • Operational Permits
Orange County Environmental Health Division	• Well Permits for construction/abandonment of any underground geological or hydrological test wells
City of Newport Beach	• Approval of Traffic Control Plan

1.5 AGENCY CONSULTATION AND COORDINATION

The agencies listed in Table 1-1 could require OCSD to obtain approvals for the proposed project. Coordination with other agencies may be required to determine the specific nature of any future permits or approvals. Agencies would be notified pursuant to the CEQA Guidelines, and any subsequent comments would be considered accordingly. In addition, this document is intended to provide agencies and the general public with an environmental basis under CEQA to facilitate the dissemination of information deemed necessary to the discretionary approvals process and the approval, or conditional approval, of any aspect of the proposed project within the jurisdiction of the agency.

1.6 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 OCSD located at 10844 Ellis Avenue, Fountain Valley, California, 92708.

- *Bay Bridge Pump Station and Force Mains Rehabilitation Study Preliminary Alignment Study Report (Final Submittal May 2016)*. The purpose of the *Preliminary Alignment Study Report* (PASR) is to develop alignment alternatives for the upgrade of Bay Bridge Pump Station and its associated force mains based on existing conditions of the project area, utility research, predetermined evaluation criteria, and a preliminary cost analysis. This report was the basis of the preliminary design for the OCSD Bay Bridge Pump Station and Force Mains Rehabilitation Project. The PASR reviews the existing conditions in the project area including utilities and geophysical conditions, including a preliminary geotechnical study. It develops preliminary alignments for the upgraded Bay Bridge Pump Station and its associated force mains, establishes a set of

comprehensive criteria to be used to evaluate each alignment's value to OCSD, and evaluates each alignment based on the set of criteria established in the PASR. In addition, the PASR develops a preliminary opinion of probable cost for each alignment discussed, recommends an alignment for the upgraded Bay Bridge Pump Station and its associated force mains based on the evaluation, and investigates the permitting required for the completion of the project per CEQA.

- *City of Newport Beach General Plan (adopted July 25, 2006)*. The *City of Newport Beach General Plan* (General Plan) provides a general, comprehensive, and long-range guide for community decision-making. The General Plan is organized into ten elements: Land Use; Harbor and Bay; Housing; Historical Resources; Circulation; Recreation; Arts and Cultural; Natural Resources; Safety; and Noise. Each General Plan element presents an overview of its scope, summary of conditions and planning issues, goals, and policies. Goals and policies of the General Plan are applicable to all lands within the City's jurisdiction. Consistent with state statutes, it also specifies policies for the adopted Sphere of Influence (SOI). The General Plan was utilized throughout this document as the fundamental planning document governing development at the project site. Background information and policy information from the General Plan is cited in several sections of this document.

- *City of Newport Beach Final Environmental Impact Report General Plan 2006 Update* (Certified July 25, 2006) SCH No. 2006011119. The *City of Newport Beach Final Environmental Impact Report General Plan 2006 Update* (General Plan EIR) reviews the City's and Planning Area's existing conditions, analyzes potential environmental impacts from implementation of the General Plan Update, identifies policies from the proposed General Plan Update that serve to reduce and minimize impacts, and identifies additional mitigation measures, to reduce potentially significant impacts of the General Plan Update. The EIR presents a worst-case scenario based upon the City's and adjacent areas' maximum potential development from 2002 through 2030. The EIR was prepared as a Program EIR (CEQA Guidelines Section 15168, *Program EIR*), and as such, was intended to serve as the environmental document for a series of actions contemplated by the General Plan, including amending the Zoning Ordinance to bring it into consistency with the General Plan.

- *City of Newport Beach Local Coastal Program Coastal Land Use Plan* (Adopted July 14, 2009). The *City of Newport Beach Local Coastal Program Coastal Land Use Plan* (CLUP) sets forth goals, objectives, and policies that govern the use of land and water in the coastal zone within the City of Newport Beach and SOI, with the exception of Newport Coast and Banning Ranch. The CLUP addresses public access, recreation, marine environment, land resources, development, and industrial development within three chapters: Land Use and Development; Public Access and Recreation; and Coastal Resource Protection. Each chapter is divided into sections and subsections. Each section or subsection begins with the identification of the Coastal Act sections that are relevant to Newport Beach, followed by a narrative of the local setting and policy direction adopted by the City to address the requirements of the Coastal Act and a listing of specific policies. The City reviews pending development projects for consistency with the CLUP before an applicant can file for a coastal development permit with the Coastal Commission.

- *Newport Beach Municipal Code*. The *Newport Beach Municipal Code* (Municipal Code) consists of regulatory, penal, and administrative ordinances of the City. It is the method the City uses to implement control of land uses, in accordance with General Plan goals and policies. The City Planning and Zoning Code, Title 20 of the Municipal Code, is to promote growth in Newport Beach in an orderly manner, while promoting public health, safety, peace, comfort, and general welfare. The Zoning Code also establishes zoning districts and regulations for the use of land and development for properties within the City.

2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION

Regionally, the project site is located within the southwestern portion of the City of Newport Beach (City), within the County of Orange (County); refer to Exhibit 2-1, *Regional Vicinity*. Locally, the project site is located at and adjacent to the Orange County Sanitation District's (OCSD) existing Bay Bridge Pump Station, located at 300 East Pacific Coast Highway (PCH) with the nearest cross street of Bayside Drive located approximately 300 feet to the east. The project also includes force main improvements that would extend to the west, across Pacific Coast Highway and the Newport Bay Channel; refer to Exhibit 2-2, *Site Vicinity*.

2.2 ENVIRONMENTAL SETTING

The proposed project site is located within a fully developed and urbanized area. The existing Bay Bridge Pump Station facility is located immediately north of PCH. The facility is roughly square shaped with an area of approximately 4,800 square feet, occupied by a one-story pump station building. Access to the pump station site is provided via a driveway along the north side of PCH. The perimeter of the pump station building is surrounded by masonry walls on all sides with two entrance gates including one double swing gate and one single swing gate on the southern boundary. The existing pump station building is located within the southern portion of the parcel and is approximately 3,300 square feet in size. The pump station site is located to the north, east, and west by a recreational vehicle (RV) storage area on a parcel approximately 31.4 acres in size; refer to Table 2-1, *Surrounding Land Uses*. This parcel is owned by Bayside Village Marina, LLC, who proposes the "Back Bay Landing Project", a mixed-use waterfront village comprised of recreational and marine-related uses on an approximately 7-acre portion of the 31.4-acre parcel.

In addition to pump station improvements, the project would also include the replacement of dual force mains originating from the pump station and terminating at or near the existing OCSD valve vault located on the west side of the Newport Bay Channel. The existing force mains consist of dual 24-inch mains approximately 1,250 feet in length, originating from the existing pump station, which route across PCH, across the existing Balboa Marina property, then to the existing valve vault located on the west side of the Newport Bay Channel. The mains were originally constructed as mortar lined and coated steel. The lines were sliplined in 1981 with 20-inch high density polyethylene (HDPE). The proposed new dual force mains would first cross under PCH in a tunnel. Within the vicinity of the project site, PCH is designated an "Eight Lane Road (Divided)" that bridges across the southern portion of the Newport Bay Channel.[1] Adjacent to the pump station site, it includes a raised median, sidewalks, curb/gutter, Class II (striped) bicycle lanes, and street lighting. PCH is also known as State Route (SR) 1, and is under the jurisdiction of the California Department of Transportation (Caltrans).

[1] City of Newport Beach and Urban Crossroads, *City of Newport Beach General Plan Figure CE1 Master Plan of Streets and Highways,* September 21, 2006.

✱ - Project Site

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Regional Vicinity

Exhibit 2-1

Source: Google Earth, 2015.

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Site Vicinity

Exhibit 2-2

Once the dual force mains cross PCH, they would traverse under a parking lot associated with the Balboa Marina, which includes recreational and restaurant uses. The existing parking lot is paved, landscaped, and equipped with nighttime security lighting. This property is under the ownership of the Irvine Company, who proposes the "Balboa Marina West" project, which would include construction of a new public boat dock and to improve and expand the existing area. A reconfigured parking lot and a marine commercial building for future restaurant and office uses are proposed.

West of the Balboa Marina, the dual force mains would cross under the Newport Bay Channel, approximately 475 feet in width within the project area. The Newport Bay Channel is within the Lower Newport Bay. The Lower Newport Bay is comprised of developed channels, beaches, and hardscape areas with a wide range of recreational activities such as sport fishing, kayaking, diving, wind surfing, sailboat racing, excursion, and entertainment boat activities, as well as visitor serving commercial and recreational uses and waterfront residences. The Newport Bay Channel ranges from -10.7 to -14 feet mean lower low water (MLLW) depth.[2] The force main crossing would occur immediately south of the PCH bridge over the Channel (i.e., the Bay Bridge); refer to Exhibit 2-3, *Existing Conditions*. The dual force mains would terminate at or near an existing OCSD valve vault immediately west of the Newport Bay Channel, approximately 0.26 miles west of the existing pump station site. The valve vault is located immediately north of the Bayshore Apartments.

SURROUNDING USES

Surrounding uses in proximity to the project site include residential, commercial, and commercial recreational marine uses, refer to Exhibit 2-3. Table 2-1, *Surrounding Land Uses*, describes the surrounding land uses and associated land use and zoning designations.

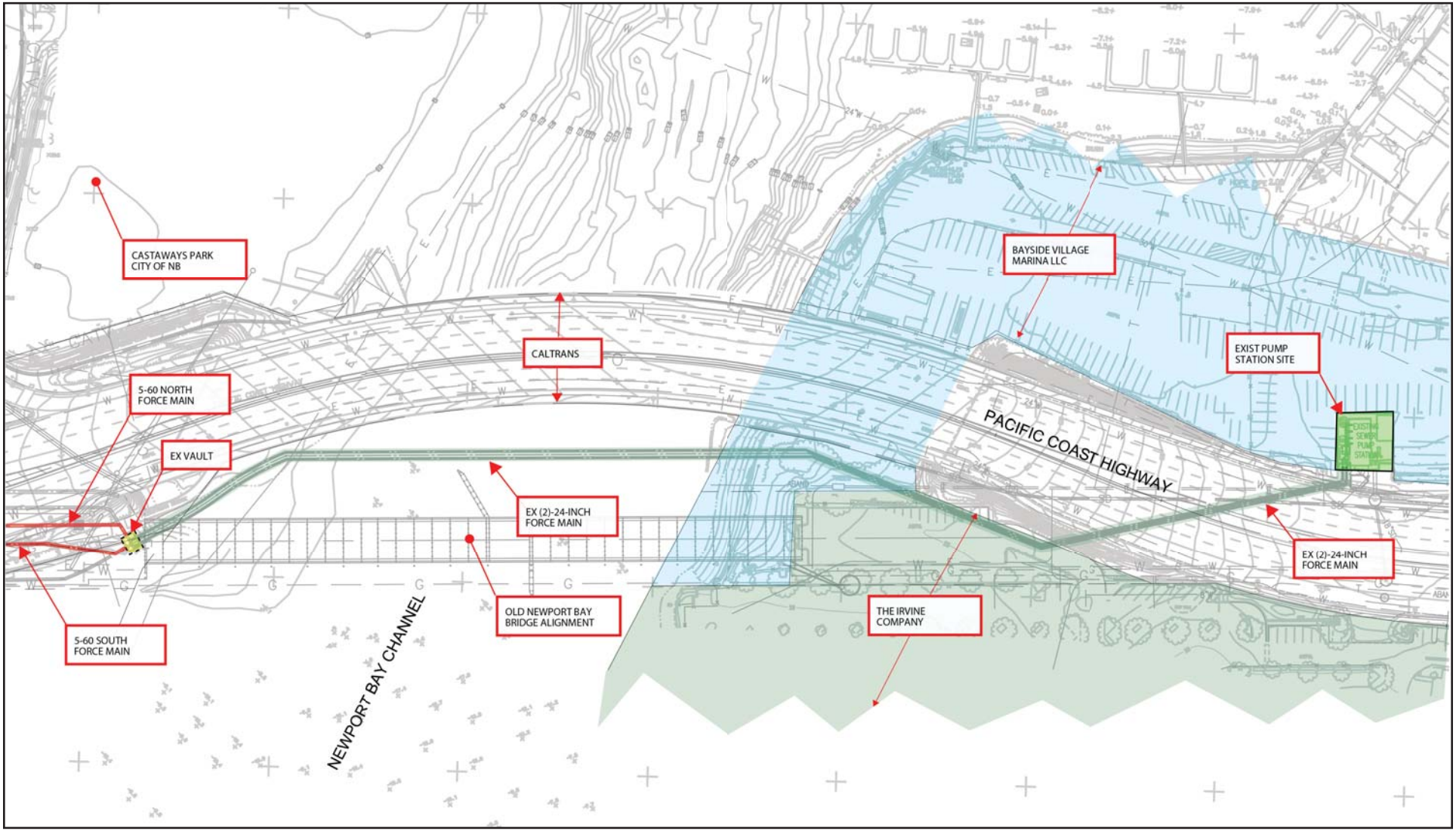
2.3 EXISTING GENERAL PLAN AND ZONING

The pump station site and PCH force main improvements area are designated "Recreational and Marine Commercial" by the *City of Newport Beach General Plan Overview Map* and zoned "Bayside Village Boat Launch and Storage" by the *City of Newport Beach Zoning Map*. The Newport Beach Channel Crossing force main improvements and microtunneling staging areas have a land use designation of "Mixed Use – Water 2" and zoning designation of "Multi-Unit Residential" with a minimum site area of 2,178 square feet.

2.4 PROJECT BACKGROUND

OCSD proposes to upgrade the existing Bay Bridge Pump Station and associated force mains. OCSD owns, operates, and maintains the existing Bay Bridge Pump Station and the Newport force mains, which convey wastewater from Newport Beach to the Plant No. 2 wastewater treatment facility in Huntington Beach. The existing Bay Bridge Pump Station is located adjacent to PCH to the south and is the furthest upstream pump station as part of the Newport force main network.

[2] Army Corps of Engineers, *2015 Bathymetry Survey,* October 13, 2015.



Source: Michael Baker International, *Bay Bridge Pump Station and Force Mains Rehabilitation Study Preliminary Alignment Study Report*, May 2016.

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Existing Conditions

Exhibit 2-3

Table 2-1
Surrounding Land Uses

Direction	General Plan Designation[1]	Zoning[2]	Existing Land Use
North	Multiple Unit Residential (RM)	Bayside Village Mobile Home Park with Mobile Home Park Overlay - UP 463 (PC-1 – MHP)	An RV storage area is currently located to the north of the pump station site. The property owner proposes the Back Bay Landing project, a mixed-use waterfront village on an approximately 7-acre portion of the 31.4 acre parcel. The proposed project would involve land use amendments to provide the legislative framework for the future development of the site. The requested approvals would provide a mix of uses including recreational and marine commercial retail, marine office, marine services, enclosed dry stack boat storage, and a limited mix of freestanding multi-family residential and mixed-use structures with residential uses above the ground floor.[3]
Northwest	General Commercial (CG)	Commercial General (CG)	Commercial shops including a jewelry store and coffee shop are located to the northwest of the Newport Bay Channel Crossing force main improvements and microtunneling staging areas.
West	Single-Unit Residential Detached (RS-D)	Single-Unit Residential (R-1)	Single-family residential uses are located to the west of the Newport Bay Channel Crossing force main improvements and microtunneling staging areas.
East	Multiple Unit Residential (RM)	Bayside Village Mobile Home Park with Mobile Home Park Overlay - UP 463 (PC-1 – MHP)	A mobile home park is located to the east of the pump station site.
South	Recreational and Marine Commercial (CM)	Commercial Recreational and Marine (CM 0.3)	Balboa Marina recreational uses and restaurant uses are located to the south of the pump station site, along the southern side of PCH. The Balboa Marina West project proposes the construction of a new public boat dock and to improve and expand the existing area. A reconfigured parking lot and a marine commercial building for future restaurant and office uses are proposed.[4]
South	Multiple Unit Residential (RM)	Multi-Unit Residential (RM [2178])	The Bayshore Apartments and Newport Marina development are located south of the Newport Bay Channel Crossing force main improvements and microtunneling staging areas.

Sources:
1. City of Newport Beach, *City of Newport Beach General Plan Overview Map,* March 12, 2014.
2. City of Newport Beach, *City of Newport Beach Zoning Map,* October 26, 2010.
3. City of Newport Beach, *Back Bay Landing,* http://www.newportbeachca.gov/trending/projects-issues/other-important-issues/back-bay-landing, Accessed August 24, 2016.
4. City of Newport Beach, *City of Newport Beach Notice of Public Hearing – Balboa Marina West MND,* October 2, 2014.

The Bay Bridge Pump Station is critical to OCSD operations as it conveys approximately 50 to 60 percent of the total flow through the Newport force mains. Because the Bay Bridge Pump Station and associated force mains are critical elements to OCSD's collection backbone, it is imperative the facility be rehabilitated to ensure continuous service to the community and avoid spills for the next design lifespan (an additional 50 years). This would be accomplished through an upgrade to the existing pump station/force main infrastructure. The facilities would be upgraded for the following reasons:

- To accommodate anticipated growth in the region and wet weather flows by increasing peak wet weather flow conveyance capacity from 16 million gallons a day (MGD) to 18.5 MGD;
- Increase reliability since the existing Bay Bridge Pump Station is outdated and no longer meets structural or maintenance standards; and
- Increase safety for OCSD Operations & Maintenance personnel where safe entry and exit can be made and maintenance crews and drivers can easily access the site. The existing pump station is accessed directly from PCH, where adjacent traffic creates safety hazards for OCSD vehicles. Maintenance trucks accessing the site require that they back into oncoming traffic.

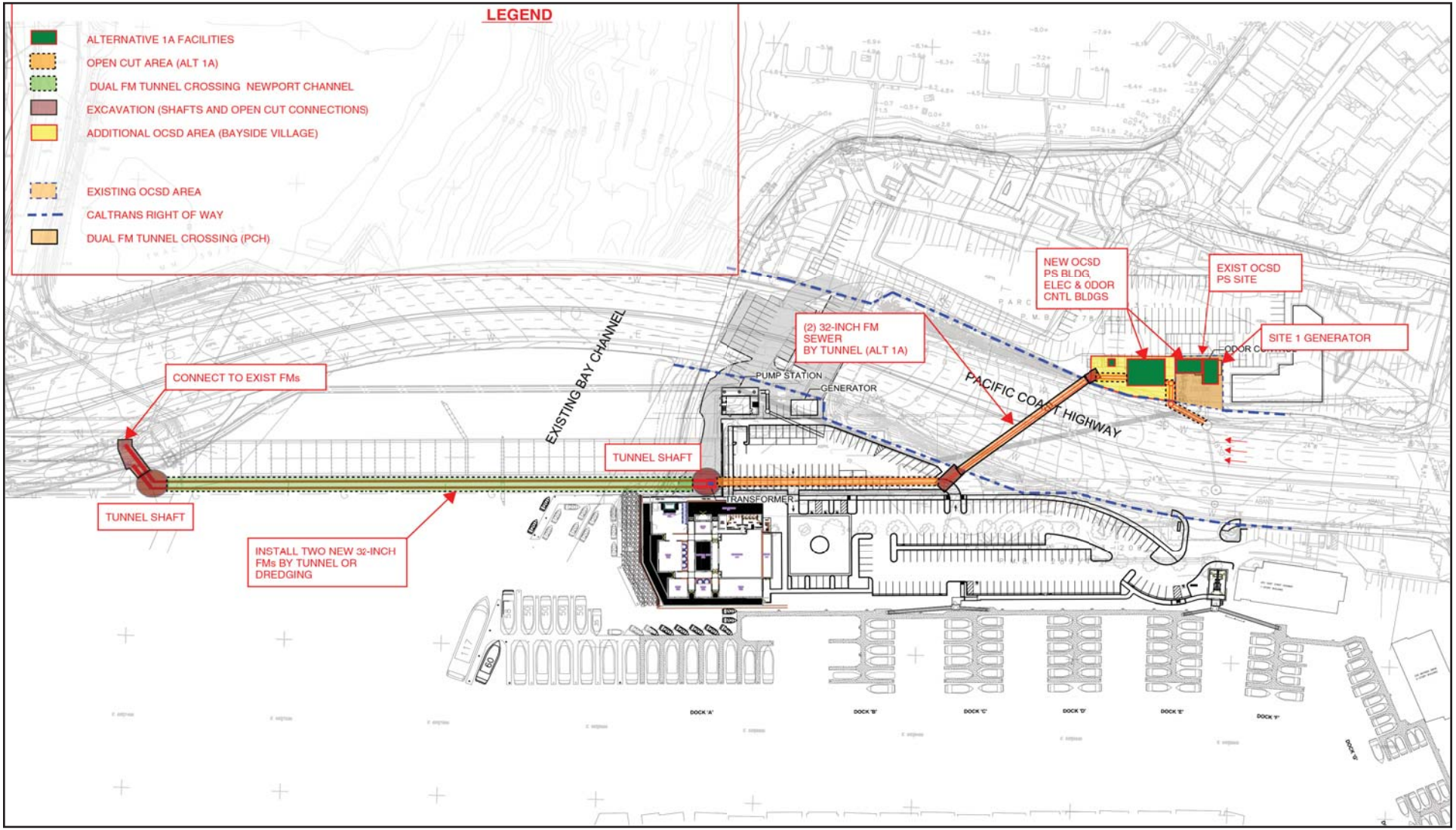
2.5 PROJECT CHARACTERISTICS

The proposed project would upgrade the Bay Bridge Pump Station and associated force mains as shown on Exhibit 2-4, *Conceptual Site Plan*. The proposed project would bring the pump station facility and force mains to current design and reliability standards to ensure continuous service for the OCSD service area. The primary project components are described in detail below, and consist of: 1) pump station improvements; 2) PCH force main facilities, and 3) Newport Bay Channel crossing force main improvements.

PUMP STATION IMPROVEMENTS

The proposed project would include construction of a new pump station at and adjacent to the existing Bay Bridge Pump Station. The new pump station would be constructed at the existing pump station site, in addition to a portion of the existing RV storage area that surrounds the pump station to the north, east and west. The existing pump station would remain in service and fully operational while the new pump station is being constructed adjacent to the existing pump station building. Once the new pump station is placed in service, the existing pump station would be taken out of service, demolished, and redeveloped with upgraded pump station facilities. The pump station would be expanded from approximately 4,800 square feet under existing conditions to 9,500 square feet (an increase of 4,700 square feet). Primary access to the proposed pump station would be provided via a driveway to the RV storage facility along the west side of Bayside Drive, with secondary access provided via a driveway along the northern side of PCH.

OCSD currently operates the pump station with two large and two smaller duty variable frequency drive (VFD) pumps. Currently, two large VFD pumps (sized at 250 horsepower [HP] each) convey full peak wet weather flows and the two smaller duty VFD pumps are 50 HP each and convey low flows. OCSD recently added a large standby pump to the existing Bay Bridge Pump Station for desired contingency during peak wet weather flow should one of their large duty pumps become disabled. Therefore, it is required that the new pump station be sized to house all pumps and provide the desired contingency and redundancy to maintain uninterrupted service. All the facilities would be placed within a new pump station building, electrical building, generator building, and odor control facility at the pump station site.



Source: Michael Baker International, *Bay Bridge Pump Station and Force Mains Rehabilitation Study Preliminary Alignment Study Report*, May 2016.

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Conceptual Site Plan

Exhibit 2-4

Pump Station Mechanical Room and Wet Well

The proposed pump station building would be constructed with a below-grade dry-pit, which would house the pumps, motors, and other mechanical equipment, and an abovegrade building that would house the electrical instrumentation, control equipment, and restroom. An underground wet well would be constructed adjacent to the mechanical room in an orientation similar to the existing pump station. A total of five pumps would be installed to meet future peak flow of 18.5 MGD and provide required contingency/redundancy.

Pump Station Generator Facility

A 620 square-foot backup generator facility would be built adjacent to the proposed pump station, where the existing pump station currently stands. A 750kw Caterpillar diesel generator would be provided to handle the power requirement of the new pump station running at full capacity. The backup generator would be paired with a 66 gallon fuel tank, which would allow the pump station to run on backup power for approximately 11 hours for operational redundancy.

The new generator building would be located in the same location as the existing pump station. It would not be built until the new pump station is commissioned and the existing pump station demolished. Existing utility feeds would continue to be utilized for the proposed pump station facility. The new transformer for the proposed pump station would be located alongside the electrical room.

Pump Station Odor Control

A new 620 square-foot odor control facility would be built adjacent to the new pump station and connected to the generator building, where the existing pump station currently stands. It would hold a multi-stage odor control scrubber system, which would remove odorous chemicals from the incoming waste stream.

PCH FORCE MAIN IMPROVEMENTS

The proposed PCH dual force mains would be constructed out of HDPE materials with a minimum inner diameter of 30 inches and an outer diameter of 32 inches. The PCH force main improvements would convey the new peak flows as well as provide the system with redundancy. The dual force mains would extend approximately 250 feet from the proposed pump station facility, and then southwest to the Balboa Marina parking lot. Each of the force mains would be installed together in a single 90- to 96-inch casing, which would be installed via microtunneling beneath PCH. The invert of the new force main crossing would be approximately 25 to 30 feet below ground.

NEWPORT BAY CHANNEL CROSSING FORCE MAIN IMPROVEMENTS

The Newport Bay Channel crossing force mains would consist of an approximately 725-foot-long segment of dual force mains. This segment of the force mains would extend west from the terminus of the PCH force main improvements (described above), ultimately terminating at or near an existing valve vault immediately west of the Newport Bay Channel, approximately 0.26 miles west of the existing pump station site. The valve vault is located immediately north of the Bayshore Apartments. The force mains would cross the Newport Bay Channel via either microtunneling or a dredged trench, both of which are described in additional detail below. It should be noted that immediately south of the proposed alignment for the

Newport Bay Channel force main crossing is the original (abandoned) alignment of the Bay Bridge, of which portions still remain (such as existing piles and abutments that were cut at the bottom of the channel). The existing piles of the old Newport Bridge are 20 to 30 feet beneath the channel's bottom.

2.5.1 CONSTRUCTION

The proposed project would involve construction of the new Bay Bridge Pump Station and associated force mains, which is expected to take between 24 to 30 months for completion. The construction methodology to be utilized for each of these project components is discussed below.

PUMP STATION IMPROVEMENTS

Prior to initiation of construction, OCSD would be required to purchase land rights for the expanded pump station site from the owner of the existing RV storage facility, Bayside Village Marina, LLC. As noted above, the existing pump station would remain in service until the new facilities have been constructed and commissioned. Once the new pump station is placed in service, the existing pump station would be taken out of service, demolished, and redeveloped with a new odor control building and generator building. Construction access would be provided via the existing driveway to the RV storage facility along the west side of Bayside Drive.

If the construction of the new pump station begins before the Back Bay Landing Project proposed by Bayside Village Marina, LLC, the areas surrounding the pump station site could be used as storage and staging area, which would also minimize traffic impacts. However, if construction of the proposed pump station begins after the Back Bay Landing Project, the contractor would have to coordinate storage and staging areas at a vacant, disturbed area owned by the City of Newport Beach, immediately south of Castaways Park. This potential staging area would not affect any existing vegetation, nor interfere with existing recreational opportunities at Castaways Park.

The construction footprint of the new pump station, not including construction vehicle access or OCSD-owned land is approximately 18,500 square feet, while the total construction footprint is approximately 35,200 square feet.

FORCE MAIN IMPROVEMENTS

PCH Force Main Improvements

The proposed dual 30-inch (32-inch outer diameter) HDPE force mains would extend from the pump station and beneath PCH in a tunnel. Use of tunneling techniques would allow for construction to occur without trenching across the PCH roadway surface, and would avoid traffic disruptions. A short segment of vitrified-clay pipe (VCP) would be constructed to connect the gravity-fed sewer system (i.e., 30-inch HDPE force mains) to the new pump station wet well.

Microtunneling is a remotely-controlled, guided, pipejacking process that provides continuous positive control of earth and groundwater pressures at the face of the excavation. The microtunneling machine and jacking pipes are pushed into the ground from a jacking shaft to a reception shaft on opposite sides of the crossing. Via microtunneling, the PCH crossing could be jacked from either side of PCH. The jacking shaft

would need to be approximately 15 to 20 feet wide and approximately 30 to 35 feet long, while the reception shaft would need to be approximately 15 to 20 feet square. The jacking shaft work area would need to occupy approximately 20,000 square feet, and the reception shaft work area would occupy approximately 10,000 square feet. Construction of the jacking and reception shaft is estimated to take four to five weeks, and three to four weeks, respectively. The microtunneling operations, including installation of the carrier pipes inside the casing is estimated to take approximately six weeks. Exhibit 2-5, *Proposed Microtunneling Work Areas*, shows the potential work areas required on each side of the crossing.

Newport Bay Channel Crossing Force Main Improvements

The proposed project would require force main improvements across the Newport Bay Channel. This segment of force main would connect the PCH force main improvements (described above) to an existing valve vault located on the west side of the Channel. Two potential construction methods have been identified for the proposed crossing, either 1) microtunneling or 2) dredging. Both methodologies are further discussed below.

Microtunneling

A microtunneled crossing on the south side of the existing Bay Bridge would consist of an approximately 725-foot long drive of 90 to 96-inch steel casing, with the two force mains installed inside. The shafts for this crossing would be located approximately 80 feet beneath the channel and must be watertight due to the high groundwater associated with the Newport Bay Channel and the permeable sandy soils. Secant piles or cutter soil mixing (CSM) shafts are the most likely alternatives for large-diameter, deep shafts that must be watertight and penetrate through both soil and rock. A series of overlapping piles are created by removing the soil by auger and replacing it with structural concrete. CSM shafts are constructed by mixing the native soil with bentonite to create a slurry and then mixing in cement to create panels of strengthened soil-cement. In both cases the initial phase of construction involves installing primary piles/panels leaving a gap in between. Once the primary piles/panels have cured, secondary piles/panels are installed which cut into the edges of the primary piles/panels creating a continuous shaft wall. The jacking shaft needs to have an internal diameter of approximately 32 to 35 feet to accommodate 20-foot joints of 96-inch casing pipe, as well as the thrust block, jacking frame, and launch seal. The reception shaft needs to be approximately 20 to 25 feet in diameter to allow for retrieval of the microtunneling machine and the installation of a reception seal. It may be necessary for the reception shaft to be larger than 25 feet in diameter to allow for construction of the fittings and risers of the force mains. Timing of the construction of the shaft on the east end of the crossing is recommended to be completed prior to the development of the Balboa Marina West project. If the crossing cannot be completed prior to the Balboa Marina West project, then pushing the alignment further north would need to be investigated. This would place the crossing more or less, directly under the original Bay Bridge, where existing piles are constructed 20-30 feet below the existing channel bottom. Both potential microtunneling options will be further analyzed as part of the CEQA process.

The work area required for construction of each of the shafts using secant pile/CSM methods would require a large drill rig and support equipment. Approximately 20,000 square feet is needed at each shaft location to allow for efficient construction of the shafts; refer to Exhibit 2-5. The work area on the west side of the crossing would occupy approximately two of the existing eastbound lanes of PCH, the Coast-Bayshore Orange County Transportation Authority (OCTA) bus stop, and all of the existing landscaped area located between PCH and the Bayshore Apartments and Newport Marina development. The work area would also

Source: Michael Baker International, *Bay Bridge Pump Station and Force Mains Rehabilitation Study Preliminary Alignment Study Report*, May 2016.

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Proposed Microtunneling Work Areas

Exhibit 2-5

block access to the bike/pedestrian path that crosses beneath PCH. The work area on the east side would need to occupy approximately 20,000 square feet in the Balboa Marina parking lots. The microtunneling operations that take place at the jacking shaft would occupy a similar square footage to the shaft construction (approximately 20,000 square feet). Once construction of the reception shaft is complete, no active trenchless operations need to take place at this location and the work area could be reduced substantially until the tunneling is complete.

The anticipated duration of shaft construction is approximately 36 to 48 weeks for the jacking shaft, and 24 to 36 weeks for the smaller reception shaft. Portions of the reception shaft construction can be completed concurrently with the jacking shaft construction. The microtunneling operations are expected to take approximately two to three months, including installation of the carrier pipe in the casing. Additional time would be required to construct risers in the shafts, make connections to the open cut portions of the work, and to backfill the excavations.

Dredging

In order to install the proposed force mains, dredging would involve the pipe being installed beneath the channel by excavation of the channel bottom, sinking the pipe, and covering the pipe with dredged or other soils material (including crushed rock). With dredging, the dual 30-inch (32-inch OD) HDPE force mains would be installed in several stages. First, the pipe would be fused into four separate 350-foot lengths that are flanged on each end. The blind flanges would have valves that allows each section to be flooded with water during installation. Concrete anchors would then be attached to each segment at 10-foot intervals. The anchors help the pipe resist countercurrent and resist the buoyancy of the HDPE pipe material. Once the pipe is fused and all appurtenances are installed, two segments would be moved into position and each end would be connected at the shoreline. After shore connections are in place, the remainder of the pipe would be pulled into the channel, flooded, and sunk into position. Following the installation of the first pipe, its corresponding section would be moved into position via air bags or barge, sunk, and connected to the first pipe's flange connection. Once all segments are in position they would be secured at the opposite shoreline to a permanent vault. The pipe would not be visible. After both mains are installed and secured, divers would be used to operate a large jet pump to sink the pipe the remaining six feet needed to provide adequate cover. The divers would work along the pipe, jetting it into place while insuring the pipe is not stressed beyond its maximum bending radius. Construction of the force mains utilizing dredging is anticipated to last approximately 28 days.

2.5.2 ACCESS AND EASEMENTS

In order to allow for construction of the proposed project to occur, it is anticipated that temporary easements from Bayside Village Marina, LLC (owner of the existing RV storage facility surrounding the existing Bay Bridge Pump Station) and the Irvine Company (owner of the Balboa Marina along the south side of PCH) would be required. Permanent easements from both of these property owners would also be required to establish access rights for OCSD to provide service and maintenance for the newly installed force mains and appurtenances.

2.5.3 LAND ACQUISITION

OCSD would be required to purchase approximately 4,700 square feet from Bayside Village Marina, LLC (owner of the existing RV storage facility surrounding the pump station site) to accommodate the improvements of the proposed project.

2.6 PERMITS AND APPROVALS

The applicable agency approvals required for development of the project may include the following, among others:

- CEQA Clearance – OCSD;
- Encroachment Permit(s) – City of Newport Beach and Caltrans;
- Traffic Control Plan Approval – City of Newport Beach and Caltrans;
- Clean Water Act Section 404 Nationwide Permit – U.S. Army Corps of Engineers;[3]
- Clean Water Act Section 401 Water Quality Certification – Santa Ana Regional Water Quality Control Board;[4] and
- Coastal Development Permit - California Coastal Commission.

[3] Required for trenching impacts within Newport Bay Channel for force main crossing. If microtunneling method is utilized, it is not anticipated that this permit/approval would be required.

[4] Ibid.

3.0 ENVIRONMENTAL CHECKLIST

3.1 PROJECT DESCRIPTION AND BACKGROUND

1. **Project Title:**
   Bay Bridge Pump Station and Force Mains Rehabilitation Project

2. **Lead Agency Name and Address:**
   Orange County Sanitation District, 10844 Ellis Avenue, Fountain Valley, CA 92708

3. **Contact Person and Phone Number:**
   Kevin Hadden, 714.962.2411

4. **Project Location:**
   The Bay Bridge Pump Station and Force Mains Rehabilitation Project (project) occurs at and surrounding the existing Bay Bridge Pump Station located at 300 East Pacific Coast Highway (PCH), within the southern portion of the City of Newport Beach.

5. **Project Sponsor's Name and Address:**
   Orange County Sanitation District, 10844 Ellis Avenue, Fountain Valley, CA 92708

6. **General Plan Designation:**
   The project site is designated "Recreational and Marine Commercial" and "Mixed Use – Water 2" by the *City of Newport Beach General Plan Overview Map.*

7. **Zoning:**
   The project site is zoned "Bayside Village Boat Launch and Storage" and "Multi-Unit Residential" by the *City of Newport Beach Zoning Map*.

8. **Description of Project:**
   The Orange County Sanitation District (OCSD) proposes to upgrade the existing Bay Bridge Pump Station and associated force mains. OCSD owns, operates, and maintains the existing Bay Bridge Pump Station and the Newport force mains, which convey wastewater from Newport Beach to the Plant No. 2 wastewater treatment facility in Huntington Beach. The project is proposed in order to increase service reliability due to the age of the existing pump station/force mains, improve safety for OCSD Operations and Maintenance staff by providing an alternate point of ingress/egress to the pump station, and accommodate planned growth and projected wet weather flows within the OCSD service area.

   The proposed project would include construction of a new pump station at and adjacent to the existing Bay Bridge Pump Station. The new pump station would be constructed at the existing pump station site, in addition to a portion of the existing RV storage area that surrounds the pump station to the north, east and west. The existing pump station would remain in service and fully operational while the new pump station is being constructed adjacent to the existing pump station building. Once the new pump station is placed in service, the existing pump station would be taken out of service, demolished, and redeveloped with upgraded pump station facilities.

In addition to the pump station improvements, the project would also include force main facilities for conveyance of wastewater. New dual force mains would extend from the proposed pump station in a southwesterly direction, via microtunneling beneath PCH. The force mains would cross the Balboa Marina parking lot, and then head west across the Newport Bay Channel. This channel crossing would be constructed via microtunneling or a dredged trench, and the dual force mains would terminate at or near an existing valve vault immediately west of the channel. Both microtunneling and dredging for the Newport Bay Channel Crossing will be further analyzed as part of the CEQA process.

9. Surrounding Land Uses and Setting:

Surrounding uses in proximity to the project site include residential, commercial, and commercial recreational marine uses; refer to Table 2-1.

10. Other public agencies whose approval is required:

Other public agency approvals may include the following, among others:

- Encroachment Permit(s) – City of Newport Beach and Caltrans;
- Traffic Control Plan Approval – City of Newport Beach and Caltrans;
- Clean Water Act Section 404 Nationwide Permit – U.S. Army Corps of Engineers;[1]
- Clean Water Act Section 401 Water Quality Certification – Santa Ana Regional Water Quality Control Board;[2] and
- Coastal Development Permit - California Coastal Commission.

11. Environmental Factors Potentially Affected:

The environmental factors checked below potentially would be affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. Please see the Environmental Checklist for additional information.

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

[1] Required for trenching impacts within Newport Bay Channel for force main crossing. If microtunneling method is utilized, it is not anticipated that this permit/approval would be required.

[2] Ibid.

3.2 DETERMINATION

On the basis of this initial evaluation:

☐	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☐	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☒	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	Orange County Sanitation District **Agency**
Carla Dillon, Engineering Supervisor **Printed Name/Title**	November 2016 **Date**

3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the Lead Agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant with Mitigation" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The Lead Agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

    a. Earlier Analysis Used. Identify and state where they are available for review.

    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

    c. Mitigation Measures. For effects that are "Less Than Significant with Mitigation," describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

    a. the significance criteria or threshold, if any, used to evaluate each question; and
    b. The mitigation measure identified, if any, to reduce the impact to less than significance.

3.4 CEQA CHECKLIST

	Description	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
I.	**AESTHETICS:** Would the project:				
a)	Have a substantial adverse effect on a scenic vista?	☒	☐	☐	☐
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☒	☐	☐	☐
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☒	☐	☐	☐
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☒	☐	☐	☐
II.	**AGRICULTURE AND FOREST 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 Dept. 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 the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
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?	☐	☐	☐	☒
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
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))?	☐	☐	☐	☒

	Description	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒
III.	**AIR QUALITY:** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
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?	☒	☐	☐	☐
IV.	**BIOLOGICAL RESOURCES:** Would the project:				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☒	☐	☐	☐
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?	☒	☐	☐	☐
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?	☒	☐	☐	☐
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☒	☐	☐	☐

	Description	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
V.	**CULTURAL RESOURCES:** Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☒	☐	☐	☐
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☒	☐	☐	☐
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☒	☐	☐	☐
d)	Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐
VI.	**GEOLOGY AND SOILS:** Would the project:				
a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i)	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	☐	☒
ii)	Strong seismic ground shaking?	☒	☐	☐	☐
iii)	Seismic-related ground failure, including liquefaction?	☒	☐	☐	☐
iv)	Landslides?	☐	☐	☒	☐
b)	Result in substantial soil erosion or the loss of topsoil?	☒	☐	☐	☐
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?	☒	☐	☐	☐
d)	Be located on expansive soil (Table 18-1-B of the Uniform Building Code), creating substantial risks to life or property?	☒	☐	☐	☐
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?	☐	☐	☐	☒
VII.	**GREENHOUSE GAS EMISSIONS:** Would the project:				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐

	Description	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing greenhouse gas emissions?	☒	☐	☐	☐
VIII.	**HAZARDS AND HAZARDOUS MATERIALS:** Would the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☒	☐	☐	☐
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?	☒	☐	☐	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
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?	☒	☐	☐	☐
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☒	☐	☐	☐
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?	☐	☐	☐	☒
IX.	**HYDROLOGY AND WATER QUALITY:** Would the project:				
a)	Violate any water quality standards or waste discharge requirements?	☒	☐	☐	☐
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)?	☐	☐	☒	☐

	Description	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☒	☐	☐	☐
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?	☐	☐	☒	☐
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?	☒	☐	☐	☐
f)	Otherwise substantially degrade water quality?	☐	☐	☒	☐
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?	☐	☐	☐	☒
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
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?	☐	☐	☐	☒
j)	Inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐
X.	**LAND USE AND PLANNING:** Would the project:				
a)	Physically divide an established community?	☐	☐	☒	☐
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?	☒	☐	☐	☐
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
XI.	**MINERAL RESOURCES:** Would the project:				
a)	Result in the loss of availability of a known mineral resource of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒
XII.	**NOISE:** Would the project result in:				
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐

	Description	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b)	Generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
XIII.	**POPULATION AND HOUSING:** Would the project:				
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)?	☐	☐	☒	☐
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
XIV.	**PUBLIC SERVICES:**				
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:				
	Fire protection?	☐	☐	☐	☒
	Police protection?	☐	☐	☐	☒
	Schools?	☐	☐	☐	☒
	Parks?	☐	☐	☐	☒
	Other public facilities?	☐	☐	☐	☒
XV.	**RECREATION:**				
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?	☐	☐	☐	☒

	Description	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
XVI.	**TRANSPORTATION/TRAFFIC:** Would the project:				
a)	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance a 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?	☒	☐	☐	☐
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☒	☐	☐	☐
e)	Result in inadequate emergency access?	☒	☐	☐	☐
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?	☒	☐	☐	☐
XVII	**TRIBAL CULTURAL RESOURCES:**				
a)	Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☒	☐	☐	☐

	Description	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
ii)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☒	☐	☐	☐
XVIII.	**UTILITIES AND SERVICE SYSTEMS:** Would the project:				
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
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?	☐	☐	☐	☒
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒
XVIIII.	**MANDATORY FINDINGS OF SIGNIFICANCE**				
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, substantially 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?	☒	☐	☐	☐

	Description	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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)?	☒	☐	☐	☐
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

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4.0 ENVIRONMENTAL EVALUATION

The following evaluation provides responses to the questions in the Environmental Checklist. A brief explanation for each question in the Environmental Checklist is provided to adequately support each impact determination. All responses consider the whole of the action involved including construction and operational impacts as well as direct and indirect impacts. Environmental factors potentially affected by the proposed project are presented below and organized according to the format of the Checklist.

4.1 AESTHETICS

Would the project:

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

Potentially Significant Impact. According to the City of Newport Beach General Plan Update EIR, hills, canyons, bluffs, and water features are considered visual resources within the City. Figure 4.1-3, *Costal Views Map* (City of Newport Beach General Plan Update EIR, 2006), illustrates the Pacific Coast Highway (PCH)/Newport Bay Bridge, which transverses the project site, as a coastal view road.

Implementation of the proposed project would involve the rehabilitation of the Bay Bridge Pump Station and associated force mains. The project may result in short-term construction effects, when construction equipment, vehicles, grading, and trenching are visible. In addition, the project would result in the construction of new and expanded pump station buildings at and surrounding the existing Bay Bridge Pump Station site. As such, short-term construction activities and the development of new buildings could potentially affect scenic vistas associated with the PCH/Newport Bay Bridge and Newport Channel. Further analysis will be conducted as part of the EIR to determine potential impacts in this regard.

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

Potentially Significant Impact. Based on the California Scenic Highway Mapping System, PCH is not officially designated as a scenic highway, but is designated as "eligible" for listing.[1] As discussed in Response 4.1.a), implementation of the proposed project would involve the rehabilitation of the Bay Bridge Pump Station and associated force mains. Therefore, further analysis will be conducted as part of the EIR to determine the project's potential impacts in this regard.

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

Potentially Significant Impact. The project site is located along the Newport Bay Channel and PCH. As discussed in Response 4.1.a), implementation of the proposed project may result in

[1] California Department of Transportation, *California Scenic Highway Mapping System*, http://dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm, accessed on June 2, 2016.

localized temporary disturbance activities during construction as well as pump station improvements within a coastal area. Thus, further analysis will be conducted as part of the EIR to determine the project's potential impacts in this regard.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Potentially Significant Impact. There are two primary sources of light: light emanating from building interiors that pass through windows and light from exterior sources (i.e., street lighting, parking lot lighting, building illumination, security lighting, and landscape lighting). Light introduction can be a nuisance to adjacent uses, and diminish the view of the night sky. Currently, light and glare in the project vicinity is produced by vehicle headlights, street lighting, and lighting from commercial and residential uses within and adjacent to the project area.

Implementation of the proposed project would present the need to utilize mechanical equipment during the construction process. Additionally, the proposed project could create a new source of light or glare during long-term operations since the project would include improvements at the existing pump station site (e.g., new or updated nighttime security lighting). Therefore, further analysis will be conducted as part of the EIR to determine potential impacts in this regard.

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 the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:

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**.** Per the California Department of Conservation, the project area is situated within urban and built-up land. No agricultural resources exist within or adjacent to the project site. Therefore, construction activities would not result in any impacts to agricultural operations and would not convert any farmland to non-agricultural use. Thus, no impacts would result in this regard.

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

   No Impact. The proposed project site and the surrounding area is zoned as Commercial Recreational and Marine, Planned Community, and Multi-Unit Residential. Thus, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and no impacts would occur in this regard.

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. As discussed in in 4.2.b), the project site and the surrounding area is zoned as Commercial Recreational and Marine, Planned Community, and Multi-Unit Residential. Project implementation would not affect any existing lands zoned for forest land, timberland, or timberland production nor cause rezoning. No impacts would result in this regard.

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

   No Impact. Refer to Response 4.2.c).

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. Refer to response 4.2.a) and 4.2.c).

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:

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

Potentially Significant Impact. The project site is located within the South Coast Air Basin (Basin), which is governed by the South Coast Air Quality Management District (SCAQMD). The United States Environmental Protection Agency (EPA) has classified the SCAB as a non-attainment area for Federal and State air quality standards. The SCAQMD CEQA Air Quality Handbook specifies the main criteria that must be addressed, in order to determine consistency with the SCAQMD 2012 Air Quality Management Plan (AQMP). Because project implementation (temporary construction-related and long-term operational impacts) could result in potentially significant impacts involving conflicts or obstruction of implementation of the AQMP, further analysis will be conducted as part of the EIR.

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

Potentially Significant Impact.

Short-Term (Construction) Emissions

The project involves pump station improvements and replacement of associated force mains extending from the pump station to the west side of the Newport Bay Channel. Construction activities associated with the project would generate pollutant emissions from grading/excavation, operation of construction equipment, and construction vehicle activities. The construction activities could violate air quality standards or contribute substantially to an existing or projected air quality violation. An analysis of the project's impacts from construction-related activities will be conducted as part of the EIR, in order to determine whether the project's total construction-related emissions would exceed SCAQMD thresholds.

Long-Term (Operational) Emissions

Long-term air quality impacts typically consist of mobile source emissions generated from project-related traffic and from stationary source emissions from combustion to produce space heating, water heating, other miscellaneous heating, or air conditioning, consumer products, and landscaping. Here, the project would include pump station and pipeline improvements. The project would generate a nominal number of traffic trips (up to 15 trips per week for periodic maintenance/inspection by OCSD staff), as the project proposes to install wastewater infrastructure and would not result in any permanent or long-term air emissions. All pumps/generators associated with the project would be electrically-powered, and would not directly emit air pollutants.

However, the proposed project would also include the use of an emergency diesel generator for redundancy. The backup generator would be paired with a 66 gallon fuel tank, which would allow the pump station to run on backup power for approximately 11 hours for operational redundancy. Unless a power outage occurs, these generators would be operated only for routine testing and maintenance purposes. Since the proposed diesel generator would have the capacity to result in the emission of pollutants during short-term maintenance, testing, and emergency situations, impacts in this regard will be further analyzed within the EIR.

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

Potentially Significant Impact. Refer to Responses 4.3.a and 4.3.b.

d) Expose sensitive receptors to substantial pollutant concentrations?

Potentially Significant Impact. 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.

Project-related grading and excavation operations could result in air quality impacts to sensitive receptors. Construction of the project would also increase short-term construction vehicle trips on area roadways and result in associated air pollutants. Construction-related air quality impacts to sensitive receptors will be analyzed utilizing the SCAQMD's Localized Significance Thresholds (LST) methodology. These impacts require emissions quantification and additional analysis in the EIR to assess their level of significance.

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

Potentially 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. According to OCSD, there are no odor complaints associated with the existing Bay Bridge Pump Station. The proposed project would include similar wastewater infrastructure, and the project includes an odor control facility. Impacts in this regard will be further analyzed within the EIR.

4.4 BIOLOGICAL RESOURCES

Would the project:

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

Potentially Significant Impact. The proposed project site is located within a developed, urbanized area. The majority of improvements associated with the project would not have the capacity to affect sensitive biological resources given the amount of previous development that has occurred in the vicinity.

However, the project includes the development of a new force main that would cross the Newport Bay Channel. Construction of this force main would occur through one of two methods, either via microtunneling beneath the channel, or via dredging across the channel bottom. Should dredging occur, impacts to sensitive biological resources within the Newport Bay Channel may occur. According to Figure 4.3-1 of the City of Newport Beach General Plan EIR, eelgrass beds are known to occur within the vicinity of the force main crossing, and according to Figure 4.3-2, the Castaways Environmental Study Area is located northwest of the project site.

The EIR will include a Biological Resources Assessment that will further analyze impacts in this regard.

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

Potentially Significant Impact. Refer to Response 4.4(a), above. The EIR will include a Biological Resources Analysis that will analyze impacts to sensitive natural communities.

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?

Potentially Significant Impact. As noted in Response 4.4(a), above, the proposed force main crossing of the Newport Bay Channel may occur via dredging. As such, these improvements may result in impacts to Federally-protected wetlands. The EIR will include preparation of Jurisdictional Delineation to further analyze impacts in this regard.

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?

Potentially Significant Impact. Refer to Response 4.4(a), above. The EIR will include a Biological Resources Assessment that will analyze impacts to wildlife movement and corridors.

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

Potentially Significant Impact. Refer to Response 4.4(a), above. The EIR will include a Biological Resources Assessment that will analyze project consistency with policies and ordinances protecting biological resources, including applicable tree preservation policies.

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?

No Impact. The project site is located within the Coastal Subarea of the Orange County Central-Coastal Natural Communities Conservation Plan (NCCP). However, the site is designated as "Developed" in the NCCP, and is not within an area designated as Reserve, Conservation Easement, Non-Reserve Open Space, or Special Linkage. The project site is not located within the plan areas of any habitat conservation plans other than the NCCP. As such, no impact would occur in this regard.

4.5 CULTURAL RESOURCES

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

Potentially Significant Impact. The proposed project involves the construction of a new pump station and associated force mains to ensure reliability of local wastewater service to the community. The proposed project area is urbanized and fully developed with roadway, recreational, restaurant, residential, and infrastructure uses. Based on the City of Newport Beach General Plan EIR, the City of Newport Beach has a variety of historic resources, including Federal, State, and local resources. 11 properties in the City have been listed or designated eligible for listing on the National Register of Historic Places or California Register of Historical Resources, or otherwise listed as historic or potentially historic in the California Historic Resources Information System (CHRIS) maintained by the Office of Historic Preservation. Based on Figure 4.4-1 of the General Plan EIR, Historic Resources, the project would not affect any of these 11 identified properties. However, the project would involve the demolition of the existing Bay Bridge Pump Station building, which was constructed in 1956. In addition, construction activities would occur within and adjacent to a range of uses of potential historical significance (e.g., the Bay Bridge, PCH, etc.). Impacts in this regard will be further analyzed in the EIR.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Potentially Significant Impact. According to the City's General Plan EIR, the City of Newport Beach has a long cultural history and is known to have been home to Native American groups prior to settlement by Euro-Americans. Archaeological materials associated with occupation of the City and surrounding areas are known to exist and have the potential to provide important scientific information regarding history and prehistory. The project would require grading, excavation, and tunneling for construction of the proposed pump station and force mains. Although the project area is developed and urbanized, archaeological resources could potentially be affected during ground-disturbing activities. Thus, impacts related to archaeological resources will be further analyzed in the EIR. For potential impacts related to tribal cultural resources, refer to Section, 4.17, Tribal Cultural Resources.

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

Potentially Significant Impact. Based on the City's General Plan EIR, paleontological resources may be present in fossil-bearing soils and rock formations below the ground surface within the City. A number of localities in the City have a variety of known significant paleontological resources, including portions of the Vaqueros formation that underlie the Newport Coast, the Newport Banning Ranch, the Topanga and Monterey Formations, and Fossil Canyon in the North Bluffs area of the City. As noted above in Response 4.5(b), the project would require grading, excavation, and tunneling activities. These ground-disturbing activities could potentially affect paleontological

resources in underlying geological formations. Thus, impacts related to paleontological resources will be further analyzed in the EIR.

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

Less Than Significant Impact. No conditions exist that suggest human remains are likely to be found on the project site. Due to the level of past disturbance on-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, those remains 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.

4.6 GEOLOGY AND SOILS

Would the project:

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

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

No Impact. The project site is located in southern California, a known seismically active region. Active and potentially active faults within southern California are capable of producing seismic shaking at the project site, and it is likely that the proposed project would periodically experience ground acceleration as a result of exposure to moderate to large magnitude earthquakes. Seismic ground shaking on one of the nearby regional faults may cause damage to development. For the purposes of the Alquist-Priolo Earthquake Fault Zoning Map Act, the State of California defines active faults as those that have historically produced earthquakes or shown evidence of movement within the past 11,000 years (during the Holocene Epoch) (City of Newport Beach, 2006).

Figure 4.5-1, *Regional Faults*, of the City of Newport Beach General Plan Update EIR illustrates the major regional faults in the City's vicinity. According to Figure 4.5-1 and the California Department of Conservation Fault Activity Map of California (2010), the project site is not within an identified Alquist-Priolo Earthquake Fault Zone. Thus, no impact would result in this regard.

ii. Strong seismic ground shaking?

Potentially Significant Impact. 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), and movement on nearby faults (sympathetic fault movement), dam failure, and fires. Given the location of the project site in seismically active region, impacts in this regard will be further analyzed in the EIR.

iii. Seismic-related ground failure, including liquefaction?

Potentially Significant Impact. The potential for seismic-related ground failure is associated with the probability of severe ground shaking as a result of a nearby active fault. Liquefaction is the phenomenon that occurs when saturated granular soils develop high pore water pressures during seismic shaking and behave like a heavy fluid. This phenomenon generally occurs in areas of high seismicity where groundwater is shallow and loose granular soils or hydraulic fill soils subject to liquefaction are present. For liquefaction to develop, loose

granular sediments below the groundwater table must be present; and shaking of sufficient magnitude and duration must occur.

According to the City of Newport Beach General Plan Update EIR, areas of Newport susceptible to liquefaction and related ground failure (i.e. seismically induced settlement) include areas along the coastline that includes Balboa Peninsula, in and around the Newport Bay and Upper Newport Bay, in the lower reaches of major streams in Newport Beach, and in the floodplain of the Santa Ana River (Figure 4.5-2, *Seismic Hazards*). The proposed project is located in an area along the coastline of Newport Bay making the proposed project susceptible to liquefaction. Therefore, further analysis will be conducted as part of the EIR in order to verify potential impacts in this regard.

iv. Landslides?

Less Than Significant Impact. Seismically induced landslides can overrun structures, people or property, sever utility lines, and block roads. However, the project site and surrounding areas are generally flat, and void of topographical features capable of producing a landslide. According to the City of Newport Beach General Plan Update EIR, the project site is not located within an identified "Area of Landslide Potential". Therefore, less than significant impact would result in this regard.

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

Potentially Significant Impact. The proposed project would include grading/excavation, tunneling, and potentially dredging through the Newport Bay Channel. Therefore, implementation of the proposed project would expose soils that may become susceptible to erosion. Thus, further analysis will be conducted as part of the EIR in order to verify potential impacts in this regard.

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?

Potentially Significant Impact. Evaluation of liquefaction and landslides is provided in responses 4.6.a.iii and iv, above. Further analysis will be conducted as part of the EIR in order to verify potential impacts in this regard.

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?

Potentially Significant Impact. Expansive soils are found associated with soils, alluvium, and bedrock formations that contain clay minerals susceptible to expansion under wetting conditions and contraction under drying conditions. Depending upon the type and amount of clay present in a geologic deposit, these volume changes (shrink and swell) can cause severe damage to slabs, foundations, and concrete flatwork. Collapsible soils undergo a volume reduction when the pore spaces become saturated causing loss of grain-to-grain contact and possibly dissolving of interstitial cement holding the grains apart. The weight of overlying structures can cause uniform

or differential settlements and damage to foundations and walls. Therefore, further analysis will be conducted as part of the EIR in order to verify potential impacts in this regard.

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. The proposed project includes the rehabilitation of the existing Bay Bridge Pump Station and associated force mains. The project would not involve the use of septic tanks or alternative wastewater systems, and no impacts would occur in this regard.

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4.7 GREENHOUSE GAS EMISSIONS

Would the project:

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

Potentially Significant Impact. Greenhouse gases (GHGs) are gases in the atmosphere that absorb and emit radiation from the sun. The main GHGs that are found in the earth's atmosphere are water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), ozone (O_3), hydrofluorocarbons (HCFs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Direct GHG emissions include emissions from construction activities, area sources, and mobile (vehicle) sources. Indirect GHG emissions are generated by incremental electricity consumption and waste generation. Because the proposed project could generate greenhouse gas emissions that may have a significant impact on the environment, project-related GHG emissions will be quantified and analyzed in the EIR, in order to determine the significance of potential impacts.

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

Potentially Significant Impact. Refer to Response 4.7(a), above. Since the project could potentially result in impacts related to GHGs, further analysis will be provided in the EIR related to conflicts with plans, policies, or regulations reducing the emissions of GHGs.

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4.8 HAZARDS AND HAZARDOUS MATERIALS

Would the project:

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

Potentially Significant Impact. Exposure of the public or the environment to hazardous materials could occur through improper handling or use of hazardous materials or hazardous wastes particularly by untrained personnel, a transportation accident, environmentally unsound disposal methods, or fire, explosion, or other emergency. The severity of potential hazards would vary with the activity conducted, the concentration and type of hazardous material or waste present, and the proximity to sensitive receptors. Various State hazardous waste laws regulate the transport, use, and handling of hazardous materials such as California's Hazardous Waste Control Act, Accidental Release Prevention Law, California Code of Regulations Title 26, and California Division of Occupational Safety and Health (Cal/OSHA) workplace safety standards. These regulations establish safe handling procedures (i.e., packaging, marking, labeling, and routing), response plans for hazardous materials transportation emergencies, and assuring worker safety in the handling and use of hazardous materials. Further analysis will be conducted in the EIR to determine the potential for the project to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during both construction and long-term operations.

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?

Potentially Significant Impact. During short-term construction, there is a possibility of accidental release of hazardous substances such as petroleum-based fuels or hydraulic fluid used for construction equipment. In addition, long-term operation of the project would require installation of a 660-gallon diesel fuel tank associated with the emergency backup generator. As stated above, the use, handling and transport of hazardous materials are regulated by various State hazardous waste laws and associated regulations. Further analysis will be conducted in the EIR to determine the potential for impacts related to upset or accident conditions involving hazardous materials.

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. There are no existing or proposed schools located within 0.25-miles of the project site. The nearest schools are Ensign Intermediate School, approximately 0.43-mile to the northwest and Newport Harbor High School, approximately 0.46-mile to the northwest. No impacts would occur in this regard.

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?

Potentially Significant Impact. According to the California Department of Toxic Substances Control Hazardous Waste and Substances List (Cortese List), the project site is not included on a list of hazardous materials site pursuant to Government Code Section 65962.5. However, two known Cortese sites are located in the surrounding area. Further analysis will be conducted as part of the EIR, in order to verify these preliminary findings and determine potential impacts in this regard.

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, John Wayne Airport, is located approximately 3.65 miles to the northwest of the project. The project area is located outside of the John Wayne Airport Influence Area and is not located within any airport land use plan or within two miles of a public airport.[1] No impacts would occur in this regard.

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 are located within the project area. No impacts would occur in this regard.

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

Potentially Significant Impact. The project is not anticipated to result in any long-term operational impacts related to emergency response or evacuation, since no proposed improvements would affect roadway facilities and the project would generate negligible vehicle trips for periodic maintenance and inspections. However, the project may result in impacts to PCH over the short-term construction process to allow for staging and access for pump station construction. Therefore, further analysis will be conducted as part of the EIR in order to determine whether project implementation would physically interfere with an adopted emergency response plan or emergency evacuation plan.

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 project site consists of, and is surrounded by, urban/developed land and the Newport Bay Channel. Castaways Park is the nearest undeveloped area of land capable of producing a wildland fire. However, Castaways Park is located over 1,000 feet northwest of the project site, and according to the Newport Beach Very High Fire Hazard Severity Zone (VHFHSZ) Map, the project site is not within the VHFHSZ.[2] Therefore, project implementation would not expose people or structures to a significant risk involving wildland fires, and no impacts would occur in this regard.

[1] County of Orange Airport Land Use Commission, *Airport Environs Land Use Plan for John Wayne Airport,* Amended April 17, 2008.

[2] CalFire, *Newport Beach Very High Fire Hazard Severity Map,* October 2011.

4.9 HYDROLOGY AND WATER QUALITY

Would the project:

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

Potentially Significant Impact. As part of Section 402 of the Clean Water Act, the U.S. Environmental Protection Agency (EPA) has established regulations under the National Pollutant Discharge Elimination System (NPDES) program to control direct storm water discharges. In California, the State Water Regional Control Board (SWRCB) administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The NPDES program regulates industrial pollutant discharges, which include construction activities. The SWRCB works in coordination with the Regional Water Quality Control Boards (RWQCB) to preserve, protect, enhance, and restore water quality. The project site is within the jurisdiction of the Santa Ana RWQCB.

Short-Term Construction

Construction of the project would include activities with the potential to contribute to water quality degradation. Soils disturbed during the project's earthwork and construction phase are susceptible to high rates of erosion from wind and rain. The potential for erosion, siltation, and sedimentation, which affect water quality, would be the greatest during this phase. The delivery, handling, and storage of construction materials and wastes, as well as the use of construction equipment, could also introduce a risk for storm water contamination. Other pollutants attached to sediment and transported to downstream locations could cause or contribute to water quality degradation. Therefore, because construction-related activities associated with the proposed project could violate water quality standards or waste discharge requirements, further analysis will be conducted as part of the EIR, in order to determine potential impacts in this regard.

Long-Term Operations

On a long-term operational basis, all force main improvements would be located underground and would not have the capacity to affect water quality. The proposed pump station improvements would occur at and surrounding the existing Bay Bridge Pump Station, which is fully developed, paved, and impervious. The project would not result in the development of new impervious surfaces, as project components would occur within previous paved/developed areas. As a pump station facility, the project would not result in the generation of any wastewater or effluent requiring disposal, but rather would convey wastewater to OCSD Plant No. 2 in Huntington Beach. Since the project would not generate wastewater or result in an increase in impervious area, long-term operational impacts would be less than significant.

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 rehabilitation of the existing pump station and associated force mains would not require the direct extraction or use of groundwater. All force main improvements would be located underground and would not have the capacity to affect groundwater supplies or recharge. The project occurs within a highly developed and urbanized portion of Newport Beach, and no designated groundwater recharge basins or infrastructure occur in the project area. The project would not result in any increase in impervious area, since the expansion of the proposed pump station building and associated facilities would utilize existing developed and paved areas.[1] Therefore, the project would not have the capacity to interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or lowering of the groundwater table level. Impacts in this regard would be less than significant.

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

Potentially Significant Impact. Refer to response 4.9(a). Although the project would not alter topography or result in long-term operational conditions that would result in substantial erosion or siltation on- or off-site, the project could result in such impacts during the construction process (when soils are exposed during earthwork). As such, impacts in this regard will be further analyzed within the EIR.

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-site or off-site?

Less Than Significant Impact. The proposed project would not substantially alter drainage conditions in the project area. Generally, topography within the project area is relatively flat and the pump station and force main improvements would not result in substantial alterations to site conditions. The proposed pump station improvements would occur at and immediately surrounding the existing Bay Bridge Pump Station, and substantial alterations to the site's existing flat grade would not be required. Force main improvements would be entirely underground, and would not have the capacity to change existing drainage conditions. In addition, the proposed pump station improvements would not result in an increase in impervious area because the proposed pump station building and associated facilities would utilize existing developed and paved areas.[2] Impacts in this regard would be less than significant.

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?

Potentially Significant Impact. Refer to responses 4.9.a) and 4.9.d). Further analysis will be required in the EIR to address short-term construction impacts related to the project.

[1] Hushmand Associates, Inc., *Geological, Geotechnical, and Seismic Technical Background Report Bay Bridge Pump Station and Force Mains Rehabilitation Study,* April 2015.

[2] Ibid.

f) Otherwise substantially degrade water quality?

Less Than Significant Impact. The proposed project is not anticipated to result in water quality impacts other than the potential impacts identified within this Section. The primary water quality concern related to the project pertains to the potential for erosion during the short-term construction process, which will be further analyzed in the EIR. Moreover, the project would not result in an increase in impervious areas (as discussed above), and would not involve a use that would result in any direct discharge (such as water or wastewater treatment facility). All force main improvements would be situated underground, and would not have the capacity to affect water quality in the project area. Thus, impacts in this regard would be less than significant.

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. No housing is proposed as part of the project. Thus, no impact would result in this regard.

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

No Impact. The only structures associated with the project are the proposed pump station facilities on the northern side of PCH. The pump station site is located within Zone X, outside of the 100-year flood hazard area.[3] Thus, no impacts would occur in this regard.

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?

No Impact. According to the City of Newport Beach Emergency Operation Plan, Dam Failure Inundation Map, the project site is not located within a dam failure inundation area.[4] Additionally, the project does not propose to construct, remove, or alter any levee or dam. As such, the project would not 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. No impact would occur and no mitigation is required.

j) Inundation by seiche, tsunami, or mudflow?

Less Than Significant Impact. As indicated in the existing conditions section above, based on FEMA flood maps, the project site has been designated as Zone X, meaning that it is outside of 100-year and 500-year flood zones. However, the site is located within an area that could be subject to flooding as a result of tsunami inundation or a seiche within Newport Bay.

As discussed in the Safety Element of the City's General Plan, Newport Beach is generally protected from most distantly generated tsunamis by the Channel Islands and Point Arguello, except for those generated in the Aleutian Islands, off the coast of Chile, and possibly off the coast

[3] Federal Emergency Management Agency, Flood Insurance Rate Map, Map # 06059C0382J, Revised December 3, 2009.

[4] Newport Beach Fire Department, *City of Newport Beach Emergency Operations Plan,* September 27, 2011.

of Central America. Nevertheless, since the early 1800s, more than thirty tsunamis have been recorded in Southern California, and at least six of these caused damage in the area. Tsunamis generated in the Alaskan region take approximately six hours to arrive in the Southern California area, while tsunamis generated off the Chilean coast take 12 to 15 hours. Given those timeframes, coastal communities in Southern California can receive adequate warning, allowing them to implement evacuation and required preparation procedures. The pump station site would have the same level of tsunami risk with or without implementation of the proposed project.

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. While there is a potential for seiche to occur within portions of the Newport Bay, the proposed project would not result in any increase in potential related to inundation by seiche, since the project would not introduce substantial changes in topography (i.e., lowering of the project site). The pump station site would have the same level of seiche risk with or without implementation of the proposed project.

In addition, the project site and surrounding areas are generally flat, and void of topographical features capable of producing mudflow. Mudflows result from the downslope movement of soil and/or rock under the influence of gravity, which can result from landslides. According to the City of Newport Beach General Plan Update EIR, the project site is not located within an identified "Area of Landslide Potential". Therefore, less than significant impact would result in this regard.

4.10 LAND USE AND PLANNING

Would the project:

a) Physically divide an established community?

Less Than Significant Impact. The project involves construction of a new pump station and replacement of associated force mains. The proposed pump station building would be located at and surrounding the existing Bay Bridge Pump Station site, and is surrounded by an existing RV storage facility. The pump station would be situated adjacent to PCH, which serves as a major transportation corridor within the project area. The pump station expansion involves an increase of 4,700 square feet beyond existing conditions and would occur at and surrounding the existing pump station site. In addition, all force main improvements would be located underground. The nearest residential uses to the project site include a mobile home park north of PCH at Bayside Drive, and to the west of the Newport Bay Channel. Given the existing features that currently act as linear features separating various uses in the community (e.g., PCH and the Newport Bay Channel), the project would not have the capacity to physically divide an established community, and impacts would be less than significant in this regard.

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?

Potentially Significant Impact. The *City of Newport Beach General Plan Overview Map* designates the pump station site and PCH force main improvements area as "Recreational and Marine Commercial". The *City of Newport Beach Zoning Map* zones the pump station site and PCH force main improvements area as "Bayside Village Boat Launch and Storage". The Newport Bay Channel crossing force main improvements and microtunneling staging areas have a land use designation of "Mixed Use – Water 2" and zoning designation of "Multi-Unit Residential" with a minimum site area of 2,178 square feet. The proposed project would result in an expansion of the existing Bay Bridge Pump Station onto land that is currently occupied by an existing RV storage facility. In addition, the project site is situated with the Coastal Zone, and would be subject to provisions within the California Coastal Act and would require a Coastal Development Permit. As such, impacts in this regard will be further analyzed in the EIR.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The project site is located within the Coastal Subarea of the Orange County Central-Coastal Natural Communities Conservation Plan (NCCP). However, the site is designated as "Developed" in the NCCP, and is not within an area designated as Reserve, Conservation Easement, Non-Reserve Open Space, or Special Linkage. The project site is not located within the plan areas of any habitat conservation plans other than the NCCP. As such, no impact would occur in this regard.

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4.11 MINERAL RESOURCES

Would the project:

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. According to the City of Newport Beach General Plan EIR Figure 4.5-4, Mineral Resource Areas, the project site is not known to contain mines, mineral deposits, or other mineral resources. The project area is within State Mineral Resource Zone 1 (MRZ) indicating "Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that there is little likelihood for their presence".[1] No mineral resource recovery activities occur at the project site or in the surrounding vicinity. Thus, no impacts would result in this regard.

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).

[1] California Department of Conservation, *Guidelines for Classification and Designation of Mineral Lands.*

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4.12 NOISE

Would the project:

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?

Potentially Significant Impact. Noise from project-related construction activities would be generated by two primary sources: 1) the transport of workers and equipment to and from the construction site; and 2) the noise related to active construction equipment and operations. These noise sources could result in impacts to nearby sensitive receptors.

The project would also generate long-term operational noise through new stationary noise sources associated with the proposed pump station (e.g., pumps and generators). Given the negligible number of vehicle trips required for periodic maintenance and inspections associated with operation of the project (i.e., a maximum of 15 vehicle trips per week), any long-term operational mobile source noise is anticipated to be nominal. However, noise impacts related to construction and pump station operation will be further analyzed within the EIR.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Potentially Significant Impact. The groundborne noise and vibration generated during project construction and operational activities could impact nearby sensitive receptors. Additional analysis will be conducted as part of the EIR in order to determine potential impacts in this regard.

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

Potentially Significant Impact. Refer to Response 4.12(a). Additional analysis will be conducted as part of the EIR in order to determine potential impacts in this regard.

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

Potentially Significant Impact. Refer to Response 4.12(a). Additional analysis will be conducted as part of the EIR in order to determine potential impacts in this regard.

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 nearest airport, John Wayne Airport, is located approximately 3.65 miles to the northwest of the project. The project area is located outside of the John Wayne Airport Influence

Area and is not located within any airport land use plan or within two miles of a public airport.[1] As such, no impacts would occur in this regard.

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. The proposed project would not be located within the vicinity of a private airstrip. Therefore, no impacts would occur in this regard.

[1] County of Orange Airport Land Use Commission, *Airport Environs Land Use Plan for John Wayne Airport,* Amended April 17, 2008.

4.13 POPULATION AND HOUSING

Would the project:

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)?

Less Than Significant Impact. The proposed project would involve construction of a new pump station and improvements to associated force mains. The project would not result in the construction of new residential or business uses or significant changes which would induce population growth. Although the project would result in an increase in flow conveyance capacity from 16 million gallons a day MGD to 18.5 MGD, this increase is intended to accommodate long-range, planned regional growth within the OCSD service area based on regional growth forecasts. Moreover, the project is intended to improve reliability since the existing Bay Bridge Pump Station is outdated and no longer meets structural or maintenance standards. Thus, impacts in this regard would be less than significant.

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

No Impact. There is no existing housing associated with the proposed project site. No impact would result in this regard.

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

No Impact. The proposed project would have no impact associated with displacing people. No impact would result in this regard.

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4.14 PUBLIC SERVICES

Would the project:

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:

- Fire protection?
- Police protection?
- Schools?
- Parks?
- Other public facilities?

No Impact. As a wastewater infrastructure facility, the proposed pump station and associated force mains would not introduce new population growth generating a need for additional public services, and no habitable structures would be included as part of the project. All force main facilities would be located below ground, and the proposed pump station building would not include any uses that would generate an increased need for fire protection and/or police protection. Therefore, impacts related to fire protection, police protection, schools, parks, or other public facilities would not occur.

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4.15 RECREATION

Would the project:

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 Section 4.14, project implementation would not increase population on-site or in the area, such that demand for recreational facilities would increase. Although the project may include construction storage and staging activities within a graded and disturbed area immediately south of Castaways Park, it would not interfere with park recreational activities and no impacts would occur in this regard.

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. Refer to Response 4.15(a).

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4.16 TRANSPORTATION/TRAFFIC

Would the project:

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?

Potentially Significant Impact. The project would result in less than significant impacts in regards to long-term operational traffic, since the project would generate negligible vehicle trips for OCSD staff to perform periodic maintenance and/or inspections of facilities and equipment. OCSD estimates that the proposed project would require a maximum of 15 vehicle trips per week during operations. These nominal number of vehicle trips would not have a significant impact on the effectiveness of local roadway facilities.

The project may result in temporary short-term traffic impacts during the construction process, particularly along PCH. Impacts to travel along westbound PCH (adjacent to the pump station site) may occur as a result of construction operations, staging, and equipment/vehicle access to allow for construction of the pump station facility. Impacts relating to short-term construction traffic operations will be further analyzed in the EIR.

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?

Less Than Significant Impact. Based on the Orange County Transportation Authority's (OCTA) Congestion Management Program (CMP), the nearest CMP intersection is located at the intersection of PCH and Newport Boulevard to the northwest, approximately 1.4 miles from the project site, and PCH and MacArthur Boulevard to the southeast, approximately 1.8 miles from the project site.[1] Although the proposed project would generate traffic during the short-term construction process (e.g., construction worker trips, delivery of materials, hauling, etc.), this traffic generation would be temporary in nature, and many of the construction-related trips would occur outside of peak hours, when traffic generally is heaviest. In addition, as noted above, the project would generate a negligible amount of long-term operational vehicle trips (a maximum of 15 vehicle trips per week) associated with periodic maintenance/inspection of the proposed wastewater facilities. This traffic would not have the capacity to substantially affect the identified CMP intersections, and impacts in this regard would be less than significant.

[1] Orange County Transportation Authority, *Draft 2015 Orange County Congestion Management Program,* September 2015.

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, John Wayne Airport, is located approximately 3.65 miles to the northwest of the project. Given the scope and nature of the proposed project (pump station and force main rehabilitation), project implementation would not increase the traffic levels or alter air traffic patterns. No impacts would occur in this regard.

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

Potentially Significant Impact. Refer to Response 4.16(a). The project could potentially result in temporary traffic hazards since pump station construction may require staging and access within PCH, adjacent to the pump station site. Impacts in this regard will be further analyzed within the EIR.

e) Result in inadequate emergency access?

Potentially Significant Impact. The project is not anticipated to result in any long-term operational impacts related to emergency response or evacuation, since no proposed improvements would affect roadway facilities and the project would generate negligible vehicle trips for periodic maintenance and inspections (a maximum of 15 trips per week). However, the project may result in impacts to PCH over the short-term construction process to allow for construction activities, staging and access for pump station construction. Therefore, further analysis will be conducted as part of the EIR in order to determine whether project implementation would result in inadequate emergency access.

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?

Potentially Significant Impact. The proposed project would not result in any conflicts with adopted policies, plans, or programs related to alternative modes of transportation during long-term operations. All force main improvements would be underground, and the pump station facility would not generate substantial vehicle traffic or affect public transit, bicycle, or pedestrian travel.

However, as noted above, the project may result in impacts to PCH over the short-term construction process to allow for construction activities, staging and access for pump station construction. These activities may affect the OCTA Coast-Bayshore bus stop in addition to a striped bicycle lane and sidewalk on the northern side of PCH. Thus, construction could have potentially significant impacts related to conflicts with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. Further analysis will be conducted as part of the EIR.

4.17 TRIBAL CULTURAL RESOURCES

As of July 1, 2015, California Assembly Bill 52 (AB 52) was enacted and expanded CEQA by establishing a formal consultation process for California tribes within the CEQA process. The bill specifies that any project may affect or cause a substantial adverse change in the significance of a tribal cultural resource would require a lead agency to "begin consultation with a California Native American tribe that is traditional and culturally affiliated with the geographic area of the proposed project." Section 21074 of AB 52 also defines a new category of resources under CEQA called tribal cultural resources." Tribal cultural resources are defined as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is either listed on or eligible for the California Register of Historical Resources or a local historic register, or if the lead agency chooses to treat the resource as a tribal cultural resource.

In compliance with AB 52, OCSD distributed letters to numerous Native American tribes notifying each tribe of the opportunity to consult with the OCSD regarding the proposed project. The tribes were identified based on a list provided by the Native American Heritage Commission (NAHC), or were tribes that had previously requested to be notified of future projects proposed by OCSD. OCSD received two tribal responses, and coordination and potential consultation between the tribes and OCSD will continue as required under AB 52. Potential impacts related to tribal cultural resources will be further analyzed within the EIR.

On February 19, 2016, the California Natural Resources Agency proposed to adopt and amend regulations as part of AB 52 implementing Title 14, Division 6, Chapter 3 of the California Code of Regulations, CEQA Guidelines, to include consideration of impacts to tribal cultural resources pursuant to Government Code Section 11346.6. On September 27, 2016, the California Office of Administrative Law approved the amendments to Appendix G of the CEQA Guidelines, and these amendments are addressed within this Initial Study.

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

   i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

      Potentially Significant Impact. The project would require grading, excavation, and tunneling for construction of the proposed pump station and force mains. Although the project area is developed and urbanized, tribal cultural resources could potentially be affected during ground-disturbing activities. As noted above, in compliance with AB 52, OCSD distributed letters to potentially affected tribes for consultation regarding the proposed project. In addition, the EIR will include further analysis of resources in the project area that are either listed or eligible for listing on the California Register of Historical Resources or a local register. Thus, impacts related to historical resources will be further analyzed in the EIR.

   ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code

Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Potentially Significant Impact. As stated above in Response 4.17(a), the project would require grading, excavation, and tunneling. Although the project area is developed and urbanized, tribal cultural resources could potentially be affected during ground-disturbing activities. As noted above, in compliance with AB 52, OCSD distributed letters to potentially affected tribes for consultation regarding the proposed project. The EIR will include further analysis related to resources potentially affected by the project that may be subject to criteria set forth in Public Resources Code Section 5024.1(c). Thus, potential impacts related to tribal cultural resources will be further analyzed in the EIR.

4.18 UTILITIES AND SERVICE SYSTEMS

Would the project:

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

No Impact. The proposed project would not result in the generation of any wastewater. Rather, the project consists of wastewater pump station/force main improvements that would assist in conveying wastewater flows from the vicinity of the project site to the OCSD's Plant No. 2 in Huntington Beach for treatment and disposal. OCSD's operations at Plant No. 2 are fully permitted by the Regional Water Quality Control Board, and the proposed project would not result in the exceedance of any wastewater treatment requirements. No impacts would occur in this regard.

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 project would not include the construction of any water facilities. The project would include wastewater pump station and force main improvements, the effects of which are analyzed within this Initial Study/Environmental Checklist. No impacts beyond those identified within this document would occur.

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. Implementation of the proposed project would rehabilitate an existing pump station facility and force mains. No new stormwater drainage facilities or expansion of existing facilities would be required as a result of the proposed project. No impact would result in this regard.

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

Less Than Significant Impact. The proposed project would not result in a direct or indirect population increase increasing demand for water. In addition, the proposed pump station facility would not result in the use of substantial amounts of water during long-term operations since the proposed pump station building and associated facilities would not utilize water except for a restroom. The restroom would be utilized by OCSD maintenance staff during periodic project maintenance operations, resulting in a minimal use of water. Although the project would result in an increase in flow conveyance capacity from 16 million gallons a day MGD to 18.5 MGD, it is intended to accommodate long-range, planned regional growth within the OCSD service area based on regional growth forecasts. Thus, the proposed project would not require the provision of new water supplies or generate population growth resulting in the need for new water supplies, and impacts would be less than significant in this regard.

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 Response 4.18(a), above.

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

Less Than Significant Impact. The proposed project would result in pump station and force main improvements. The project would not include any habitable structures, and would not have the capability to produce solid waste during long-term operations. Although the project may require the disposal of construction/demolition debris during the construction process (soil, asphalt, demolished materials, 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. The City disposes solid waste at the Frank R. Bowerman landfill in Irvine, a 725-acre facility that is operating at a maximum daily permitting capacity of 11,500 tons per day. The landfill has a remaining capacity of 205,000,000 cubic yards and is expected to remain open until 2053.[1] The increase in solid waste from the project's construction activities would not have a significant impact upon the existing and projected landfill capacity of the Frank R. Bowerman landfill. Thus, impacts in this regard would be less than significant.

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

No Impact. The proposed project would comply with all Federal, State, and local statutes and regulations related to solid waste, including the California Integrated Waste Management Act and City requirements for solid waste generated during the construction process. No impacts would occur in this regard.

[1] CalRecycle, *Facility/Site Summary Details: Frank R. Bowerman Sanitary LF (30-AB-0360),* http://www.calrecycle.ca.gov/SWFacilities/Directory/30-AB-0360/Detail/, accessed September 26, 2016.

4.19 MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:

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?

Potentially Significant Impact. As concluded in Section 4.4, Biological Resources, the project has the potential to result in impacts to sensitive plant and animal species. In addition, as noted in Section 4.5, Cultural Resources and Section 4.17, Tribal Cultural Resources, the project may result in impacts to historical, archaeological, paleontological, and tribal cultural resources. Therefore, further analysis will be conducted as part of the EIR, in order to determine whether the proposed project would 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.

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)?

Potentially Significant Impact. A significant impact may occur if a proposed project, in conjunction with related projects, would result in impacts that are less than significant when viewed separately, but would be significant when viewed together. Further analysis will be conducted as part of the EIR in order to determine whether the project would have impacts that are individually limited, but cumulatively considerable.

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

Potentially Significant Impact. As concluded within this Initial Study, project implementation would result in potentially significant environmental impacts that may have adverse effects on human beings. Therefore, further analysis will be conducted as part of the EIR in this regard.

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