

# **Moulton Niguel Water District Crown Valley Pipelines Replacement Project**

**DRAFT**

## **Initial Study/Mitigated Negative Declaration**

**Prepared for:**

**Moulton Niguel Water District**  
26161 Gordon Road  
Laguna Hills, CA 92653

**Prepared by:**

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**November 2021**

# CROWN VALLEY PIPELINES REPLACEMENT PROJECT

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## PROPOSED MITIGATED NEGATIVE DECLARATION AND NOTICE OF INTENT TO ADOPT THE PROPOSED MITIGATED NEGATIVE DECLARATION

This serves as the Moulton Niguel Water District's Notice of Intent to adopt a Mitigated Negative Declaration for the Crown Valley Pipelines Replacement Project, prepared in accordance with the California Environmental Quality Act (CEQA) and CEQA Guidelines.

**Name of Project:** Crown Valley Pipelines Replacement Project

**Project Location:** The proposed Crown Valley Pipelines Replacement ("Project") is a linear feature whose southern end is located in the city of Dana Point (Township 8 South, Range 8 West, Sections 4 and 9; Dana Point, California, U.S. Geological Survey [USGS] 7.5-minute Quadrangle Map [1968]) and northern end in the city of Laguna Niguel (Township 7 South, Range 8 West [no sections]; San Clemente, California, USGS 7.5-minute Quadrangle Map [1981]). The Project will be located in and adjacent to Crown Valley Parkway from the Moulton Niguel Water District's Lower Salada Lift Station, located at 32332 Crown Valley Parkway, to approximately the Crown Valley Parkway intersection with Hillhurst Drive.

**Lead Agency:** Moulton Niguel Water District  
26161 Gordon Road  
Laguna Hills, CA 92653

**Project Description:** The Crown Valley Pipelines Replacement Project consists of three components: Lower Salada Lift Station Force Main Replacement, Crown Valley Parkway Transmission Main Lower Reach Replacement, and I.D. No. 1 Master Meter Relocation as these facilities are along the same area of Crown Valley Parkway requiring the design and construction to be coordinated.

The Project site is not designated a hazardous waste property, or a hazardous waste disposal site as enumerated under Section 65962.5 of the California Government Code.

**NOTICE IS HEREBY GIVEN THAT** the Moulton Niguel Water District proposes to adopt a Mitigated Negative Declaration for the above-cited Project. Such Mitigated Negative Declaration is based on the finding that, by implementing the identified mitigation measures, the Project's potential impacts will be maintained at a less than significant level. The reasons to support such a finding are documented by the Initial Study prepared by Tetra Tech, Inc. Copies of the Initial Study, the proposed Mitigated Negative Declaration and supporting materials are available for review at the Moulton Niguel Water District located at 26161 Gordon Road, Laguna Hills, CA 92653. The Draft Initial Study/Mitigated Negative Declaration and appendices are also available for review and download from Moulton Niguel Water District's website: <https://www.mnwd.com/engineering-notices/>.

For questions regarding the Mitigated Negative Declaration, please contact:

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<b>TITLE:</b>	Engineering Manager	<b>EMAIL:</b>	<a href="mailto:TDmytryshyn@mnwd.com">TDmytryshyn@mnwd.com</a>
<b>ADDRESS:</b>	Moulton Niguel Water District 26161 Gordon Road Laguna Hills, CA 92653		

**Public Review Period:** 30 days      **Begins:** 11/15/2021    **Ends:** 12/15/2021

**Public Meeting:** Consideration of adoption of the Mitigated Negative Declaration by the Moulton Niguel Water District is scheduled to take place on February 10, 2022 at 6:00 p.m. at the Moulton Niguel Water District headquarters located at 26161 Gordon Road, Laguna Hills, CA 92653.

In accordance with CEQA Guidelines, any comments concerning the findings of the proposed Initial Study/Mitigated Negative Declaration must be submitted in writing and **received by the Moulton Niguel Water District no later than 5:00 p.m. on December 15, 2021**, in order to be considered prior to the Moulton Niguel Water District's final determination on the Project. Please submit your written comments to Todd Dmytryshyn, PE, District Project Manager, Moulton Niguel Water District located at 26161 Gordon Road, Laguna Hills, CA 92653 or via email to [TDmytryshyn@mnwd.com](mailto:TDmytryshyn@mnwd.com).

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## ABBREVIATIONS AND ACRONYMS

§	Section
ACP	asbestos-cement pipe
AQMP	Air Quality Management Plan
Basin	South Coast Air Basin
BMP	Best Management Practices
CAGN	Coastal California gnatcatcher
CalEEMod	California Emissions Estimator Model <sup>®</sup>
CDFW	California Department of Fish and Wildlife
Central/Coastal Orange County NCCP/HCP	Natural Community Conservation Plan/Habitat Conservation Plan for the Central/Coastal Subregion of Orange County
CEQA	California Environmental Quality Act
CH <sub>4</sub>	methane
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	carbon dioxide equivalent
CRHR	California Register of Historical Resources
dBA	A-weighted sound level
District	Moulton Niguel Water District
EIR	Environmental Impact Report
GHG	greenhouse gas
HCP	Habitat Conservation Plan
I.D. No. 1 Master Meter	Master Meter of Improvement District Number 1
JTM	Joint Transmission Main
MLD	Most Likely Descendant
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
N <sub>2</sub> O	nitrous oxide
NPDES	National Pollutant Discharge Elimination System
O <sub>3</sub>	ozone
OCFA	Orange County Fire Authority
PM <sub>10</sub>	inhalable particulate matter
PM <sub>2.5</sub>	fine particulate matter
PRC	Public Resources Code
Project	Crown Valley Pipelines Replacement Project
RCPG	Regional Comprehensive Plan and Guide

SoCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCWD	South Coast Water District
Tetra Tech	Tetra Tech, Inc.
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VdB	velocity level in decibels

## 1.0 INTRODUCTION

The Moulton Niguel Water District (District) is proposing to replace approximately 9,250 feet of the Lower Salada Lift Station existing sewer force main, approximately 9,650 feet of the existing Crown Valley Parkway Transmission Main Lower Reach potable water pipeline, and relocation of the Master Meter of Improvement District Number 1 (I.D. No. 1 Master Meter). The pipelines (sewer main and potable water main) and I.D. No.1 Master Meter are all owned and maintained by the District.

The Crown Valley Pipelines Replacement Project (herein referenced as “Project”) is needed to address the conditions of the sewer force main and the potable water pipeline due to age. The relocation of the I.D. No. 1 Master Meter is required due to a separate South Coast Water District (SCWD) project involving the relocation of 2,500 linear feet of the existing 39-inch Joint Transmission Main (JTM) onto Crown Valley Parkway. The District will require coordination with SCWD’s design firm regarding the final location of the SCWD’s relocated 39-inch JTM and outlet for the Project’s relocated I.D. No. 1 Master Meter.

Following initial review of the proposed Project, the District has determined that it is subject to the guidelines and regulations of the California Environmental Quality Act (CEQA). This Initial Study addresses the environmental effects of the Project, as proposed.

### 1.1 STATUTORY AUTHORITY AND REQUIREMENTS

This Mitigated Negative Declaration has been prepared by the District with technical assistance from Tetra Tech, Inc. (Tetra Tech) to evaluate if implementation of the Project would have a significant effect on the environment. Pursuant to Section 15070 of the *Guidelines for Implementation of the California Environmental Quality Act* (14 California Code of Regulations Sections (§§) 15070-15075), a public agency shall prepare or have prepared a proposed negative declaration or mitigated negative declaration for a project subject to CEQA when:

- (a) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or
- (b) The initial study identifies potentially significant effects, but:
  - (1) Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and
  - (2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

### 1.2 REQUIRED CONTENT

CEQA Guidelines Section 15071 indicate that a Negative Declaration circulated for public review shall include:

- (a) A brief description of the project, including a commonly used name for the project, if any;
- (b) The location of the project, preferably shown on a map, and the name of the project proponent;
- (c) A proposed finding that the project will not have a significant effect on the environment;

- (d) An attached copy of the Initial Study documenting reasons to support the finding; and
- (e) Mitigation measures, if any, included in the project to avoid potentially significant effects.

## 2.0 PROJECT INFORMATION

Project title:	Crown Valley Pipelines Replacement Project
Lead agency name and address:	<b>Moulton Niguel Water District</b> 26161 Gordon Road Laguna Hills, CA 92653
Contact person and phone number:	<b><i>Todd Dmytryshyn, PE</i></b> 949.425.3549
Project location:	The proposed Crown Valley Pipelines Replacement sites are located in the city of Dana Point and the city of Laguna Niguel, in the southern portion of Orange County. The Project will be located in and adjacent to Crown Valley Parkway from the Moulton Niguel Water District's Lower Salada Lift Station, located at 32332 Crown Valley Parkway to approximately the Crown Valley Parkway intersection with Hillhurst Drive. See Figure 2-1, Project Vicinity Map.
Project sponsor's name and address:	<b>Moulton Niguel Water District</b> 26161 Gordon Road Laguna Hills, CA 92653
General Plan Designation:	Dana Point – RES 3.5-7 (Residential 3.5-7 DU/AC), RES 14-22 (Residential 14-22 DU/AC), P/A (Prof. / Admin.)  Laguna Niguel – Residential Detached, Open Space, Residential Attached, Parks and Recreation, Public/Institution, Community Commercial, Professional Office; Public/Institution

Zoning Designation:	Dana Point – Residential Single Family 4 DU/AC (RSF 4), Residential Single Family 7 DU/AC (RSF 7), Residential Multiple Family 22 DU/AC (RMF 22), Professional/Administration (P/A)  Laguna Niguel – Open Space District (OS), Park & Recreation District (PR), Single Family District 3 (RS-3), Multi-Family District (RM), Public/Institutional District (PI), Community Commercial District (CC)
Surrounding land uses:	Surrounding land uses primarily consist of single family residential, multi-family residential, municipal, and commercial. Nearby major cross streets are Pacific Island Drive/Camino Del Avion near the southern end of the Project and Alicia Parkway to the north. Interstate 5 is located approximately 2.5 miles to the east. State Route 73 is located approximately 4.5 miles to the north. State Route 1 is located approximately 0.6 miles to the southwest.

## **2.1 ENVIRONMENTAL SETTING**

### **2.1.1 Regional**

The Project is located in the southern portion of Orange County with the majority of the Project located in the city of Laguna Niguel and the southern end of the Project located in the city of Dana Point (see Figure 2-1, Project Vicinity Map). Regional access to the Project area is provided by Interstate 5, generally running north-south to the east of the city of Laguna Niguel, State Route 73, which generally forms the city of Laguna Niguel's northern boundary, and State Route 1, which generally forms the city of Dana Point's southern boundary. The Project area is also accessible from adjacent communities via major arterial surface streets.

The city of Laguna Niguel is predominately a single-family residential community with large areas of open space. Other types of land uses, including multi-family residential, commercial, and institutional, occur within Laguna Niguel. The city of Dana Point is also predominately residential, with commercial, institutional, industrial, and mixed uses occurring within Dana Point.

### **2.1.2 Project Site**

The Project site is predominately surrounded by residential and open space uses. The Project will be located in and adjacent to Crown Valley Parkway beginning, at the southern end, from the District's Lower Salada Lift Station, located at 32332 Crown Valley Parkway in Dana Point. From there, the Project crosses into the city of Laguna Niguel at the intersection of Crown Valley Parkway and Pacific Island Drive/Camino del Avion and extends to approximately the intersection of Crown Valley Parkway with Hillhurst Drive (see Figure 2-2, Project Location Map).

## **2.2 PROJECT DESCRIPTION**

### **2.2.1 General Description**

The District serves a 37-square mile area, delivering drinking water, recycled water, and wastewater services to more than 170,000 customers in Laguna Niguel, Dana Point, Aliso Viejo, Mission Viejo, Laguna Hills, and San Juan Capistrano. Over the District's 60-year history, the District has invested in building a robust infrastructure system. The District operates a potable water distribution system which includes more than 700 miles of water mains, 30 pump stations and 20 pressure reducing stations and flow control facilities. The District's potable water supply is imported from Northern California through the California State Water Project and the Colorado River managed by the Metropolitan Water District.

The District participates in the South Orange County Wastewater Authority, a joint powers agency comprised of ten governmental agencies, which owns and operates three regional wastewater treatment plants and two ocean outfalls. The District also shares treatment capacity with Santa Margarita Water District at a fourth wastewater treatment plant, Plant 3A, which the District owns, operates, and maintains. The District's wastewater operations include 501 miles of wastewater pipelines and 19 lift stations that pump wastewater over the ridge lines to the various treatment plants for disposal or recycling.

The Project includes three components: (1) replacement of the Lower Salada Lift Station Force Main, (2) replacement of the Crown Valley Parkway Transmission Main Lower Reach, and (3) relocation of I.D. No. 1 Master Meter. These components are included in this Project because all of the facilities are located along the same area of Crown Valley Parkway and require a coordinated design and construction effort. The Project is needed to address the conditions of the sewer force main and the potable water pipeline due to age. Relocation of I.D. No. 1 Master Meter is necessary because a separate SCWD project involving the relocation of



2,500 linear feet of the existing 39-inch JTM onto Crown Valley Parkway. It will be necessary for the District to coordinate with the design firm for SCWD on both the new location of the SCWD 39-inch JTM and the outlet for the Project's relocated I.D. No. 1 Master Meter.

### **2.2.2 Lower Salada Lift Station Force Main**

1. Lower Salada Lift Station is located at 32332 Crown Valley Parkway in the city of Dana Point and is a vital sewer facility in the southern portion of the District. The lift station pumps into an existing 12-inch asbestos-cement pipe (ACP) force main that is located within Crown Valley Parkway right-of-way and easement through the El Niguel Country Club. The 12-inch force main discharges into a 15-inch gravity sewer in Crown Valley Parkway at the summit manhole located just north of the intersection of Paseo del Niguel and Crown Valley Parkway. Sewer contents then flow by gravity in a separate pipeline north to the Joint Regional Wastewater Treatment Plant, which is operated by the South Orange County Wastewater Authority. The existing force main was constructed in 1963 and is due for replacement. The District proposes to replace approximately 9,250 feet of the existing 12-inch force main pipeline with two 12-inch lines. The existing pipeline will be abandoned in place by filling with concrete or cellular grout.

The new, dual-pipe force main will be relocated within Crown Valley Parkway and will have an approximate length of 9,400 feet. Figure 2-3 shows the existing and proposed alignments of the force main.

### **2.2.3 Crown Valley Parkway Transmission Main Lower Reach**

The existing Crown Valley Parkway Transmission Main Lower Reach for potable water is a 12-inch concrete cylinder pipe extending from Camino del Avion at the south end to approximately 820 feet north of the intersection of Paseo del Niguel and Crown Valley Parkway at the north end, in the city of Laguna Niguel. The total length of the transmission main is approximately 9,650 feet. The north end of the 12-inch pipe terminates at the existing I.D. No. 1 Master Meter. After the I.D. No. 1 Master Meter is a 16-inch cement mortar lined and coated steel pipe (Upper Reach), and this larger pipeline continues north on Crown Valley Parkway. The Crown Valley Parkway Transmission Main serves the District's 450 pressure zones. The pipeline was constructed in the 1960s and is due for replacement. The District proposes to replace and abandon in place the existing 12-inch Lower Reach with a parallel 12-inch pipeline located outside the raised median island. Figure 2-3 shows the existing and proposed alignments of the Lower Reach.

### **2.2.4 I.D. No. 1 Master Meter Interconnection Replacement**

The JTM is part of the Joint Regional Water Supply System. The Joint Regional Water Supply System includes facilities with multiple owners by capacity share. SCWD is responsible for operations and maintenance of the Joint Regional Water Supply System, including the JTM. The JTM is a 39-inch cement mortar lined and coated steel pipe that supplies the District with potable water via the I.D. No. 1 Master Meter interconnection. Currently, a portion of the JTM (approximately 2,500 feet) is located within a residential housing tract east of Crown Valley Parkway, between Paseo del Niguel and Hillhurst Drive. In a separate project, SCWD is planning to relocate this portion of the JTM into the Crown Valley Parkway right-of-way. This work will be adjacent to the proposed alignments of the Lower Salada Lift Station Force Main and Crown Valley Parkway Transmission Main Lower Reach replacements (see Figure 2-3). As a result of SCWD's planned JTM relocation, the District's I.D. No. 1 Master Meter interconnection will also need to be relocated. The I.D. No. 1 Master Meter interconnection is currently located on Paseo del Valle in a residential housing tract east of Crown Valley Parkway in the city of Laguna Niguel. Coordination

with SCWD on the proposed JTM alignment and outlet for the relocated master meter is necessary.

The new master meter location was selected based on proximity to the existing JTM and the Crown Valley Parkway Transmission Main. It will be located approximately 50 feet east of Crown Valley Parkway within public right-of-way in the cul-de-sac of Paseo Del Niguel (see Figure 2-4). The new master meter facility will consist of an unmanned concrete vault (approximately 216 square feet in size) which will house a modulating valve and flow meter (see Figure 2-5). Telemetry and communication equipment will be located in aboveground cabinets outside of the vault.

### **2.2.5 Construction Details**

The majority of construction activities to replace both the force main and potable water main will use open-trench techniques within the paved sections of Crown Valley Parkway.

The depth of disturbance for trenching activities will average 6 to 7 feet. It is anticipated that construction activities for the pipeline would result in importing approximately 16,500 cubic yards of soil and exporting 18,400 cubic yards of soil, resulting in a net export of 1,900 cubic yards. Requirements for construction of I.D. No. 1 Master Meter are expected to be 160 cubic yards of imported soils and 300 cubic yards of exported soils, with a resulting net export of 140 cubic yards of soil.

Construction is anticipated to begin in the third quarter of 2022 and last approximately 18 to 24 months. Construction activities will generally be conducted on weekdays, during regular work hours. A limited amount of work may take place at night, if it is necessary to work when traffic volumes and/or when sewer flows are minimal.

Staging and stockpiling requirements for location options being considered for the Project are expected to be within permanent easements, although temporary construction easements may also be necessary, depending on which location is selected.

Transportation of equipment and material will be along Interstate Freeway 5, exiting to Crown Valley Parkway.

The construction work area along the proposed pipelines will be approximately 30 feet to 35 feet wide. The total area of disturbance expected for the pipelines is 1.4 acres. A traffic control plan will be prepared to accommodate this work area corridor along the pipeline route. The construction work area for the master meter will be approximately 0.13 acres to 0.26 acres.

For trenching activities, construction equipment is expected to include an excavator, two dump trucks, a loader, a street sweeper, a sheep's trench compactor, a jack hammer, and a pavement saw cutter.

It is estimated that trenching for the pipelines would involve about 3,770 truck trips for bedding and pipe material deliveries, and for spoil haul out. This would be for the 122-week duration of construction activities, averaging close to 14 trips per day. An additional 100 truck trips are expected for the construction of I.D. No.1 Master Meter.

Construction Best Management Practices (BMPs) will be used including those for stormwater, erosion/sediment control, and spill prevention. All staging and stockpiling will occur on-site. Waste and excess debris will be hauled away for disposal.

Equipment and material will be hauled to and from the site via Interstate Freeway 5 and Crown Valley Parkway south of the freeway.

### **2.2.6 Mitigation Measures**

The following mitigation measures have been incorporated into the scope of work for the Proposed Project and will be fully implemented by the District to avoid or minimize adverse environmental impacts identified in this Initial Study/Mitigated Negative Declaration. These mitigation measures will be included in the Mitigation Monitoring and Reporting Plan prepared for this Project (see Appendix A).

#### **Mitigation Measures:**

##### ***BIO-1: Seasonal Work Restrictions near the Laguna Niguel Open Space***

Direct and indirect impacts on nesting Coastal California gnatcatchers (CAGNs) shall be avoided and/or reduced by time restrictions placed on construction activities near the Laguna Niguel open space.

- a. Construction within 300 feet of coastal sage scrub habitat shall be conducted outside the CAGN breeding season. The breeding season of the CAGN generally extends from February 15 through July 15, with the peak of nest initiations occurring from mid-March through mid-May.
- b. If construction activities must be completed during the CAGN breeding season (February 15 through July 15), then a qualified biologist shall perform weekly surveys of the coastal sage scrub habitat to identify active nests.
- c. If active nests are found, the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) shall be contacted, and measures shall be taken to minimize impacts.
- d. If no nesting activity is observed, then work may proceed, but weekly monitoring of the area shall be required until July 15 to ensure that no new nests have been built.

##### ***BIO-2: Pre-construction Breeding Bird Surveys***

The peak breeding season for birds generally runs from February 1 through September 1, but can vary slightly from year to year, usually depending on weather conditions. Raptors are known to begin nesting early in the year and some begin as early as January 1; however, there is little potential for raptors to breed within the tall trees located along Crown Valley Parkway and there is no raptor breeding habitat within the Laguna Niguel open space. To avoid and reduce impacts on migratory, non-game breeding birds, and their nests, young, and eggs, the District shall implement the following measures prior to Project mobilization, staging, and other disturbances.

- a. Project activities that could remove or disturb potential nest sites shall be scheduled outside the peak breeding season for birds (September 2 through January 31). Removing all physical features that could potentially serve as nest sites outside of the breeding season for birds will also help to prevent birds from nesting within the Project site during the breeding season and during construction activities. No further action is necessary if Project activities occur during the non-breeding season.
- b. If Project activities that could remove or disturb potential bird nest sites occur from February 1 through September 1, a qualified biologist experienced in conducting breeding bird surveys shall conduct a pre-construction clearance and nesting bird survey within the work site(s) three days prior to the work in the area.
- c. If no active nests are observed during the pre-construction bird nesting survey, or if they are observed and will not be disturbed by Project activities, then those activities may begin, and no further action shall be required. This will be determined by the biologist.

- d. If an active nest is identified and will potentially be disturbed by Project activities, a no-activity buffer zone shall be established between the Project activities and the active nest so that nesting activities are not interrupted. The buffer should be a minimum width of 100 feet (500 feet for special-status birds or raptors). The biologist shall determine the appropriate size of the buffer zone based on the type of activities planned near the nest and type of bird species nesting. Adjustments in the nest buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors. The buffer zone shall be delineated on maps and marked with flagging or other means. No Project construction shall occur within the buffer zone until the biologist has determined that the young have fledged, are no longer being fed by the parents, or have left the nest, and will no longer be impacted by Project activities. Once the nesting cycle is complete, Project activities may begin within the buffer zone.
- e. If special-status species are observed during the pre-construction survey, the biologist shall contact appropriate resource agencies to develop additional avoidance, minimization, and/or mitigation measures, prior to commencing Project activities. Appropriate permits, if necessary, shall also be obtained.

**CUL-1: Environmental Training** – Prior to Project construction, a qualified archaeologist will provide cultural resource instruction for all on-site Project personnel. This instruction will cover the following:

- all applicable laws and penalties for disturbing cultural resources,
- discuss the prehistoric and historic regional context and archaeological sensitivity of the area,
- describe the types of cultural resources found in the area,
- instruct Project workers that they must halt construction if a cultural resource is inadvertently discovered during construction, and
- present the procedures they are to follow in the event an inadvertent discovery is made (CUL-3).

The Inadvertent Discovery Plan will describe appropriate procedures, notifications, and treatment of cultural resources, and respectful behavior after a discovery (e.g., no posting to social media or photographs). If requested by a local tribe(s), a tribal representative(s) shall be invited to participate in the environmental training to discuss or provide context from a tribal cultural perspective regarding the cultural resources within the region.

**CUL-2: Cultural Resource Monitoring Plan and Inadvertent Discovery Plan** – A qualified archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards (36 Code of Federal Regulations Part 61) will be retained for the Project to be on-call and prepare a Cultural Resource Monitoring and Inadvertent Discovery Plan (Plan) for the Project. The Plan will review applicable laws, provide a map of locations (and depth) where an archaeological monitor may be required to observe earthmoving activities within native soils. The Plan will outline monitor responsibilities and procedures for monitoring ground disturbance, monitor reporting, and the procedures for an inadvertent discovery (CUL-3). In addition, the Plan will provide specific monitoring treatment measures for Project activities within the recorded boundary of site P-30-000033 (CA-ORA-000033). The Plan shall be developed in coordination and consultation with interested tribe(s) and shall provide procedures for discovery of tribal cultural resources. A qualified archaeological monitor will be retained to conduct archaeological monitoring of construction activities as identified by the Plan. If requested by interested tribe(s), a Native American monitor will be retained, as applicable. The archaeological monitor will follow the protocol outlined in the Plan. A final report summarizing the monitoring activities and the

results of monitoring site P-30-000033 (CA-ORA-000033), including a site record (DPR-523) update, will be prepared by the Project archaeologist. The archaeological monitor will work in coordination with the Native American monitor (as applicable).

**CUL-3: Inadvertent Discovery of Archaeological Resources During Construction** – During Project-level construction, should subsurface archaeological resources be discovered, all activity within 50 feet of a “find” shall stop and the qualified on-call archaeologist shall be contacted to assess the significance of the find according to CEQA Guidelines Section 15064.5 and/or National Register of Historic Places criteria (as applicable). The archaeologist shall have the authority to halt any Project-related construction activities that could impact potentially significant resources. If any find is determined to be significant, the archaeologist shall determine, in consultation with the implementing agencies and any local Native American groups expressing interest, appropriate avoidance measures or other appropriate mitigation. Ground-disturbing activities shall not continue until the discovery has been assessed by the archaeologist. The archaeologist shall be afforded the necessary time to assess the find. With monitoring, construction activities may continue on other areas of the Project site during evaluation and treatment of historic or unique archaeological resources. Under CEQA Guidelines Section 15126.4(b)(3), preservation in place is the preferred means to avoid impacts to archaeological resources qualifying as historical resources. Methods of avoidance may include, but shall not be limited to, (i) Project re-route or re-design, (ii) Project cancellation, or (iii) identification of protection measures such as capping or fencing. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures, such as data recovery or other appropriate measures, in consultation with the implementing agency and any local Native American representatives expressing interest in prehistoric or tribal resources. If an archaeological site does not qualify as an historical resource but meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site shall be treated in accordance with the provisions of Section 21083.2.

**GEO-1: Inadvertent Discoveries of Paleontological Resources** — If construction staff or others observe previously unidentified paleontological resources during ground disturbing activities, they will halt work within a 200-foot radius of the find(s), delineate the area of the find with flagging tape or rope (may also include dirt spoils from the find area), and immediately notify a qualified paleontologist. Construction will halt within the flagged or roped-off area. The paleontologist will assess the resource as soon as possible and determine appropriate next steps in coordination with the District. Such finds will be formally recorded and evaluated. The resource will be protected from further disturbance or looting pending evaluation.

**NOISE-1:** Construction noise levels will fluctuate depending on the construction phase, equipment type and duration of use, distance between noise source and sensitive receptor, and the presence or absence of barriers between noise source and receptors. Standard construction activities shall be limited as follows:

- Equipment and trucks used for Project construction shall utilize the best available noise control techniques (e.g., equipped with manufacturer-rated high attenuation mufflers, specification of low noise equipment, use of air intake silencers, ducts, engine enclosures and acoustically attenuating buildings, as needed, to meet regulatory criteria).
- Stationary noise sources shall be located as far from adjacent receptors as possible and shall be muffled and enclosed, incorporate insulation barriers or other measures to the extent feasible.
- Any impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for Project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where



use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 A-weighted decibels (dBA). External jackets on the tools themselves shall be used where feasible as this could achieve a reduction of 5 dBA. Quieter procedures shall be used such as drilling rather than impact equipment whenever feasible.

- No specialized construction techniques that could generate high noise levels (i.e., greater than 90 dBA) will take place on weekends or federal holidays.

## **2.3 OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED**

Other public agencies whose approval is expected to be required in the form of permits, financing approval, or participation agreements are as follows:

- Santa Ana Regional Water Quality Control Board – Storm Water Pollution Prevention Plan for construction activities and development discharge,
- City of Dana Point, Department of Public Works & Engineering – Encroachment Permit, and
- City of Laguna Niguel, Department of Public Works – Encroachment Permit.

## **2.4 TRIBAL CULTURAL RESOURCES CONSULTATION**

In conformance with Assembly Bill 52 Tribal Consultation Requirements, the District notified the Native American Tribes/Tribal representatives that are traditionally and culturally affiliated with the Project area. The District sent Project notification to the following Tribes on April 22, 2021:

- The Campo Band of Diegueno Mission Indians
- Ewiiapaayp Band of Kumeyaay Indians
- Juaneño Band of Mission Indians
- La Posta Band of Diegueno Mission Indians
- La Jolla Band of Luiseño Indians
- Manzanita Band of Kumeyaay Nation
- Mesa Grand Band of Diegueno Mission Indians
- Pala Band of Mission Indians
- Pauma Band of Luiseño Indians
- San Luis Rey Band of Mission Indians
- Santa Rosa Band of Cahuilla Indians
- Soboba Band of Luiseño Indians
- Sycuan Band of the Kumeyaay Nation

One Native American Tribe, the Juaneño Band of Mission Indians, Acjachemen Nation-Belardes, requested consultation on this Project. The consultation between the District and the Juaneño Band of Mission Indians, Acjachemen Nation-Belardes is ongoing.

Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process (see Public Resources Code [PRC] Section 21083.3.2). Information may also be available from the California Native American Heritage

Commission's (NAHC) Sacred Lands File per PRC Section 5097.94 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality.

### 3.0 ENVIRONMENTAL CHECKLIST

#### 3.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked would be potentially affected by this Project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Aesthetics                | <input type="checkbox"/> Agriculture & Forestry Resources | <input type="checkbox"/> Air Quality                        |
| <input type="checkbox"/> Biological Resources      | <input type="checkbox"/> Cultural Resources               | <input type="checkbox"/> Energy                             |
| <input type="checkbox"/> Geology/Soils             | <input type="checkbox"/> Greenhouse Gas Emissions         | <input type="checkbox"/> Hazards & Hazardous Materials      |
| <input type="checkbox"/> Hydrology/Water Quality   | <input type="checkbox"/> Land Use/Planning                | <input type="checkbox"/> Mineral Resources                  |
| <input type="checkbox"/> Noise                     | <input type="checkbox"/> Population/Housing               | <input type="checkbox"/> Public Services                    |
| <input type="checkbox"/> Recreation                | <input type="checkbox"/> Transportation                   | <input type="checkbox"/> Tribal Cultural Resources          |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire                         | <input type="checkbox"/> Mandatory Findings of Significance |

#### 3.2 DETERMINATION: (TO BE COMPLETED BY THE LEAD AGENCY)

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 (EIR) 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

Date

RODNEY S. WOODS  
Print Name



### 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 if it is based on project-specific factors as well as general standards (e.g., the project would 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 off-site as well as on site, 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, 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 incorporated” applies when the incorporation of mitigation measures has reduced an effect from a “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.
- (5) Earlier analyses may be used if, pursuant to 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 earlier analyses 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 incorporated,” 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, when 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 a less than significant level.

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### 3.4 ENVIRONMENTAL IMPACT ANALYSIS

#### 3.4.1 AESTHETICS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:					
a.	Have a substantial adverse effect on a scenic vista?				X
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within along a state scenic highway?				X
c.	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d.	Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?				X

#### Existing Conditions:

The Project site is located in an urban setting characterized by views of residential, open space, and municipal uses.

Crown Valley Parkway is a Dana Point Landscape Corridor and is identified as a City Entrance Feature at the intersection of Crown Valley Parkway and Pacific Island Drive/Camino Del Avion (City of Dana Point 1991a). None of the scenic corridors identified in the city of Dana Point's General Plan Conservation/Open Space Element are near or within the viewshed of the Project site (City of Dana Point 1995a).

Crown Valley Parkway is designated as a Landscape Corridor in the city of Laguna Niguel's General Plan Open Space/Parks/Conservation Element (City of Laguna Niguel 1992a).

The Project pipelines replacement will be located in Crown Valley Parkway and the District's Lower Salada Lift Station, see Figures 2-2 and 2-3. The Master Meter will be located within the public right-of-way in the cul-de-sac of Paseo Del Niguel, approximately 50 feet east of Crown Valley Parkway (see Figure 2-4). Views of the site are limited to the surrounding residential, open space, recreational, and municipal uses, as well as to adjacent roadways.

According to the Caltrans Map of Designated Scenic Routes (Caltrans 2018), there are no official state-designated routes in the Project vicinity. State Route 1, an eligible state scenic highway, is located approximately 0.6 miles to the southwest. The Project site is not visible from State Route 1 due to distance and intervening structures and topography.

**Discussion:**

**a. Would the project have a substantial adverse effect on a scenic vista?**

**No Impact.** Direct views of the Project site are from surrounding residential, open space, recreational, municipal uses, and adjacent roadways. The proposed Project pipelines replacements will be constructed underground within Crown Valley Parkway. The master meter will be constructed in underground vaults either within Crown Valley Parkway public right-of-way, or within Hillhurst Drive. Telemetry and communication equipment will be located in aboveground cabinets outside of the vault. Due to the location of the Project components, implementation of the proposed Project would not block any scenic vistas and no impact would occur.

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

**b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

**No Impact.** The Project site is not in the viewshed of any designated or eligible state scenic highway. No impact to a scenic highway will occur.

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

**c. Would the project in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?**

**Less Than Significant Impact.** The Project is located in an urbanized area. The general plan land use designations adjacent to the Project site in Dana Point are RES 3.5-7 (Residential 3.5-7 DU/AC), RES 14-22 (Residential 14-22 DU/AC), and P/A (Prof./Admin.) and are zoned Residential Single Family 4 DU/AC (RSF 4), Residential Single Family 7 DU/AC (RSF 7), Residential Multiple Family 22 DU/AC (RMF 22), and Professional / Administration (P/A).

The general plan land use designations adjacent to the Project site in Laguna Niguel are Residential Detached, Open Space, Residential Attached, Parks and Recreation, Public/Institution, Community Commercial, Professional Office; Public/Institution and are zoned Open Space District (OS), Park & Recreation District (PR), Single Family District 3 (RS-3), Multi-Family District (RM), Public/Institutional District (PI), Community Commercial (CC).

The proposed Project involves improvements to existing utility facilities and will not introduce elements that conflict with applicable zoning or other regulations governing scenic quality.

The proposed Project would involve both temporary and permanent changes to the visual character of the site. Temporary changes are associated with construction activities, including construction equipment, staging, and site construction. Temporary Project impacts on ornamental/landscaping vegetation is anticipated. The total area of disturbance for landscape/vegetation is about 3,800 square feet along Crown Valley Parkway. These areas involve the roadway median and master meter locations. Following Project activities, the temporary impacted areas would be restored to pre-construction conditions. These visual impacts would be short-term in nature and are not considered to be significant.

Implementation of the proposed Project would result in minor long-term/permanent changes to the visual character of the site through the addition of the aboveground cabinets for the telemetry and communication equipment and air valves. The majority of the proposed Project will be underground and post-construction, not visible.

The proposed Project would result in minor changes to the existing visual character of the site, it would not result in the permanent removal or degradation of any significant visual resources and would be consistent in character to the surrounding area. For this reason, impacts are considered to be less than significant.

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

**d. Would the project create a new source of substantial light or glare would adversely affect day or nighttime views in the area?**

**No Impact.** There are two primary sources of light: light emanating from building interiors that pass through windows, and light from exterior sources (e.g., street lighting, parking lot lighting, building illumination, security lighting, and landscape lighting). Light introduction can be a nuisance to adjacent users and diminish the view of the clear night sky. Currently, light and glare in the Project vicinity is produced by vehicle headlights, street lighting, and lighting from the adjacent buildings.

The Project would not include any lighting. The aboveground cabinets for the telemetry and communication equipment would not include shiny finishes, the Project is not expected to create any daytime glare. Therefore, no impacts are expected from the standpoint of light and glare.

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

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### 3.4.2 AGRICULTURE AND FOREST RESOURCES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 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 maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b.	Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?				X
c.	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220(g)) or timberland (as defined in PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d.	Result in the loss of forest land or conversion of forest land to non-forest use?				X
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?				X

#### Existing Conditions:

On the Farmland Mapping and Monitoring Program Map for California (California Department of Conservation 2021), the Project site and the surrounding area is designated as Urban and Built-



Up Land, which is generally described as land occupied by structures that has a variety of uses including residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

**Discussion:**

- a. **Would the project 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.** According to the Farmland Mapping and Monitoring Program Map for California, the Project site is an area designated as Urban and Built-Up Land. No Prime or Unique Farmland, or Farmland of Statewide importance exists within the Project site or vicinity; therefore, no impact would occur.

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

- b. **Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?**

**No Impact.** There are no agricultural zoning designations or agricultural uses within the Project site or adjacent areas (City of Dana Point 1995b; City of Laguna Niguel 2011). The Project would not convert farmland or conflict with any land zoned for agriculture. No Williamson Act contracts apply to the Project site. Therefore, no impact would occur.

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

- c. **Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220(g)) or timberland (as defined in PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**

**No Impact.** The Project site is surrounded by land zoned for residential, open space, recreation, commercial, and institutional uses. There are no forest land or timberland resource designations or forest land or timberland resource uses within the Project limits or adjacent areas. Therefore, no impact would occur.

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

- d. **Would the project result in the loss of forest land or conversion of forest land to non-forest use?**

**No Impact.** There is no forest land in the vicinity of the Project site. Therefore, the proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur.

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

- e. **Would the project 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.** There is no farmland or forest land located within or near the Project site. Therefore, the Project would not involve any changes that could result in the loss or conversion of farmland or forest land to other uses. No impact would occur.

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

### 3.4.3 AIR QUALITY

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district 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?				X
b.	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?			X	
c.	Expose sensitive receptors to substantial pollutant concentrations?			X	
d.	Result in other emissions (such as those leading to odors) affecting a substantial number of people?			X	

#### Existing Conditions:

The Project site is located within the South Coast Air Basin (SoCAB or “Basin”), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The Basin is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east. The Basin includes all of Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside counties.

The California Air Resources Board tracks attainment of air quality standards (established by both U.S. Environmental Protection Agency and SCAQMD) for basins throughout the state. The SoCAB has been designated as a non-attainment area for ozone (O<sub>3</sub>), fine particulate matter (PM<sub>2.5</sub>), and inhalable particulate matter (PM<sub>10</sub>) as it does not meet California Ambient Air Quality Standards for certain pollutants regulated under the Federal Clean Air Act. Conditions within the SoCAB also fail to meet National Ambient Air Quality Standards for O<sub>3</sub> and PM<sub>2.5</sub> and therefore the SoCAB is considered to be a federal non-attainment area for these pollutants. Table 3-1 lists criteria air pollutants and their current attainment status in the SoCAB.

**Table 3-1. Criteria Pollutants Attainment Status in the South Coast Air Basin**

Air Pollutants	State	Federal
O <sub>3</sub> (1-hour)	Nonattainment	Extreme Nonattainment
O <sub>3</sub> (8-hour)	Nonattainment	Extreme Nonattainment
PM <sub>2.5</sub>	Nonattainment	Serious Nonattainment
PM <sub>10</sub>	Nonattainment	Attainment/Maintenance
NO <sub>2</sub>	Attainment	Attainment/Maintenance
CO	Attainment	Attainment/Maintenance
SO <sub>2</sub>	Attainment	Attainment
Lead	Not applicable	Attainment

Air Pollutants	State	Federal
Sulfates	Attainment	Not applicable
Hydrogen Sulfide	Attainment	Not applicable
Vinyl Chloride	Attainment	Not applicable
CO – carbon monoxide; NO <sub>2</sub> – nitrogen dioxide; O <sub>3</sub> – ozone; PM <sub>10</sub> – inhalable particulate matter; PM <sub>2.5</sub> – fine particulate matter; SO <sub>2</sub> – sulfur dioxide. Source: SCAQMD 2018.		

Table 3-2 lists criteria air pollutant *de minimis* levels based on federal attainment status. The *de minimis* level establishes a threshold value for pollutant loading (an amount that should not be exceeded by the annual emissions from a project). Projects can demonstrate conformity with *de minimis* levels by evaluating the expected output of these pollutants during (a) project implementation (i.e., construction), and (b) operation of the “facility” after construction; and (c) showing these threshold values will not be exceeded annually during or after construction.

**Table 3-2. Federal Attainment Status/*De Minimis* Emissions Thresholds**

Pollutant	Area Type	Tons/Year
O <sub>3</sub> (VOC or NO <sub>x</sub> )	Serious nonattainment	50
	Severe nonattainment	25
	Extreme nonattainment	10
	Other areas outside an ozone transport region	100
O <sub>3</sub> (NO <sub>x</sub> )	Marginal and moderate nonattainment inside an ozone transport region	100
	Maintenance	100
O <sub>3</sub> (VOC)	Marginal and moderate nonattainment inside an ozone transport region	50
	Maintenance within an ozone transport region	50
	Maintenance outside an ozone transport region	100
CO, SO <sub>2</sub> and NO <sub>2</sub>	All nonattainment & maintenance	100
PM <sub>10</sub> and PM <sub>2.5</sub>	Serious nonattainment	70
	Moderate nonattainment and maintenance	100
Lead	All nonattainment & maintenance	25
CO – carbon monoxide; NO <sub>2</sub> – nitrogen dioxide; NO <sub>x</sub> – nitrogen oxide; O <sub>3</sub> – ozone; PM <sub>10</sub> – inhalable particulate matter; PM <sub>2.5</sub> – fine particulate matter; SO <sub>2</sub> – sulfur dioxide; VOC – volatile organic compounds. Source: US EPA 2019.		

#### Discussion:

**a. Would the project conflict with or obstruct implementation of the applicable air quality plans?**

**No impact.** The applicable plans considered here are (1) the Air Quality Management Plan (AQMP) prepared by the SCAQMD, and (2) the Regional Comprehensive Plan and Guide (RCPG) prepared by the Southern California Association of Governments (SCAG). The former directly affects air quality through specific management strategies for pollutant emissions, while the latter indirectly affects air quality by providing recommendations for the management of land development and transportation.

The Federal Clean Air Act requires the SCAQMD to reduce emissions of certain pollutants for which the Basin is in non-attainment (i.e., ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>). The Project would be subject to the SCAQMD's AQMP. The AQMP contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving ambient air quality standards. These strategies are developed, in part, based on regional population, housing, and employment projections prepared by SCAG.

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial counties and serves as a forum for regional issues relating to transportation, the economy, community development and the environment. SCAG serves as the federally designated metropolitan planning organization for the southern California region. With regard to air quality planning, the RCPG includes Growth Management and Regional Mobility chapters that form the basis for the land use and transportation control portions of the AQMP. RCPG projections are used in the preparation of air quality forecasts and consistency analysis included in the AQMP. Both the RCPG and AQMP strategies incorporate projections from local planning documents.

The Project will be consistent with the AQMP, which is primarily concerned with long-term influence on air quality in the Basin. Neither the implementation of the Project nor its operation would result in long-term regional impacts. The Project would comply with SCAQMD Rule 403 and would implement all feasible mitigation measures to control PM<sub>10</sub> and PM<sub>2.5</sub>; and the Project would be consistent with the goals and policies of the AQMP for control of fugitive dust. In addition, because the proposed Project would not result in a change in the number of dwelling units, the number of occupants in the area, or the level of activities in the area (and, therefore, will not alter RCPG projections), it is not in conflict with the AQMP restrictions relative to land use and transportation. The Project's long-term influence would also be consistent with the goals and policies of both the AQMP and the RCPG and is, therefore, considered consistent with the SCAQMD's and SCAG's plans and no impact would occur.

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

**b. Would the project 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?**

**Less Than Significant Impact.** The Project site is located in a region that is in non-attainment for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The California Emissions Estimator Model® (CalEEMod) was used to estimate the construction and operational emissions from the Project, in detail, and the results are presented in Appendix B. The model output for both construction and operational emissions for the proposed Project are summarized in Table 3-3. The model output used conservative assumptions which imply a conservative equipment and vehicle mix and a worst-case construction schedule (provided in Appendix B). Construction emissions include operation of on-site construction equipment, fugitive dust from site disturbance activities, and vehicle travel by construction workers, deliveries, and hauling during construction. Once construction is complete, there would be no permanent impact to vehicle traffic, water use, waste, energy use, or any activities resulting in air emissions. Therefore, operational emissions were considered negligible.

The incremental increase in regional emissions from Project activities would fall below SCAQMD significance thresholds. The Project will not result in the violation of air quality standards or contribute substantially to an existing or projected air quality violation. A less than significant construction impact is anticipated.

The additional emissions associated with the Project would not be considerable because they fall below SCAQMD thresholds. As a result, the Project would not make a cumulatively

considerable contribution during construction and operation. Therefore, impacts would be less than significant.

**Table 3-3. Regional Significance Analysis<sup>a</sup>**

	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub> <sup>b</sup>	PM <sub>2.5</sub>
<b>Maximum Daily Regional Emissions (lbs/day)</b>						
<b>Construction</b>						
On-site and Off-site Emissions	3.0	28.1	24.6	0.1	2.5	1.3
<b>SCAQMD Regional Significance Threshold (lbs/day)</b>	<b>75</b>	<b>100</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
<i>Exceeds Regional Significance Threshold?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
<b>Operation</b>						
Area, Energy, and Mobile	0	0	0	0	0	0
<b>SCAQMD Regional Significance Threshold (lbs/day)</b>	<b>55</b>	<b>55</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
<i>Exceeds Regional Significance Threshold?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
CO – carbon monoxide; lbs/day – pounds per day; NO <sub>x</sub> – nitrogen oxide; PM <sub>10</sub> – inhalable particulate matter; PM <sub>2.5</sub> – fine particulate matter; ROG – reactive organic gas; SO <sub>x</sub> – sulfur oxide; VOC – volatile organic compounds. a. Compiled using the CalEEMod emissions inventory model, provided in Appendix B. b. PM <sub>10</sub> emissions estimates are based on compliance with SCAQMD Rule 403 requirements for fugitive dust suppression.						

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

**c. Would the project expose sensitive receptors to substantial pollutant concentrations?**

**Less Than Significant Impact.** The Project involves replacement of water and sewer pipelines and a meter station in or near public rights-of-way, where nearby sensitive receptors could potentially be affected. Local emissions are those that occur within the immediate vicinity of the Project, i.e., they do not include those from commuter and haul truck travel on freeways, or greenhouse gases (GHGs) associated with the off-site generation of electricity used by the Project. In addition to the regional significance thresholds shown in the preceding section, SCAQMD has localized significance thresholds for nitrogen oxide, PM<sub>10</sub>, PM<sub>2.5</sub>, and carbon monoxide that are a function of Project acreage and distance from receptors. The localized significance thresholds for this Project were determined based on SCAQMD localized significance thresholds look-up tables for Source Receptor Area 21 Capistrano Valley and a minimum receptor-source distance of 25 meters (82 feet). As shown in Table 3-4 below, construction and operation of the Project would not result in emissions of criteria pollutants in excess of established thresholds.

SCAQMD also identifies significance thresholds for toxic air contaminants that are based on localized impacts. These include a maximum incremental lifetime cancer risk of 10 in a million or more, a cancer burden (i.e., estimated potential increase in cancer diagnoses) of 0.5 or more, and a chronic and acute hazard index (i.e., ratio of concentrations to reference exposure levels) of one or more. The primary toxic air contaminant emitted from construction activities is diesel particulate matter; however, because emissions of toxic air contaminants from diesel-powered construction equipment are expected to be minimal, intermittent, and of short duration, the Project is not expected to substantially increase ambient concentrations of toxic air contaminants regionally or locally. Therefore, the Project would not expose sensitive receptors to substantial pollutant concentrations. As such, localized impacts to off-site sensitive receptors would be less than significant.

**Table 3-4. Localized Significance Analysis<sup>a</sup>**

	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub> <sup>b</sup>	PM <sub>2.5</sub> <sup>b</sup>
<b>Maximum Daily Localized Emissions (lbs/day)</b>						
<b>Construction</b>						
On-site Emissions	2.7	21.6	22.5	0.1	0.9	0.9
<b>SCAQMD Localized Significance Threshold (lbs/day)</b>	<b>NA</b>	<b>91</b>	<b>696</b>	<b>NA</b>	<b>4</b>	<b>3</b>
<i>Exceeds Localized Significance Threshold?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
<b>Operation</b>						
Area, Energy, and Mobile	0	0	0	0	0	0
<b>SCAQMD Localized Significance Threshold (lbs/day)</b>	<b>NA</b>	<b>91</b>	<b>696</b>	<b>NA</b>	<b>1</b>	<b>1</b>
<i>Exceeds Regional Significance Threshold?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
CO – carbon monoxide; lbs/day – pounds per day; NO <sub>x</sub> – nitrogen oxide; PM <sub>10</sub> – inhalable particulate matter; PM <sub>2.5</sub> – fine particulate matter; ROG – reactive organic gas; SO <sub>x</sub> – sulfur oxide; VOC – volatile organic compounds. a. Compiled using the CalEEMod emissions inventory model, provided in Appendix B. b. PM <sub>10</sub> and PM <sub>2.5</sub> emissions estimates are based on compliance with SCAQMD Rule 403 requirements for fugitive dust suppression.						

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

**d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

**Less Than Significant Impact.** During Project-related construction activities, various diesel-powered vehicles and equipment could create minor odors. These odors are not likely to be noticeable beyond the immediate vicinity and would be temporary and short-lived due to rapid dissipation. Construction odor impacts would be less than significant. No long-term odor impacts would occur with Project implementation.

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

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### 3.4.4 BIOLOGICAL RESOURCES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?		X		
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?			X	
c.	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
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?				X
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
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?				X

#### Existing Conditions:

##### Literature Review

A Tetra Tech biologist researched readily available information, including relevant literature, databases, agency web sites, various previously completed reports and management plans, Geographic Information System data, maps, aerial imagery from public domain sources, and in-house records to:

- 1) assess habitats, special-status plant and wildlife species, jurisdictional waters, critical habitats, and wildlife corridors that may occur in and near the project site, and
- 2) identify local or regional plans, policies, and regulations that may apply to the project.



The following data sources were accessed during the literature review.

- **California Department of Fish and Wildlife**
  - California Natural Diversity Database (CDFW 2021c).
  - Biogeographic Information and Observation System (CDFW 2021a, 2021b).
- **U.S. Fish and Wildlife Service**
  - Information, Planning and Conservation (USFWS 2021b).
  - National Wetlands Inventory and Wetlands Mapper (USFWS 2021c).
  - Critical Habitat Portal (USFWS 2021a).
- **California Native Plant Society**
  - Inventory of Rare and Endangered Plants of California (CNPS 2021).
- **Other**
  - City of Dana Point General Plan (1995a) and municipal codes.
  - City of Laguna Niguel General Plan (1992a) and municipal codes.
  - The Natural Community Conservation Plan/Habitat Conservation Plan for the Central/Coastal Subregion of Orange County (Central/Coastal Orange County NCCP/HCP) (R.J. Meade Consulting, Inc. 1996a, 1996b) and accompanied documents (County of Orange 1996).

#### Field Survey

A qualified biologist conducted a reconnaissance-level biological survey of the Project site on April 22, 2021 from 7:45 a.m. to 9:30 a.m. The survey included a site assessment, plant community and land cover mapping, general plant survey, general wildlife survey, and general wildlife movement assessment. The pedestrian survey was conducted during the daylight hours and covered all accessible areas of the Project site. The biologist used binoculars from strategic vantage points whenever direct access was not possible. The biologist characterized the existing habitat and evaluated the presence of sensitive plant communities, special-status plants and wildlife, jurisdictional areas, and potential wildlife movement corridors.

#### Existing Conditions

The Project site is entirely developed and no longer contains natural plant communities, native soils, or undeveloped natural open land capable of supporting natural vegetation or habitats. The section of Crown Valley Parkway containing the Project site is located in a developed urban portion of Laguna Niguel and Dana Point and is mostly surrounded by the following: residential development, Crown Pacific Professional Center, El Niguel Country Club and Golf Course, El Niguel Racquet Club, Laguna Niguel Library, Laguna Niguel City Hall, and Crown Valley Mall.

One land cover type was determined to be present within the Project site: developed lands and ornamental landscaping. Developed lands include areas occupied by man-made structures, paved surfaces (like asphalt streets, i.e., Crown Valley Parkway), and other impermeable surfaces, such as sidewalks, driveways, and medians. Landscaping associated with the developed lands are also included within this category. Landscaping is located along Crown Valley Parkway and Hillhurst Drive, and consists of non-native horticulture trees, shrubs, flowers, turf, and ground cover planted for landscaping and aesthetic purposes. A few native California sycamores (*Platanus racemosa*) are located along Crown Valley Parkway. The developed areas provide virtually no habitat for wildlife species; however, common bird species adapted to urban areas could use the trees and shrubs for roosting, shelter, foraging, and

nesting. Developed lands and ornamental landscaping are not considered a sensitive plant community.

About 500 feet of native vegetation (coastal sage scrub) exists at the Crown Valley Parkway and Camino del Avion/Pacific Island Drive intersection within the city of Laguna Niguel (Figures 3-1 through 3-5). This natural habitat area is zoned by the City of Laguna Niguel as “Open Space” and is referred to as the “Laguna Niguel open space” in this report. The coastal sage scrub plant community within the Laguna Niguel open space, is dominated by California sagebrush (*Artemisia californica*) and lemonade berry (*Rhus integrifolia*). The site is steep and vegetative cover is dense with little open ground. Table 3-5 lists the plant species observed within the Laguna Niguel open space during the field survey.<sup>1</sup>

**Table 3-5. Plant Species Observed during the Field Surveys**

Scientific Name	Common Name (=Synonym)
<i>Malosma laurina</i>	laurel sumac
<i>Rhus integrifolia</i>	lemonade berry
<i>Foeniculum vulgare</i>	sweet fennel (=anise)
<i>Artemisia californica</i>	California sagebrush
<i>Baccharis pilularis</i>	coyote bush
<i>Centaurea melitensis</i>	totalote (=Malta star thistle)
<i>Cynara cardunculus</i>	artichoke thistle (=cardoon)
<i>Encelia californica</i>	bush sunflower (=California encelia)
<i>Isocoma menziesii</i> var. <i>vernonioides</i>	coastal goldenbush
<i>Pseudognaphalium californicum</i>	California everlasting (=green everlasting, =ladies tobacco)
<i>Stephanomeria virgata</i>	virgate wreath-plant (=twiggy wreath-plant, =wand chicory)
<i>Brassica nigra</i>	black mustard
<i>Acacia pycnantha</i>	golden wattle
<i>Acmispon glaber</i>	deerweed (=California broom)
<i>Melilotus albus</i>	white sweet clover
<i>Marrubium vulgare</i>	horehound
<i>Salvia mellifera</i>	black sage
<i>Mimulus aurantiacus</i>	bush monkeyflower (=sticky monkeyflower)
<i>Eriogonum fasciculatum</i>	California buckwheat
<i>Nicotiana glauca</i>	tree tobacco
<i>Solanum xanti</i>	purple nightshade (=chaparral nightshade)
<i>Elymus condensatus</i>	giant wild rye
<i>Pennisetum setaceum</i>	fountain grass (=African fountain grass)

*Preliminary Descriptions of the Terrestrial Communities of California* (Holland 1986) classifies this species assemblage as Diegan coastal sage scrub (Holland Element Code 32500). *A Manual of California Vegetation, Second Edition* (Sawyer et al. 2009) classifies this species assemblage among their *Rhus integrifolia* Shrubland Alliance (lemonade berry scrub) and their

<sup>1</sup> The biologist did not walk within the Laguna Niguel open space because it was fenced; therefore, binoculars were used to identify species.

*Rhus integrifolia* - *Artemisia californica* Association (CaCode 37.803.06) which is listed as sensitive within CDFW's *California Sensitive Natural Communities* list (CDFW 2020).

Holland (1986) describes Diegan coastal sage scrub as low, soft-woody subshrubs (to 1 meter high) that are most active in winter and early spring. Many of the species found in this plant community are facultatively drought-deciduous. This community is usually dominated by California sagebrush and California buckwheat (*Eriogonum fasciculatum*) together with other shrubs. This plant community is typically found on low-moisture availability sites: steep, xeric slopes or clay-rich soils that are slow to release stored water. It intergrades at higher elevations with chaparrals or in drier more inland areas with Riversidean sage scrub.

#### Special-Status Plants and Wildlife

No listed or sensitive plants or wildlife were observed or detected within or adjacent to the Project site during the field survey.<sup>2</sup> Given the developed nature of Crown Valley Parkway and adjacent parcels, the Project site lacks suitable habitats, soils, features, and/or other factors needed to support any special-status species; however, special-status plants and wildlife could potentially occur within the Laguna Niguel open space.

#### Breeding Birds

The Project footprint is developed; however, the land along Crown Valley Parkway supports large trees, shrubs, ground cover, open ground, and other physical features that could potentially provide cover, foraging, and nesting habitat for resident and migratory birds that have adapted to urban areas. Those birds that could potentially breed adjacent to the Project footprint are protected by the Migratory Bird Treaty Act and the California Fish and Game Code (sections 3503, 3503.5, 3513, and 3800), which render it unlawful to take native breeding birds, and their nests, eggs, and young.

#### Sensitive Plant Communities

The California Natural Diversity Database identified three sensitive plant communities/habitats having the potential to occur within the Project site: southern coast live oak riparian forest; southern cottonwood willow riparian forest; and southern sycamore alder riparian woodland. These CDFW sensitive plant communities were not observed within or adjacent to the Project site.

The coastal sage scrub habitat that exists within city of Laguna Niguel open space located adjacent to the Project site at the Crown Valley Parkway and Camino del Avion/Pacific Island Drive intersection (Figure 3-6) has been designated by NatureServe as a vulnerable (G3 and S3) natural community and is considered sensitive by CDFW.

#### Riparian Habitats

Riparian habitats are characterized by vegetated areas on, relating to, or near the banks of a freshwater watercourse such as a river, stream, creek, spring, seep, pond, or lake. No riparian habitats occur within or adjacent to the Project site.

#### Critical Habitats

When a species is listed as federally endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. The Project site is not located within a USFWS designated or proposed critical habitat for listed plant or wildlife species; however, the Project site is located adjacent to designated critical habitat (*Unit 7: Central-Coastal NCCP Subregions of Orange County*) for CAGN within the Laguna Niguel open space located at the Crown Valley Parkway and Camino del Avion/Pacific Island Drive intersection (Figure 3-7). This CAGN critical habitat polygon occurs west of the Project site from Club House

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<sup>2</sup> The biologist did not walk within the Laguna Niguel open space because it was fenced and is not part of the Project site.

Drive south to just below the Crown Valley Parkway and Camino del Avion/Pacific Island Drive intersection. Another polygon exists east of the Project site within the Salt Creek Regional Park.

#### *Aquatic Features and Jurisdictional Areas*

The Project site (Crown Valley Parkway) is entirely developed and does not support natural or man-made aquatic features or water bodies. The Project site does not contain federal or state wetlands, waters, or habitats that are potentially subject to the jurisdictional authority of the United States Army Corps of Engineers, the Regional Water Quality Control Board, CDFW, or the California Coastal Commission. No jurisdictional areas (wetland, marsh, coastal, etc.) occur within or adjacent to the Project site.

#### *National Wetlands Inventory Wetlands*

No National Wetlands Inventory wetlands occur within or adjacent to the Project site.

#### *Vernal Pools*

No vernal pools, vernal pool soil conditions, or associated vernal pool vegetation exists within or adjacent to the Project site.

#### *Undesignated Terrestrial Wildlife Corridors*

The Project site is completely developed and does not contain or function as a wildlife movement corridor.

#### *California Department of Fish and Wildlife Designated Wildlife Corridors*

Per the Biogeographic Information and Observation System Habitat Connectivity Viewer, the Project site is not located within or near a CDFW designated Essential Connectivity Area; however, the Project site is located approximately 0.5 mile east and south of the Aliso Creek Natural Landscape Block.

#### *City of Dana Point Designated Wildlife Corridors*

The city of Dana Point General Plan does not describe or display City designated wildlife movement corridors or linkages.

#### *City of Laguna Niguel Designated Wildlife Corridors*

The city of Laguna Niguel General Plan does not describe or display City designated wildlife movement corridors or linkages; however, the general plan discusses prominent City landforms that could be used by wildlife for movement. Aliso Creek Corridor is a 19-mile greenbelt linking the Cleveland National Forest to the Pacific Ocean and it is considered a valuable open space resource. The Salt Creek Corridor is a large open space corridor that extends from Laguna Niguel to the Pacific Ocean. These corridors are located within the vicinity of the Project, but not within or adjacent to Project site.

#### *Fish*

No suitable aquatic habitats that could support fish occur within or adjacent to the Project site.

#### *Nursery Sites*

No rookeries or other types of native wildlife nursery sites occur within or adjacent to the Project site.

#### **Discussion:**

- a. **Would the project 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 the U.S. Fish and Wildlife Service?**

### **Less than Significant Impact with Mitigation Incorporated.**

Direct, temporary Project impacts on ornamental/landscaping vegetation is anticipated. The total area of disturbance for landscape/vegetation is about 3,800 square feet along Crown Valley Parkway. This area involves the medians with landscape that the Project has to cross to get to the other side of the street and for the master meter vault. Following Project activities, the temporarily impacted areas would be restored to pre-construction conditions. These impacts would be considered less than significant.

The Laguna Niguel open space is not located within the Project footprint and would not be directly impacted by the Project; however, it is adjacent to the Project footprint and work areas making it possible for indirect impacts to occur on this land. Special-status plants could potentially be impacted by the Project should they occur within the Laguna Niguel open space; however, any impacts would likely be minor because the potential indirect impact area is small and restricted in nature. In addition, Project work crews will use industry accepted and standard construction BMPs to avoid, eliminate, and reduce potential construction-related impacts on biological resources. For these reasons, impacts on the Laguna Niguel open space and any potential special-status plants that may exist within would be considered less than significant.

Special-status wildlife, including the CAGN (*Polioptila californica californica*) could potentially be impacted by the Project should they occur within the Laguna Niguel open space during construction activities. CAGN is a non-migratory, permanent resident of coastal sage scrub habitat and is known to occur within the Project vicinity. This bird is listed by the federal Endangered Species Act as a federal threatened species and is designated by CDFW as a species of special concern. CAGN has a high potential to occur within the coastal sage scrub habitat located in the Laguna Niguel open space during Project construction; however, any impacts would likely be minor because the potential indirect impact area is small and restricted in nature relative to the remaining coastal sage scrub within the Laguna Niguel open space and CAGN and other special-status wildlife would be expected to move to adjacent areas of similar habitat at the onset of Project activities. The coastal sage scrub habitat will not be directly impacted by the Project and any impacts on wildlife would be considered less than significant. However, in addition to BMPs, the District will implement mitigation measure **BIO-1** to help further avoid, eliminate, and/or reduce impacts on the CAGN.

The Project footprint and surrounding lands supports habitats and physical features that could potentially provide nesting habitats for resident and migratory birds, including CAGN; therefore, the Project has the potential to result in direct impacts on breeding birds, if Project construction occurs during the breeding bird season and birds are nesting within the Project site and/or immediate vicinity at that time. Temporary direct impacts on breeding birds could occur from increased noise, vibration, and dust during construction, which could adversely affect the breeding behavior of some birds, and lead to the loss (take) of eggs and chicks, or nest abandonment. Loss of active bird nests as a result of construction or other site preparation activities would be a potentially significant impact. The District will implement mitigation measure **BIO-2** to avoid, eliminate, and reduce impacts on breeding birds to less than significant levels.

### **Mitigation Measures:**

#### ***BIO-1: Seasonal Work Restrictions near the Laguna Niguel Open Space***

Direct and indirect impacts on nesting CAGNs shall be avoided and/or reduced by time restrictions placed on construction activities near the Laguna Niguel open space.

- a. Construction within 300 feet of coastal sage scrub habitat shall be conducted outside the CAGN breeding season. The breeding season of the CAGN generally extends from



February 15 through July 15, with the peak of nest initiations occurring from mid-March through mid-May.

- b. If construction activities must be completed during the CAGN breeding season (February 15 through July 15), then a qualified biologist shall perform weekly surveys of the coastal sage scrub habitat to identify active nests.
- c. If active nests are found, the USFWS and CDFW shall be contacted, and measures shall be taken to minimize impacts.
- d. If no nesting activity is observed, then work may proceed, but weekly monitoring of the area shall be required until July 15 to ensure that no new nests have been built.

### ***BIO-2: Pre-construction Breeding Bird Surveys***

The peak breeding season for birds generally runs from February 1 through September 1, but can vary slightly from year to year, usually depending on weather conditions. Raptors are known to begin nesting early in the year and some begin as early as January 1; however, there is little potential for raptors to breed within the tall trees located along Crown Valley Parkway and there is no raptor breeding habitat within the Laguna Niguel open space. To avoid and reduce impacts on migratory, non-game breeding birds, and their nests, young, and eggs, the District shall implement the following measures prior to Project mobilization, staging, and other disturbances.

- a. Project activities that could remove or disturb potential nest sites shall be scheduled outside the peak breeding season for birds (September 2 through January 31). Removing all physical features that could potentially serve as nest sites outside of the breeding season for birds will also help to prevent birds from nesting within the Project site during the breeding season and during construction activities. No further action is necessary if Project activities occur during the non-breeding season.
- b. If Project activities that could remove or disturb potential bird nest sites occur from February 1 through September 1, a qualified biologist experienced in conducting breeding bird surveys shall conduct a pre-construction clearance and nesting bird survey within the work site(s) three days prior to the work in the area.
- c. If no active nests are observed during the pre-construction bird nesting survey, or if they are observed and will not be disturbed by Project activities, then those activities may begin, and no further action shall be required. This will be determined by the biologist.
- d. If an active nest is identified and will potentially be disturbed by Project activities, a no-activity buffer zone shall be established between the Project activities and the active nest so that nesting activities are not interrupted. The buffer should be a minimum width of 100 feet (500 feet for special-status birds or raptors). The biologist shall determine the appropriate size of the buffer zone based on the type of activities planned near the nest and type of bird species nesting. Adjustments in the nest buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors. The buffer zone shall be delineated on maps and marked with flagging or other means. No Project construction shall occur within the buffer zone until the biologist has determined that the young have fledged, are no longer being fed by the parents, or have left the nest, and will no longer be impacted by Project activities. Once the nesting cycle is complete, Project activities may begin within the buffer zone.
- e. If special-status species are observed during the pre-construction survey, the biologist shall contact appropriate resource agencies to develop additional avoidance, minimization, and/or mitigation measures, prior to commencing Project activities. Appropriate permits, if necessary, shall also be obtained.

Since construction is anticipated to last approximately 18 to 24 months, a pre-construction breeding bird survey will need to be conducted prior to moving into a new area from February 1 through September 1; therefore, pre-construction breeding bird surveys may occur several times during the breeding season.

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

**Less than Significant Impact.** The Laguna Niguel open space contains a CDFW designated sensitive plant community and USFWS designated critical habitat for CAGN. As described previously, the Laguna Niguel open space is not located within the Project footprint and would not be directly impacted by the Project; however, it is adjacent to the Project footprint and work areas making it possible for indirect impacts on coastal sage scrub to occur. These indirect impacts would be considered less than significant because the coastal sage scrub (lemonade berry scrub/lemonade berry-California sagebrush scrub) is reasonably widespread in California as reflected by its low sensitivity status (G3, S3) and the potential indirect impact area is small and restricted in nature. In addition, Project work crews will use industry accepted, standard construction BMPs to avoid, eliminate, and reduce potential construction-related impacts on biological resources. For these reasons, impacts on the Laguna Niguel open space, sensitive coastal sage scrub plant community, and USFWS designated CAGN critical habitat would be considered less than significant. There are no riparian habitats or sensitive natural communities present on or near the Project site, and therefore no impacts would occur to riparian habitats or sensitive natural communities.

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

- c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

**No Impact.** There are no state or federally protected wetlands present on or near the Project site. Therefore, the Project will have no impact on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

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

- d. Would the project 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 wildlife nursery sites?**

**No Impact.** With no native habitat, the Project is not anticipated to 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. No impact is anticipated.

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

- e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

**No Impact.**

*Laguna Niguel General Plan and Dana Point General Plan*

The *Conservation Component* of the *Open Space/Parks/Conservation Element* of the city of Laguna Niguel General Plan provides for the management and conservation of natural

resources. The *Conservation and Open Space Element* of the city of Dana Point General Plan addresses the preservation and use of Laguna Niguel's important natural resources and open space areas. The Project site is completely developed; therefore, the Project would not conflict with the natural resource goals or policies outlined within each city's general plan.

#### City Protected Trees

The general plans, ordinances, and municipal codes for Laguna Niguel and Dana Point do not contain specific provisional language that addresses specific protected trees; therefore, no impacts on protected trees will occur.

#### Laguna Niguel Hillside Protection Ordinance

The *Laguna Niguel Hillside Protection Ordinance* contains regulations that provide for the protection and preservation of sensitive hillside and canyon areas in Laguna Niguel. Natural landforms such as mountains, hills, canyons, valleys, and other natural features are absent from the Project site. The Laguna Niguel open space contains sensitive hillsides and canyon areas; however, these natural landforms are not located within the Project footprint and would not be directly impacted by the Project.

#### Dana Point Designated Environmentally Sensitive Areas

The city of Dana Point has designated Environmentally Sensitive Areas within its jurisdiction. Per the Dana Point Community View Maps, the Project site is not located within or adjacent to a city designated Environmental Sensitive Area.

The Project would not conflict with any local policies or ordinances protecting biological resources or Environmentally Sensitive Areas, such as a tree preservation policy or ordinance, and therefore no impact would occur.

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

**f. Would the project 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 boundary of the Natural Community Conservation Plan/Habitat Conservation Plan for the Central/Coastal Subregion of Orange County (Central/Coastal Orange County NCCP/HCP), more specifically within the coastal subregion.

#### City of Dana Point

The city of Dana Point is a signatory to the Central/Coastal Orange County NCCP/HCP Implementation Agreement; therefore, the city of Dana Point is required to comply with the terms of the Implementation Agreement and make sure that any project that is in its jurisdiction and that requires its approval must meet the requirements and conditions of the plan. The portion of the Project site located within the city of Dana Point, is not in or adjacent to the Reserve System, a designated Special Linkage Area, an Existing Use Area, any Non-Reserve Open Space, or any Conservation Easement. As a result, there are no construction or development restrictions for the Project site. In addition, the Project site and adjacent parcels within Dana Point do not contain protected or covered habitats such as coastal sage scrub, nor wildlife species such as the CAGN; therefore, this part of the Project site, will have no direct or indirect impacts on protected or covered habitats or species. For this reason, the project would not conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state HCP.



*City of Laguna Niguel*

The portion of the Project site in the city of Laguna Niguel is not located within or adjacent to the Reserve System, a designated Special Linkage Area, a Non-Reserve Open Space, nor a Conservation Easement. However, the open space located at the intersection of Crown Valley Parkway and Camino del Avion/Pacific Island Drive and is adjacent to the Project footprint is designated as an Existing Use Area and more specifically, the “City of Laguna Niguel Existing Use Areas.” Existing Use Areas are those portions of the Central/Coastal Subregion owned by Non-Participating Landowners and public agencies and subject to the provisions of Chapter 4.4.1 of the plan. Existing Use Areas comprise areas with important populations of Identified Species, but which are geographically removed from the Reserve System (i.e., these areas exist as “islands” of Identified Species populations) such that they do not provide primary connectivity functions. Existing Use Areas include existing open space maintained by community and homeowner associations, other privately owned lands, and some public parklands. The Laguna Niguel open space, which is a designated Existing Use Area is not located within the project footprint and would not be directly impacted by the Project. The city of Laguna Niguel is not a plan participant and did not sign the Central/Coastal Orange County NCCP/HCP Implementation Agreement and is therefore not subject to the established policies of the Central/Coastal Orange County NCCP/HCP. Thus, the Project would not conflict with the Central/Coastal Orange County NCCP/HCP.

The Project would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan and therefore, no impacts are expected.

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

### 3.4.5 CULTURAL RESOURCES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Cause a substantial adverse change in the significance of a historical resource pursuant to in Section 15064.5?				X
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		
c.	Disturb any human remains, including those interred outside of formal cemeteries?			X	

A cultural resources evaluation and records search was conducted by Tetra Tech and is provided as Appendix C. The following summarizes the results and conclusions.

#### Existing Conditions:

The proposed Project site is located in both the city of Dana Point and the city of Laguna Niguel, in the southern portion of Orange County. The Project will be located in and adjacent to Crown Valley Parkway from the Moulton Niguel Water District's Lower Salada Lift Station, located at 32332 Crown Valley Parkway to approximately the Crown Valley Parkway intersection with Hillhurst Drive (see Figure 2-3).

Regionally, this area is in the western end of the Peninsular Ranges Geomorphic Province. The Project site is within an alluvial valley with deposits mostly of young stream sediments upslope from the Pacific Ocean. Adjoining the Project along both sides of the valley are exposures of the older Niguel Formation (Pliocene) and Capistrano Formation (Miocene-Pliocene).

Sediments within the Project area consist of Quaternary aged deposits: Holocene (recent to 10,000 years old) and Pleistocene (10,000 to 2 million years old) marine and non-marine terrace deposits, to older Pliocene to Late Miocene (3.6 to 11.62 million years ago) marine basin deposits. Late Pleistocene and Holocene deposits are generally considered more likely to contain prehistoric archaeological deposits. It is generally accepted that human occupation of southern California region did not occur until approximately 12,000 years ago. Therefore, landforms that are Pleistocene (approximately 1.8 million years to 11,650 years before present) in age or older are less likely to contain subsurface archaeological material. Conversely, intact Holocene (approximately 11,650 years before present) age deposits are considered more likely to contain archaeological material. Therefore, late Pleistocene and Holocene deposits are generally considered more likely to contain prehistoric archaeological deposits.

The surficial deposits within the Project have been subjected to previous ground disturbance and fill due to historic and modern development. The Project is within an entirely built environment with paved areas, landscaping, residential and commercial development, and a golf course. Based on the geotechnical report for the Project, artificial fill underlies the paved areas across the Project site. The artificial fill ranges in depth below asphalt between 5 to 8 feet in the northern portion of the Project and 3 to 5 feet in the central and southern portion of the Project. The fill is primarily underlain by Quaternary aged (late Pleistocene and Holocene) young alluvial deposits that range between approximately 3 to 13 feet in depth. If construction ground disturbance depths range within native soils, there would be a potential to impact previously unrecorded subsurface cultural resources. An archaeological survey was not

conducted for the Project due to the built environment and no visible non-disturbed or natural ground surface.

Vegetation in the Project site and adjacent area consists primarily of non-native species and landscaping. Prior to the nineteenth century, the Dana Point region had a variety of vegetation zones and a rich biological diversity. This diversity was supported by climatic and hydrological conditions that provided abundant resources which allowed a subsistence lifestyle by indigenous and historic populations. Three surface water resources near the Project area provided fresh water: Salt Creek (Arroyo Salada) to the west and two unnamed springs to the east.

The prehistory of the southern California region has been summarized within four major horizons or cultural periods: Horizon I – Early Period (12,000 to 7,500 years before present [BP]), Horizon II – Millingstone Horizon (7,500 to 3,000 BP), Horizon III – Intermediate Cultures (3,000 to 1,000 BP), and Horizon IV – Late Prehistoric (1,000 years BP to European historic contact, approximately the mid-1500s anno domini). The Project area is within the ancestral territory traditionally inhabited by the Juaneño, Takic speakers, historically associated with the Mission San Juan Capistrano. The Gabrieliño (Tongva) were to the north and the Luiseño to the south. The Juaneño are considered to be linguistically and ethnologically related to the Luiseño. The Juaneño occupied the coastal areas extending from Aliso Creek to the northwest, south along the coast to San Onofre and Las Pulgas, and inland to the Sierra Santa Ana. Similar to the Gabrieliño (Tongva) and Luiseño, the Juaneño were fisher-hunter-gatherers who exploited a variety of floral and faunal resources available within the coastal bay, littoral, riverine, marsh, and interior grassland valley ecological zones of their territory. Subsistence resources included items such as several species of oak trees, grasses, sage bushes, rabbits, deer, fish, shellfish, and other terrestrial and marine mammals. Today, the Juaneño Band of Mission Indians, Acjachemen Nation is governed by a Tribal Council. The tribe is active in government, has many citizens, tribal committees, community activities, and tribal gatherings.

## REGULATORY COMPLIANCE

Various state and local laws, ordinances, and regulations pertain to the protection of cultural resources. These are summarized briefly below.

- **California Environmental Quality Act.** CEQA (Section 21084.1) requires a lead agency determine whether a project could have a significant effect on historical resources or tribal cultural resources (under PRC Section 21074 [a][1][A]-[B]). Under the CEQA (Section 15064.5), a historic resource (e.g. buildings, structures, or archaeological resources) is a resource listed in, or determined to be eligible for listing in the California Register of Historical Resources (CRHR) or a local register or landmark, identified as significant in a historical resource survey (meeting the requirements of Section 5024.1(g) of the PRC), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (Section 15064.5[a][3]). Under the California Code of Regulations, Title 14, Chapter 11.5, properties listed on or formally determined to be eligible for listing in the National Register of Historic Places are automatically eligible for listing in the CRHR. A resource is generally considered to be historically significant under CEQA if it meets the criteria for listing in the CRHR (see PRC Section 5024.1, Title 14 California Code of Regulations, Section 5024.1).
- **California Health and Safety Code, Section 7050.5.** Section 7050.5 (a) states that it is a misdemeanor (except as provided in Section 5097.99, see below) to knowingly mutilate or disinter, wantonly disturb, or willfully remove any human remains in or from any location other than a dedicated cemetery without the authority of law. The provisions of this subdivision shall not apply to any person carrying out an agreement developed

pursuant to subdivision (l) of Section 5097.94 of the PRC or to any person authorized to implement Section 5097.98 of the PRC. Section 7050.5 (b) requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If determined to be Native American, the coroner must contact the California NAHC.

- **California Native American Historical, Cultural, and Sacred Sites Act.** The California Native American Historical, Cultural, and Sacred Sites Act requires that upon discovery of human remains, construction or excavation activity cease and that the county coroner be notified. If the remains are Native American, the coroner must notify the NAHC. The NAHC will then identify and notify a most likely descendant (MLD). The Sacred Sites Act stipulates the procedures the MLD may follow for treating or disposing of the remains and associated grave goods.
- **California Public Resource Code, Section 5097.** PRC Section 5097 specifies the procedures to be followed in the event of an unexpected discovery of human remains on non-federal land. The disposition of Native American remains falls within the jurisdiction of the NAHC.
- **Assembly Bill 52.** Under CEQA, Assembly Bill 52 requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project.
- **California State Senate Bill 18.** California State Senate Bill 18 requires cities and counties to notify and consult with California-recognized Native American Tribes about proposed local land use planning decisions for the purpose of protecting Traditional Tribal Cultural Places. The Governor's Office of Planning and Research was mandated to amend its General Plan Guidelines to include the stipulations of Senate Bill 18 and to add advice for consulting with California Native American Tribes.

## Record Search Results

A record search of the California Historical Resources Information System managed at the South Central Coastal Information Center (SCCIC), California State University at Fullerton, was conducted on April 9, 2021 (see Appendix C, nonconfidential results). The records search focused specifically on the proposed Project site and an area encompassing a 0.25-mile buffer centered on the Project area. The SCCIC records search identified 14 previously prepared reports of surveys conducted within the Project area between 1977 and 2014 that overlap with portions of the Project area (approximately 70 percent). Eighteen previously conducted surveys were identified within 0.25-mile of the Project which were conducted between 1976 and 2014. These previous investigations consist of archaeological and paleontological surveys, monitoring, testing, and cultural resources literature reviews.

One previously recorded prehistoric archaeological site was identified in the Project site (P-30-000033, discussed below). Eight previously recorded cultural resources were identified within 0.25 mile of the Project. Of the eight formally recorded resources identified within 0.25 mile, one is an isolated piece of groundstone and the remaining seven are all recorded as prehistoric shell midden site types. The records search results for the Project and for within 0.5 miles are provided in Appendix C.

The previously recorded archaeological site within the Project area can be summarized as follows:

- **P-30-000033 (CA-ORA-000033):** This site is originally recorded as a shell midden with groundstone, a stone pendant, scrapers and choppers and partially destroyed due to development (Lytton 1960). The site was excavated in the early 1960s by the University of California at Los Angeles and is later described as destroyed by 1976 due to urban

development (Archaeological Research Inc. 1976; Scientific Resources Surveys, Inc. 1977). In 2013, the SCCIC noted that the previously recorded boundary of the site is unverified due to insufficient location information. Based on modern google earth aerial imagery, the previously recorded site boundary is currently within a built environment with roads, a residential housing development, and a golf course.

### **Review of Historic U.S. Geological Survey Map, General Land Office Plat Map, and Historic Aerial Review**

Review of historic maps provides information regarding potential unrecorded historic features or sites within the Project. Based on the map review, the Project was undeveloped land in 1949. By 1968, the Project appears with paved major roads and freeways, and residential subdivisions to the west. By 1972, increased development of residential subdivisions and a golf course appear along either side of Crown Valley Way. Between 1980 to 2016, the undeveloped land is developed with major infrastructure including commercial areas, residential subdivisions, major roads, and a golf course. The results of the review of available historic aerials and USGS quadrangle maps are presented in Appendix C.

### **Federal Land Patent Search**

A search of federal land patents through the Bureau of Land Management's General Land Office Records website identified two early patent holders for Township 8 South, Range 8 West, Section 9, by the State of California (c.1876) and Amardo Amarisca (c.1877) (see Appendix C, Table 4). Federal land patents provide information on the initial transfer of land titles from the federal government to private (individuals or companies) or local governments by the title transfer authority. No historic information was available for Amardo Amarisca through census and genealogic sources, historic newspaper articles, or other online sources.

### **Native American Heritage Commission Sacred Lands Files Search**

Tetra Tech contacted the NAHC on March 12, 2021 and requested that the NAHC review its Sacred Land File Search. The NAHC replied on March 24, 2021, that the Sacred Land File results were positive for the Project and provided a list of local Native American contacts with knowledge of the region (see Attachment 3). Specifically, the NAHC recommended contacting the Juaneño Band of Mission Indians, Acjachemen Nation-Belardes. The NAHC recommends conducting outreach to the listed tribes or individuals as they may have knowledge of cultural resources within or near the Project area. Native American government to government consultation is part of the lead CEQA agency's responsibilities under Assembly Bill 52. Per Assembly Bill 52, the District provided written notification on April 22, 2021 to the tribal governments listed by the NAHC, including the Juaneño Band of Mission Indians, Acjachemen Nation-Belardes. On May 10, 2021, Joyce Stanfield Perry, Juaneño Band of Mission Indians, Acjachemen Nation-Belardes, Tribal Manager, Cultural Resource Director, replied to the District that the tribe would like to consult regarding the Project. The consultation between the District and the Juaneño Band of Mission Indians, Acjachemen Nation-Belardes is ongoing.

### **Discussion:**

#### **a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to in Section 15064.5?**

**No Impact.** Section 15064.5 of the CEQA Guidelines specifically defines a "historical resource" as a resource that meets one or more of the following criteria:

- Listed in, or determined eligible for listing in, the CRHR; or
- A resource listed in a local register of historical resources, as defined in Section 5020.1(k) of the PRC; or



- Identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the PRC; or
- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California that may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (PRC, Section 5024.1, Title 14 California Code of Regulation, Section 4852) including the following:

- An association with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.
- An association with the lives of persons important to local, California, or national history.
- An embodiment of the distinctive characteristics of a type, period, region, or method of construction, or a representation of the work of a master, or possesses high artistic values.
- A resource that has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

The archival research conducted for the initial study determined that the Project site does not contain any known historic resources as defined by the CEQA Guidelines. No impact would result.

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

**b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?**

**Less Than Significant with Mitigation Incorporated.** The SCCIC record search identified one previously recorded prehistoric archaeological site within the Project's direct area of impact (P-30-000033).

**P-30-000033 (CA-ORA-000033):** This site is originally recorded as a shell midden with groundstone, a stone pendant, scrapers and choppers and partially destroyed due to development. The site was excavated in the early 1960s by the University of California at Los Angeles and is later described as destroyed by 1976 due to urban development. In 2013, the SCCIC noted that the previously recorded boundary of the site is unverified due to insufficient location information. Based on modern google earth aerial imagery, the previously recorded site boundary is currently within a built environment with roads, a residential housing development, and a golf course.

One previously recorded prehistoric resource P-30-000033 (CA-ORA-000033) is within the Project footprint and is documented as destroyed due to urban development. As such, the site is not listed or eligible for listing in the CRHR. Although the site has been substantially altered (destroyed) due to past development, there is a potential that cultural artifacts or deposits remain within the previously recorded boundary of the site in undisturbed subsurface soils.

Based on the natural setting, NAHC Sacred Lands File results, SCCIC records search results and literature review, previous surveys, and distribution patterns of previously recorded sites within and near the Project, and previous disturbance to native surface and subsurface soils (i.e., modern development, artificial fill), the Project area is assessed as having an overall low to moderate sensitivity for significant buried precontact or historic archaeological resources within undisturbed subsurface deposits. Hence, there is a possibility that buried archaeological deposits may be encountered during Project-related subsurface excavation (e.g., Holocene age

alluvial deposits), which is proposed at depths of up to approximately 6 to 7 feet. Mitigation addressing inadvertent discoveries of archaeological resources is included as Mitigation Measures CUL-1, CUL-2, and CUL-3 below. With Mitigation Measures CUL-1, CUL-2, and CUL-3 incorporated, a less than significant impact is anticipated.

**Mitigation Measures:**

**CUL-1: Environmental Training** – Prior to Project construction, a qualified archaeologist will provide cultural resource instruction for all on-site Project personnel. This instruction will cover the following:

- all applicable laws and penalties for disturbing cultural resources,
- discuss the prehistoric and historic regional context and archaeological sensitivity of the area,
- describe the types of cultural resources found in the area,
- instruct Project workers that they must halt construction if a cultural resource is inadvertently discovered during construction, and
- present the procedures they are to follow in the event an inadvertent discovery is made (CUL-3).

The Inadvertent Discovery Plan will describe appropriate procedures, notifications, and treatment of cultural resources, and respectful behavior after a discovery (e.g., no posting to social media or photographs). If requested by a local tribe(s), a tribal representative(s) shall be invited to participate in the environmental training to discuss or provide context from a tribal cultural perspective regarding the cultural resources within the region.

**CUL-2: Cultural Resource Monitoring Plan and Inadvertent Discovery Plan** – A qualified archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards (36 Code of Federal Regulations Part 61) will be retained for the Project to be on-call and prepare a Cultural Resource Monitoring and Inadvertent Discovery Plan (Plan) for the Project. The Plan will review applicable laws, provide a map of locations (and depth) where an archaeological monitor may be required to observe earthmoving activities within native soils. The Plan will outline monitor responsibilities and procedures for monitoring ground disturbance, monitor reporting, and the procedures for an inadvertent discovery (CUL-3). In addition, the Plan will provide specific monitoring treatment measures for Project activities within the recorded boundary of site P-30-000033 (CA-ORA-000033). The Plan shall be developed in coordination and consultation with interested tribe(s) and shall provide procedures for discovery of tribal cultural resources. A qualified archaeological monitor will be retained to conduct archaeological monitoring of construction activities as identified by the Plan. If requested by interested tribe(s), a Native American monitor will be retained, as applicable. The archaeological monitor will follow the protocol outlined in the Plan. A final report summarizing the monitoring activities and the results of monitoring site P-30-000033 (CA-ORA-000033), including a site record (DPR-523) update, will be prepared by the Project archaeologist. The archaeological monitor will work in coordination with the Native American monitor (as applicable).

**CUL-3: Inadvertent Discovery of Archaeological Resources During Construction** – During Project-level construction, should subsurface archaeological resources be discovered, all activity within 50 feet of a "find" shall stop and the qualified on-call archaeologist shall be contacted to assess the significance of the find according to CEQA Guidelines Section 15064.5 and/or National Register of Historic Places criteria (as applicable). The archaeologist shall have the authority to halt any Project-related construction activities that could impact potentially significant resources. If any find is determined to be significant, the archaeologist shall determine, in consultation with the implementing agencies and any local Native American

groups expressing interest, appropriate avoidance measures or other appropriate mitigation. Ground-disturbing activities shall not continue until the discovery has been assessed by the archaeologist. The archaeologist shall be afforded the necessary time to assess the find. With monitoring, construction activities may continue on other areas of the Project site during evaluation and treatment of historic or unique archaeological resources. Under CEQA Guidelines Section 15126.4(b)(3), preservation in place is the preferred means to avoid impacts to archaeological resources qualifying as historical resources. Methods of avoidance may include, but shall not be limited to, (i) Project re-route or re-design, (ii) Project cancellation, or (iii) identification of protection measures such as capping or fencing. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures, such as data recovery or other appropriate measures, in consultation with the implementing agency and any local Native American representatives expressing interest in prehistoric or tribal resources. If an archaeological site does not qualify as an historical resource but meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site shall be treated in accordance with the provisions of Section 21083.2.

**c. Disturb any human remains, including those interred outside of formal cemeteries?**

**Less than Significant Impact.** Results of the SCCIC records search revealed there are no known burials or cemeteries within or adjacent to the Project site.

Existing regulations require that if human remains and/or cultural items defined by the Health and Safety Code, Section 7050.5, are inadvertently discovered, all work in the vicinity of the find would cease and the Orange County Coroner would be contacted immediately. If the remains are found to be Native American as defined by Health and Safety Code, Section 7050.5, the coroner will contact the NAHC by telephone within 24 hours. The NAHC shall immediately notify the person it believes to be the MLD as stipulated by California PRC, Section 5097.98. The MLD(s), with the permission of the landowner and/or authorized representative, shall inspect the site of the discovered remains and recommend treatment regarding the remains and any associated grave goods. The MLD shall complete their inspection and make their recommendations within 48 hours of notification by the NAHC. Any discovery of human remains would be treated in accordance with Section 5097.98 of the PRC and Section 7050.5 of the Health and Safety Code. Therefore, with compliance with existing regulations, Project impact would be less than significant.

**Mitigation Measures:** No mitigation is required. Compliance with existing regulations will ensure that any Project impact on human remains would be less than significant.



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### 3.4.6 ENERGY

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b.	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				X

#### Existing Conditions:

There is no direct consumption of energy by the existing pipelines as currently configured, nor is any expected with the replacement pipelines after construction. The Lower Salada Lift Station does (and will continue to) use energy to push wastewater through the force main, but there are no alterations to the lift station as part of this Project. Therefore, the operation phase of the proposed Project will not change conditions from the current configuration to the future one.

#### Discussion:

##### a. Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

**Less Than Significant Impact.** According to the CEQA Guidelines, “[u]ses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.” Therefore, the purpose of this analysis is to identify any significant irreversible environmental effects of Project implementation that cannot be avoided.

Construction of the proposed Project would lead to the consumption of limited, slowly renewable, and non-renewable resources, committing such resources to uses that future generations would be unable to reverse. Project construction would require the commitment of resources that include: (1) building materials; (2) fuel; and (3) the transportation of goods and people to and from the proposed Project.

During Project construction, energy will be consumed in the form of petroleum-based fuels associated with the use of construction vehicles and equipment on the Project site, construction worker travel to and from the Project site, and truck trips delivering building materials to the Project site and hauling solid waste from the Project site.

The construction of the Project will require an estimated 12,000 gallons of gasoline for worker commuter vehicles during construction and 85,500 gallons of diesel fuel to power construction equipment.

There will be no increase on vehicle traffic, water use, waste, or energy once the Project is constructed.

The Proposed Project will comply with all applicable regulations and codes which require achievement of various levels of energy efficiency in building design, construction, and operation. The consumption of such resources would represent a long-term commitment of those resources. The commitment of resources required for the construction of the proposed Project would limit the availability of such resources for future generations or for other uses during the life of the Project. However, use of such resources will be short-term and minimal during construction and will not result in energy consumption requiring a significant increase in energy production for the energy provider. In addition, the proposed Project will comply with all applicable regulations and codes. Therefore, the energy demand associated with the proposed Project will be less than significant.

**Mitigation Measures:** No mitigation is required. Regulatory compliance will maintain impacts at a less than significant level.

**b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

**No Impact.** As noted above, the Project will not result in energy consumption requiring a significant increase in energy production for the energy provider. The Project is not expected to conflict with or obstruct a state or local plan for renewable energy or energy efficiency and therefore, no impacts are expected.

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

### 3.4.7 GEOLOGY AND SOILS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Directly or indirectly cause 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.			X	
	ii.) Strong seismic ground shaking?			X	
	iii.) Seismic-related ground failure, including liquefaction?			X	
	iv.) Landslides?			X	
b.	Result in substantial soil erosion or the loss of topsoil?			X	
c.	Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?			X	
d.	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			X	
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
f.	Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?		X		

#### Existing Conditions:

The Project site is not located within an Alquist-Priolo Earthquake Fault Zone (CGS 2021). The principal seismic hazard that could affect the site is ground shaking resulting from an earthquake occurring along any one of several major active faults in the region. The known regional faults that could produce the most significant ground shaking at the Project site include the Newport-Inglewood and Elsinore-Whittier faults (City of Laguna Niguel 1992b; City of Dana Point 1991b).

Portions of the linear Project site are located adjacent to, and in places slightly overlap with, liquefaction zones and landslide zones (CGS 2021).

**Discussion:**

- a. **Would the project directly or indirectly cause 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.**

**Less than Significant Impact.**

The Project site is not located within an Alquist-Priolo Earthquake Fault Zone and no active faults are known to cross the Project site (CGS 2021). The probability of damage because of surface ground rupture is low due to the lack of known active faults crossing the Project area. The Project has been designed in accordance with applicable seismic safety standards. The operation of the proposed Project, therefore, is not anticipated to expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death from the rupture of a known earthquake fault. The impact is anticipated to be less than significant.

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

ii.) **Strong seismic ground shaking?**

**Less than Significant Impact.** The Project is located within the seismically active Southern California region and is likely to experience strong ground shaking from seismic events generated on regionally active faults. The Project has been designed in accordance with applicable seismic safety standards. The operation of the proposed Project, therefore, is not anticipated to expose people or structures to potential substantial adverse effects from strong seismic ground-shaking. The impact is anticipated to be less than significant.

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

iii.) **Seismic-related ground failure, including liquefaction?**

**Less Than Significant Impact.** Liquefaction occurs when loosely packed sediments are also water-logged near the ground surface. Such sediments can lose their structural integrity in response to strong ground shaking. During earthquakes, if liquefaction occurs beneath buildings or other structures, it can cause major damage. Portions of the Project site are located within or adjacent to liquefaction zones or liquefaction landslide overlap zones (CGS 2021). Construction projects within a liquefaction hazard zone require geotechnical reports to address and mitigate the potential vulnerability of structural integrity during earthquakes. Construction of the Project will comply with applicable measures of the California Building Code regarding construction in a liquefaction zone and other seismic safety measures. Operation of the proposed Project would not expose people or structures to substantial impacts involving seismic-related ground failure from liquefaction; therefore, a less than significant impact would occur.

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

iv.) **Landslides?**

**Less Than Significant Impact.** Portions of the Project site are located within or adjacent to landslide zones or liquefaction landslide overlap zones (CGS 2021). Construction projects within a landslide hazard zone require geotechnical reports to address and mitigate the potential vulnerability of structural integrity during earthquakes. Construction of the Project will comply with applicable measures of the California Building Code regarding construction in a landslide zone and other seismic safety measures. Operation of the proposed Project would not expose people or structures to substantial impacts involving landslides; therefore, a less than significant impact would occur.

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

**b. Would the project result in substantial soil erosion or the loss of topsoil?**

**Less than Significant Impact.** Construction of the Project would include ground-disturbing activities, such as excavation and grading in order to build the proposed Project. However, because the proposed Project will be more than one acre, the proposed Project will be subject to the requirements of the Construction General Permit under the National Pollutant Discharge Elimination System (NPDES) program administered by the State Water Resources Control Board. In addition, construction of the proposed Project would be required to comply with water quality control measures of both the city of Dana Point (Construction BMPs Report) and the city of Laguna Niguel (BMPs for Construction Sites & Home Remodeling Projects). The Project site will be paved or landscaped so that no exposed soil would remain. The Project will have a less than significant impact related to erosion and loss of topsoil in the construction and operational phases.

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

**c. Is the project 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 onsite or offsite landslides, lateral spreading, subsidence, liquefaction, or collapse?**

**Less than Significant Impact.** Based on the analysis provided in Responses (a.) (iii. and iv.) above, less than significant impacts would be experienced related to liquefaction or on-site or off-site landslides. Further, the no subsidence hazard zones could be identified in the vicinity of the Project site. Construction of the Project will comply with applicable measures of the California Building Code regarding seismic safety measures. Operation of the proposed Project would not expose people or structures to substantial impacts involving unstable geology or unstable soils; therefore, a less than significant impact would occur.

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

**d. Is the project located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?**

**Less than Significant Impact.** Expansiveness refers to the potential to swell and shrink with repeated cycles of wetting and drying and is a common feature of fine-grained clayey soils. This wetting and drying causes damage due to differential settlement within buildings and other improvements. Expansive soils are relatively common in both the city of Laguna Niguel and the city of Dana Point, as well as much of southern Orange County. Identification will be made through a geotechnical investigation and the results provided in a report to be prepared for the Project. Whether or not expansive soils offer significant presence within the Project area remains to be determined. Regardless of the geotechnical investigation results, design and construction of the Project will comply with applicable regulations and standard specifications to prevent potential risk of damage from expansive soils. The Project would be required to comply with building codes in order to minimize the potential for hazards due to expansive soils. Therefore, regulatory compliance will ensure that impacts would be less than significant.

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

**e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

**No Impact.** No septic tanks or alternative wastewater systems will be constructed as part of the Project, and no impacts will occur.

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

**f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

**Less Than Significant with Mitigation Incorporated.** The Project site is located in an alluvial valley (Arroyo Salada) with deposits mostly of young stream sediments. Adjoining the Project along both sides of the valley are exposures of the older Niguel Formation (Pliocene) and Capistrano Formation (Miocene-Pliocene). Both of the older formations have produced important fish and marine mammal fossils (White 1956). The younger alluvial deposits are much less likely to produce fossils. Therefore, due to a low probability of occurrence and the highly disturbed condition of the Project site and surroundings, the likelihood that paleontological resources or unique geologic features exist on-site is considered low. Regardless of probability, ground-disturbing activities (such as grading or excavation) could unearth undocumented paleontological resources or unique geologic features by disturbing native soils that may contain such resources. The proposed Project could potentially cause a substantial adverse change in significance to a paleontological resource, but incorporation of the following Mitigation Measure GEO-1 would reduce the potential impact on paleontological resources to less than significant.

**Mitigation Measures:**

**GEO-1: Inadvertent Discoveries of Paleontological Resources** — If construction staff or others observe previously unidentified paleontological resources during ground disturbing activities, they will halt work within a 200-foot radius of the find(s), delineate the area of the find with flagging tape or rope (may also include dirt spoils from the find area), and immediately notify a qualified paleontologist. Construction will halt within the flagged or roped-off area. The paleontologist will assess the resource as soon as possible and determine appropriate next steps in coordination with the District. Such finds will be formally recorded and evaluated. The resource will be protected from further disturbance or looting pending evaluation.

### 3.4.8 GREENHOUSE GAS EMISSIONS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b.	Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?				X

#### Existing Conditions:

The State of California has enacted key legislation in an effort to reduce its contribution to climate change. Climate change is a result of GHGs emitted all around the world from sources such as the combustion of fuel for transportation and heat, cement manufacture, and refrigerant emissions.

Assembly Bill 32, the California Global Warming Solutions Act of 2006, requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. The Air Resources Board is the state agency charged with monitoring and regulating sources of emissions of GHGs. Assembly Bill 32 requires the Air Resources Board to adopt and implement a list of discrete and early action GHG reduction measures, which was completed in October 2007.

The SCAG is the regional planning agency for ensuring implementation of Senate Bill 375 (i.e., the Sustainable Communities and Climate Protection Act of 2008) which supports the state's climate action goals to reduce GHG emissions through coordinated transportation and land use planning with the goal of more sustainable communities. Under the Sustainable Communities Act, the Air Resources Board sets regional targets for GHG emissions reductions from passenger vehicle use.

Area sources of GHG include emissions from natural gas combustion, fireplaces, landscaping equipment, consumer products, and architectural coatings. Indirect sources include emissions from energy consumption and water conveyance. Mobile sources include emissions from passenger vehicles and delivery trucks. Typically, mobile sources are the primary contributor of GHG emissions for a project of this type.

#### Discussion:

- a. **Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

**Less than Significant Impact.** The major source of GHG for this Project is the combustion of fuel in various types of equipment used for construction, used in vehicles hauling materials, and used in vehicles by workers commuting to and from the site.

There are three types of GHG from fuel combustion: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). GHG emissions are presented as carbon dioxide equivalents (CO<sub>2</sub>e). CO<sub>2</sub>e is computed based on global warming equivalence. The CH<sub>4</sub> global warming equivalence is 25 times that of CO<sub>2</sub>, and the N<sub>2</sub>O global warming equivalence is 298 times that of CO<sub>2</sub>.



Mathematically, the CO<sub>2</sub>e can be represented by the following equation:

$$\text{CO}_2\text{e Emissions} = \text{CO}_2 \text{ Emissions} + (25 \times \text{CH}_4 \text{ Emissions}) + (298 \times \text{N}_2\text{O Emissions})$$

For typical diesel-fueled combustion equipment used in construction activities, the emissions factors adjusted with global warming equivalence are the following:

1. CO<sub>2</sub> emission factors are 22.4 pounds of CO<sub>2</sub>e per gallon consumed,
2. CH<sub>4</sub> emission factors are 0.065 pounds of CO<sub>2</sub>e per gallon consumed, and
3. N<sub>2</sub>O emission factors are 0.068 pounds of CO<sub>2</sub>e per gallon consumed.

As shown in these emission factors, the CO<sub>2</sub> contribution is 99 percent of the total GHG emissions generated by combustion equipment. Therefore, the CO<sub>2</sub> emissions were assumed to be equivalent to the CO<sub>2</sub>e emissions levels.

The CalEEMod model was used to estimate GHG emissions during the construction phase of the proposed Project (see Appendix B for model results). Based on the construction schedule, types and quantities of construction equipment, worker vehicles, and haul trucks, etc., the maximum CO<sub>2</sub>e emissions were estimated. The GHG emissions for each construction year are compared with SCAQMD's GHG screening threshold and summarized in Table 3-6.

**Table 3-6. Construction and Operational Emissions – GHG<sup>a</sup>**

	CO <sub>2</sub> e (tons/year)
<b>Construction</b>	
Total Project Construction GHG Emissions <sup>b</sup>	1,171
Total Project Construction GHG Emissions – Amortized over 30 years	39
<b>Operation</b>	
Total Operational GHG Emissions	0
Total Amortized Construction + Operational GHG Emissions	39
<b>SCAQMD GHG Screening Threshold</b>	<b>10,000</b>
<b>Exceeds Screening Threshold?</b>	<b>No</b>
<sup>a</sup> Compiled using the CalEEMod emissions inventory model, provided in the Appendix B.	
<sup>b</sup> Total Project Construction GHG Emissions conservatively represent total emissions from the duration of the 24-month construction schedule.	

As indicated in Table 3-6, short-term and temporary construction CO<sub>2</sub>e emissions will not exceed SCAQMD's GHG screening threshold. The Project's construction related GHG emissions cumulatively are not a considerable contribution to climate change and, therefore, are less than significant. The Project's operation related GHG emissions will be negligible, and cumulatively are not a considerable contribution to climate change.

Due to the complex physical, chemical, and atmospheric mechanisms involved in global climate change, there is no basis for concluding that the Project's theoretically small emissions increase could actually cause a measurable increase in global GHG emissions necessary to influence global climate change. The GHG emissions of the Project alone will likely not cause a direct physical change in the environment. Global emissions in their aggregate contribute to climate change, and a single project's emissions, especially one of such small scale, will not have a measurable effect. Therefore, due to the incremental amount of GHG emissions estimated for this Project, and the lack of any evidence for concluding that the Project's GHG emissions could cause a measurable increase in global GHG emissions capable of forcing global climate change, the Project is not considered to be hindering the goals of Assembly Bill 32. Thus, because the Project would result in total GHG emissions less than the SCAQMD 10,000 tons CO<sub>2</sub>e annual threshold, it is not considered to have a significant impact on a cumulative level.

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

**b. Would the project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?**

**No Impact.** The proposed Project would not conflict with any applicable plan, policy, or regulation in regard to GHG emissions. The city of Laguna Niguel has not yet completed a climate action plan to reduce GHG emissions within its jurisdiction. Climate action plans typically include a number of GHG reduction measures that target GHG emissions associated with transportation, construction, energy production, waste handling/treatment, water treatment/distribution, and other activities.

As shown in Table 3-6, the Project results in GHG emissions well below the SCAQMD threshold of 10,000 tons per year. Therefore, the Project would not conflict with any applicable plan, policy, and/or regulation to reduce GHG emissions. Thus, the project is considered to have no impact.

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

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### 3.4.9 HAZARDS AND HAZARDOUS MATERIALS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
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?			X	
c.	Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?				X
d.	Be located on a site that 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?				X
e.	Be located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a public airport or public use airport, and result in a safety hazard or excessive noise for people residing or working in the project area?				X
f.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g.	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.			X	

#### Existing Conditions:

The Project area is urbanized with residential, open space, and municipal uses.

The California State Water Resource Control Board GeoTracker database (SWRCB 2021) and the California Department of Toxic Substances Control EnviroStor database (DTSC 2021) were searched for hazardous materials sites within the Project area. El Niguel Country Club, within which a portion of the Project alignment is located, is listed on the California State Water Resource Control Board GeoTracker for two leaking underground storage tank cleanup sites. The cleanup actions were completed, and the cases were closed as of July 1999 and April

2003. No other listed hazardous material sites are located within or adjacent to the project alignment.

The Project site is not located within 2 miles of a public airport or public use airport. The nearest airport is John Wayne Airport located approximately 13 miles to the north. The Project site is not within the Orange County Airport Land Use Plan Area or the John Wayne Airport Safety Zone for John Wayne Airport (ALUC 2005).

**Discussion:**

**a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

**Less than Significant Impact.** The proposed Project would include the short-term transport, storage, and use of chemical agents, solvents, paints, and other hazardous materials commonly associated with construction activities. Some examples of hazardous materials include fuels, lubricating fluids such as paints and adhesives, solvents, and ACP materials removed during sewer force main pipe abandonment process. All transport, storage, and use of hazardous materials or wastes would comply with Resource Conservation and Recovery Act; Comprehensive Environmental Response, Compensation, and Liability Act; and California hazardous waste control law<sup>3</sup>; as well as requirements of the Occupational Safety and Health Administration, Orange County Fire Authority (OCFA), and the District itself. Handling and disposal of ACP materials will comply with the District's Standard Specification Section 15072 which addresses the requirements for cutting, removal, handling, and disposal of ACP. Operation of the proposed Project would not require the routine transport, use, or disposal of hazardous materials. Based on the above analysis, potential impacts from the transport, storage, and use of chemical agents, solvents, paints, and other hazardous materials to the public or the environment would be less than significant.

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

**b. Would the project create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?**

**Less than Significant Impact.** During construction, there is a potential for accidental release of hazardous substances such as petroleum-based fuels or hydraulic fluid used by construction equipment. The level of risk associated with the accidental release of hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials utilized during construction. The construction contractor would be required to use standard construction controls and safety procedures, including those for handling and disposal of ACP materials, that would avoid and minimize the potential for accidental release of such substances into the environment. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, state, and federal law. As with the discussion for 3.4.9(a) above, all chemical and fuel storage and usage would comply with existing federal, state, and local requirements (including chemical hygiene requirements administered by the California Division of Occupational Safety and Health). With the aforementioned measures implemented as part of the proposed Project, impacts would be less than significant.

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

**c. Would the project emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?**

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<sup>3</sup> Codified in California Health and Safety Code, Division 20, Chapter 6.5, Hazardous Waste Control.

**No Impact.** There are no schools within 0.25 miles of the Project site. The closest school to the Project site is the Moulton Elementary School, located approximately 0.5 miles to the northwest of the Project site. No impact would occur.

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

- d. **Is the project located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

**No Impact.** The California State Water Resource Control Board GeoTracker database (SWRCB 2021) and the California Department of Toxic Substances Control EnviroStor database (DTSC 2021) were searched for hazardous materials sites within the project area. El Niguel County Club, within which a portion of the project alignment is located, is listed on the California State Water Resource Control Board GeoTracker for two leaking underground storage tank cleanup sites. The cleanup actions were completed, and the cases were closed as of July 1999 and April 2003. No other listed hazardous material sites are located within or adjacent to the project alignment. Therefore, no impacts would occur.

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

- e. **For a project located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a public airport or public use airport, and result in a safety hazard or excessive noise for people residing or working in the project area?**

**No Impact.** The Project site is also not located within 2 miles of a public airport or public use airport. The nearest airport is John Wayne Airport located approximately 13 miles to the north. The Project would not result in a safety hazard for people residing or working in the Project area and no impact would occur.

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

- f. **Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

**Less Than Significant Impact.** For construction of the proposed Project, traffic control will be needed to temporarily reduce available lanes during the construction within Crown Valley Parkway. However, full road closures are not anticipated. In addition, a traffic control plan will be prepared to accommodate this work area width along the pipeline route. These impacts would be short-term and temporary and would have a less than significant impact to roadways utilized for emergency purposes. Therefore, the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and impacts would be less than significant.

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

- g. **Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.**

**Less Than Significant Impact.** The area adjacent to the Project site to the west is rated as having a high fire hazard area (OSFM 2021). A high rating is defined as "Fires start easily from most causes. Unattended brush and campfires are likely to escape. Fires spread rapidly and may burn intensely on slopes. Fires may become serious and difficult to control if not attacked successfully while small."

During construction, the presence of Project-related workers in the area would be temporary and limited to a small number, and the contractor would be required to follow specifications to minimize fire hazards during construction. The majority of the proposed Project will be located

belowground and the aboveground new master meter facility will be small equipment cabinets and therefore, would not expose people to wildland fires during operation. Therefore, the Project would not expose people or structures to substantial risk from wildland fires, and impacts would be less than significant.

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

### 3.4.10 HYDROLOGY AND WATER QUALITY

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b.	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner that would:				
	(i) result in substantial erosion or siltation on site or off site?			X	
	(ii) substantially increase the rate or amount of surface runoff in a manner that would result in flooding on site or off site?			X	
	(iii) create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
	(iv) impede or redirect flood flows?			X	
d.	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e.	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

#### Existing Conditions:

##### Surface Water

There are few major drainages in this part of Orange County because the location is close to the coast and drainages are generally small and discharge directly to the Pacific Ocean. The project alignment roughly follows the Arroyo Salada drainage, a tributary to Salt Creek, which flows through Dana Point before flowing into the ocean. The storm-drain system serving the Project site follows the natural topography of the extended Salt Creek watershed and locally discharges directly into the Arroyo Salada, which flows to Salt Creek. San Juan Creek is the next major watershed to the south of the Project site and San Diego Creek is the next major watershed to the north.



The area surrounding the Project is mostly urbanized, and includes residential, open space, and municipal land uses. The pipeline alignment parallels (and intersects with) the Crown Valley Parkway alignment which, in turn, runs up the western side of the Arroyo Salada valley. Thus, the natural drainage of the area is generally perpendicular to the linear project; flowing from west to east. Stormwater flows across the site to storm drains located along Crown Valley Parkway.

There are parts of the Arroyo Salada drainage identified as being within a Federal Emergency Management Agency Flood Zone A, where the probability of flooding inundation has been evaluated to be 0.2 percent (FEMA 2019). These are all adjacent to the Crown Valley Parkway, but never include Crown Valley Parkway (or the Project alignment) within the mapped areas of Zone A. The lower end of the Project site is closest to a tsunami inundation area in Dana Point (California Emergency Management Agency 2009). However, this inundation area is on the coastal side of Pacific Coast Highway, at least 1 mile away from the Project (see Figure 3-8).

Urban Runoff Management is required by the NPDES Permit issued by the San Diego Regional Water Quality Control Board for parts of Orange County. The permit, known as the Municipal Separate Storm Sewer System (MS4) permit, regulates stormwater runoff from urbanized areas in the San Diego Region, including south Orange County (which encompasses both the city of Dana Point and the city of Laguna Niguel). Construction projects are required to comply with municipal directives for water quality management, so that they: (1) comply with applicable discharge prohibition requirements set forth in the Water Quality Ordinance to prevent unauthorized (and non-stormwater) discharges, and (2) implement BMPs in accordance with the County Drainage Area Management Plan and local agency requirements, to reduce contaminants in stormwater discharges (County of Orange 2013).

**Discussion:**

- a. **Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?**

**Less than Significant Impact.**

**Short-term Impacts**

The proposed Project could potentially result in water quality impacts in the short-term during the construction process. Grading and excavation required for Project implementation would result in exposed soils that may be subject to wind and water erosion. Because the Project impact area is expected to be more than one acre, the proposed Project will be subject to the requirements of the Construction General Permit under the NPDES program administered by the State Water Resources Control Board. This means, construction of the proposed Project will be required to comply both with the NPDES General Permit, as well as with water quality control measures established by both the city of Dana Point and the city of Laguna Niguel. This would include requirements for the implementation of BMPs to minimize the potential for water quality impacts during construction.

**Long-Term Operational Impacts**

The proposed Project would not affect water quality in the Project area upon completion of construction. Development of the majority of the Project site will result in a new impervious surface which will merely replace a previously impervious surface. Additionally, the Project is not expected to alter drainage conditions surrounding, or within, the Project area, so impacts would be less than significant.

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

**b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?**

**Less than Significant Impact.** This Project is expected to require very little water during the construction phase, and not create any new water demand upon completion of the Project. It is a pipeline replacement project that will not create any significant new impervious areas, interfere with local groundwater basins, or affect their recharge areas. The Project will not result in any significant draw on water resources or change groundwater recharge opportunity. Therefore, the Project would not deplete groundwater supplies or interfere with groundwater recharge resulting in a net decrease in aquifer volume or a lowering of the groundwater table level. Thus, impacts to groundwater supply would be less than significant.

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

**c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner that would:**

**(i). Result in substantial erosion or siltation on site or off site?**

**Less than Significant Impact.** Refer to Response 3.4.10(a) above. Development of the Project will not alter drainage conditions within the Project site or for the larger watershed area that surrounds the Project. Thus, impacts in this regard would be less than significant.

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

**(ii). Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on site or off site?**

**Less than Significant Impact.** Refer to Responses 3.4.10(a) and 3.4.10(c) above. The proposed Project is not expected to significantly alter on-site or off-site runoff in comparison to existing conditions. Impacts would be less than significant.

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

**(iii). Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

**Less than Significant Impact.** Refer to responses 3.4.10(a) and 3.4.10(c) above. The proposed Project is not expected to significantly alter on-site or off-site runoff in comparison to existing conditions. Therefore, impacts to stormwater drainage systems would be less than significant.

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

**(iv). Impede or redirect flood flows?**

**Less than Significant Impact.** As noted in responses 3.4.10(a) and 3.4.10(c) above, the Project is not expected to alter drainage patterns either on-site or off-site. As a result, the Project will not create any new barriers to impede surface runoff or cause flood flows to be redirected from existing drainage conveyances. Impacts to the efficacy of the local stormwater drainage system are expected to be less than significant.

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

**d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?**

**No Impact.** The Project site is not located within a 100-year floodplain (FEMA 2019). As a result, potential impacts to structures would be less than significant, and these facilities will not require active and on-site operations personnel so no injury or death from flooding is anticipated. The Project site is not located in any areas at risk for seiche, tsunami or mudflows; therefore, no impacts associated with these hazards would occur.

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

**e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

**Less than Significant.** Refer to Response 3.4.10(a) and 3.4.10(b) above. Development of the Project would include requirements for the implementation of BMPs to minimize the potential for water quality impacts during construction. Post construction conditions will be essentially the same as current conditions with regard to surface loading and non-point source additions to stormwater constituent loads. In addition, the Project would not deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the groundwater table level. A less than significant impact would occur.

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

### 3.4.11 LAND USE AND PLANNING

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Physically divide an established community?			X	
b.	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X

#### Existing Conditions:

The Project site is located in an urban setting characterized by residential, open space, and municipal uses.

The general plan land use designations adjacent to the Project site in Dana Point are RES 3.5-7 (Residential 3.5-7 DU/AC), RES 14-22 (Residential 14-22 DU/AC), and P/A (Prof. / Admin.) and are zoned Residential Single Family 4 DU/AC (RSF 4), Residential Single Family 7 DU/AC (RSF 7), Residential Multiple Family 22 DU/AC (RMF 22), and Professional / Administration (P/A).

The general plan land use designations adjacent to the Project site in the City of Laguna Niguel are Residential Detached, Open Space, Residential Attached, Parks and Recreation, Public/Institution, Community Commercial, Professional Office; Public/Institution and are zoned Open Space District (OS), Park & Recreation District (PR), Single Family District 3 (RS-3), Multi-Family District (RM), Public/Institutional District (PI), Community Commercial (CC).

#### Discussion:

##### a. Would the project physically divide an established community?

**Less Than Significant Impact.** For construction of the proposed Project, traffic control will be needed to temporarily reduce available lanes during the construction within Crown Valley Parkway. However, full road closures are not anticipated. In addition, a traffic control plan will be prepared to accommodate this work area width along the pipeline route. These impacts would be short-term and temporary and would have a less than significant impact to utilization of roadways. Therefore, the proposed Project would not divide an established community and the impact would be less than significant.

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

##### b. Would the project cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

**No Impact.** The proposed Project involves improvements to existing utility facilities and will not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project; therefore, no significant impacts would occur.

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

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### 3.4.12 MINERAL RESOURCES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				X
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?				X

#### Existing Conditions:

Mineral Resource Zones are commercially viable mineral or aggregate deposits, such as sand, gravel, and other construction aggregate. The mineral resources in Orange County consist of deposits of regionally significant aggregate resources identified by the California Department of Conservation, Divisions of Mines and Geology. These significant sand and gravel resources for the Orange County region are located in portions of the Santa Ana River, Santiago Creek, San Juan Creek, and Arroyo Trabuco. Orange County's petroleum resources are in the form of oil and natural gas deposits. The primary petroleum resource areas of the County are Huntington Beach, Newport Beach, Seal Beach, and the Brea/La Habra foothill regions. The Project site is not located near any of these areas (County of Orange 2012).

#### Discussion:

- a. **Would the project 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.** No mineral recovery activities currently occur in the Project area, and the Project site is not underlain by any known mineral resources of value to the region or to the residents of the state. Thus, no impacts would occur.

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

- b. **Would the project 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.** As noted in 3.4.12 (a) above, the Project site is not located within a Mineral Resource Zone or an area of oil and gas resources. Thus, no impacts would occur.

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

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### 3.4.13 NOISE

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:					
a.	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in a local general plan or noise ordinance, or applicable standards of other agencies?		X		
b.	Generation of excessive groundborne vibration or groundborne noise levels?			X	
c.	For a project located within the vicinity of a private airstrip or 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?				X

#### Existing Environment:

The existing noise environment in the vicinity of the Project site consists of vehicle noise from Crown Valley Parkway as well as Hillhurst Drive and Paseo Del Niguel. Surrounding areas primarily consist of single family residential, multi-family residential, municipal, and commercial land uses. The General Plans for both the city of Dana Point and the city of Laguna Niguel indicate that the existing ambient noise levels at the proposed Project site should be between 60 and 65 dBA Community Noise Equivalent Level.

#### Discussion:

- a. **Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?**

**Less than Significant with Mitigation Incorporated.** The city of Dana Point and Laguna Niguel's municipal codes establishes exterior noise standards of 55 dBA from 7:00 a.m. until 10:00 p.m. and 50 dBA from 10:00 p.m. until 7:00 a.m. The Project includes the replacement of pipelines and construction of a master meter and does not incorporate any noise-generating equipment into the post-construction operational use of the pipeline. Therefore, the noise levels associated with the operation of the Project are considered to have no impact.

The city of Dana Point and Laguna Niguel's municipal codes exempt noise sources associated with construction, repair, remodeling, or grading of any real property, provided said activities do not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a federal holiday.

Construction is anticipated to begin in the third quarter of 2022 and last up to 18–24 months, with activities anticipated to be conducted only on weekdays and only during regular work hours. The majority of construction activities to replace both the force main and potable water

main will use open-trench techniques within the paved sections of Crown Valley Parkway. These construction activities would require a variety of equipment. Construction equipment associated with these activities would not be expected to generate noise levels above 90 dBA at 50 feet, and most equipment types would typically generate noise levels of less than 85 dBA at 50 feet.

The highest noise levels during construction are expected to result in a maximum instantaneous noise level ( $L_{max}$ ) of up to 88 dBA at a distance of 100 feet from the Project. This would be loud enough to temporarily interfere with speech communication outdoors and indoors with the windows open at a distance of 100 feet from the Project.

Project construction would generally occur during an 8-hour period between the hours of 7:00 a.m. and 8:00 p.m., Monday through Friday and would be considered exempt from the city of Dana Point and Laguna Niguel's noise regulations. A limited amount of work may take place at night, if it is necessary to work when traffic volumes and/or sewer flows are minimal. The City of Laguna Niguel Municipal Code Section 6-7-7 (11b and 11c) allows for construction that will cause less interference to the public and sewer line repairs when there is minimal flow a night to be conducted at night. Night work in the City of Laguna Niguel will require approval from the City's Public Works Director. Temporary increases to the ambient noise levels could occur, therefore, implementation of mitigation measure **NOISE-1** would reduce these temporary noise increases. Due to the infrequent nature of loud construction activities at the Project site, the limited hours of construction, implementation of mitigation measure **NOISE-1**, and the construction noise exemptions from municipal codes and approval of construction permits, the temporary increase in noise due to construction is considered to be a less than significant impact.

#### **Mitigation Measures:**

**NOISE-1:** Construction noise levels will fluctuate depending on the construction phase, equipment type and duration of use, distance between noise source and sensitive receptor, and the presence or absence of barriers between noise source and receptors. Standard construction activities shall be limited as follows:

- Equipment and trucks used for Project construction shall utilize the best available noise control techniques (e.g., equipped with manufacturer-rated high attenuation mufflers, specification of low noise equipment, use of air intake silencers, ducts, engine enclosures and acoustically-attenuating buildings, as needed, to meet regulatory criteria).
- Stationary noise sources shall be located as far from adjacent receptors as possible and shall be muffled and enclosed, incorporate insulation barriers or other measures to the extent feasible.
- Any impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for Project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically-powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible as this could achieve a reduction of 5 dBA. Quieter procedures shall be used such as drilling rather than impact equipment whenever feasible.

No specialized construction techniques that could generate high noise levels (i.e., greater than 90 dBA) will take place on weekends or federal holidays.

- b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?**

**Less than Significant Impact.** Operation of the Project would not generate vibration. However, construction of the Project could generate some groundborne vibration. Possible sources of vibration may include bulldozers, dump trucks, backhoes, rollers, and other construction equipment that produces vibration. No blasting or pile driving will be required at the Project site.

Project construction activities would occur within approximately 100 feet from single family residences. According to the Federal Transit Administration guidelines, a vibration level of 65 vibration decibels (VdB) is the threshold of perceptibility for humans. For a significant impact to occur, vibration levels must exceed 80 VdB during infrequent events (FTA 2018). Based on the levels published by the Federal Transit Administration and the type of equipment proposed for use at the proposed Project, coupled with the distance to the existing identified noise sensitive receptors, analysis shows that all identified sensitive receptors will be below the maximum vibration level of 80 VdB (FTA 2006). This vibration level is considered acceptable for impacts to residential homes and is, therefore, considered to be a less than significant impact.

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

- c. **For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 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.** There is no public airport or public use airport located within 2 miles of the proposed Project site. The Project would not result in exposing people residing or working in the Project area to excessive noise levels associated with a public airport and no impact would occur.

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

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### 3.4.14 POPULATION AND HOUSING

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?				X
b.	Displace a substantial number of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

#### Existing Conditions:

According to the California Department of Finance (2020a) the populations of both the city of Laguna Niguel and the city of Dana Point decreased between 2019 and 2020 (-0.072 percent and -0.199 percent respectively). However, for the decade between 2010 and 2020 the city of Laguna Niguel's population increased by 3.71 percent while the city of Dana Point's population decreased by -0.61 percent. In 2010, the city of Laguna Niguel's estimated population was 62,979 and the city of Dana Point's estimated population was 33,351. These numbers were well down in population ranking, as the 17th and 27th most populated cities (out of 34 cities total in the county), and these rankings did not change over the decade. Estimates for each city's 2020 population were 65,316 and 33,146, respectively. Total numbers of housing units increased in both counties by 924 (to a total of 26,236 units) and by 224 (to a total of 16,162 units), respectively, according to the California Department of Finance (2020b).

#### Discussion:

- a. **Would the project induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?**

**No Impact.** The proposed Project will be replacing infrastructure with similar capacities, and thus would not change the availability of utilities or services to either city. As a result, it would not change water supply or sewer services, and would not result in any change to (i.e., exceedance of) existing water entitlements nor will it provide additional capacity in the wastewater treatment system. In addition, the proposed Project would not involve nor induce the construction of any new homes, businesses, or other uses that could result in direct population growth. Therefore, no impacts with regard to growth-inducement would be expected.

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

- b. **Would the project displace substantial number of existing people or housing, necessitating the construction of replacement housing elsewhere?**

**No Impact.** The Project site is currently within a transportation right-of-way, and this will remain the same upon completion. Construction of the Project would not require the removal or obstruction of existing housing and therefore would not require the displacement of people or the construction of replacement housing elsewhere. Therefore, no impacts would occur.

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

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### 3.4.15 PUBLIC SERVICES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a 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 following public services:				
	i.) Fire protection?				X
	ii.) Police protection?				X
	iii.) Schools?				X
	iv.) Parks?				X
	v.) Other public facilities?				X

#### Existing Conditions:

Public services include critical facilities such as police stations, fire stations, hospitals, shelters, and other facilities that provide important services to the community. Other public services include schools and parks and libraries that serve the communities.

Fire protection and other related services in Dana Point and Laguna Niguel are provided by the OCFA. The closest OCFA station to the Project site is Station No. 5, located at 23600 Pacific Island Drive near the northern end of the Project site (City of Dana Point 1995c; City of Laguna Niguel 1992b).

Police protection services for Dana Point and Laguna Niguel are provided by the Orange County Sheriff's Department at 30331 Crown Valley Parkway located near the northern end of the Project site (City of Dana Point 1995c; City of Laguna Niguel 1992b). The Capistrano Unified School District administers public schools for Dana Point and Laguna Niguel (City of Dana Point 1991b; City of Laguna Niguel 1992b). The Orange County Public Library System operates the Crown Valley Branch Library in Laguna Niguel and the Dana-Niguel Branch in Dana Point (City of Dana Point 1991b; City of Laguna Niguel 1992b).

#### Discussion:

- a. **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a 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:**

#### i.) Fire Protection

**No Impact.** The proposed Project would not increase the need for fire protection services because no residential uses are proposed, and the Project will not result in an increase in the local population. Therefore, no impacts to fire protection services or facilities are expected.



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

**ii.) Police Protection**

**No Impact.** The proposed Project would not increase the need for additional police protection services. The proposed Project would not introduce any residential, commercial, or other uses that would require an increase in demand for police protection beyond what is currently provided. Therefore, the Project would not require police facilities to be altered.

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

**iii.) Schools**

**No Impact.** Implementation of the proposed Project would not create a need for construction of additional school facilities, as the Project would not result in an increase in population, nor would it result in removal of schools, a reduction of school capacity, or displacement of students from existing schools. Therefore, no impact to school services or facilities are expected.

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

**iv.) Parks**

**No Impact.** Implementation of the proposed Project would not cause demand for construction of additional park facilities, as the Project would not result in an increase in population, nor would it result in removal of parks. Therefore, no impacts to parks are expected.

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

**v.) Other Public Facilities**

**No Impact.** The proposed Project would not alter any of the government facilities in the area or produce a need for additional or new government services; therefore, no impacts to other public facilities are expected.

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

### 3.4.16 RECREATION

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	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?				X
b.	Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				X

#### Existing Conditions:

The city of Dana Point has approximately 28 parks, of various sizes covering a total of 82 acres, located throughout Dana Point (City of Dana Point 2021). The closest park to the Project site is Sea Terrace Park, located at the intersection of Pacific Coast Highway and Niguel Road, about 1 mile from the Project (at its closest point).

The city of Laguna Niguel has access to 30 parks, including two of Orange County's regional parks. Laguna Niguel owned parks comprise nearly 100 acres, and one of the largest, Crown Valley Park is located just a couple hundred feet northeast of the intersection of Crown Valley Parkway and Niguel Road; less than a half mile from the Project (City of Laguna Niguel 2021a).

#### Discussion:

- 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.** The construction or operation of the proposed Project would not involve temporary access to, or use of, any park. The proposed Project would not add additional residences or business in the neighborhood and thus would not cause additional use of any park or other recreational facilities in the area. Therefore, no impact to existing neighborhood and regional parks or other recreational facilities would occur.

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

**No Impact.** The proposed Project does not include recreational facilities or expansion of existing recreational facilities; therefore, no impact would occur.

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

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### 3.4.17 TRANSPORTATION

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian facilities?			X	
b.	Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			X	
c.	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d.	Result in inadequate emergency access?			X	

#### Existing Conditions:

The Project site is located in southern Orange County and parallels a portion of Crown Valley Parkway. Its southern end is within the city of Dana Point, and from there extends over a mile and a half into the city of Laguna Niguel. Pacific Coast Highway is the southern end of Crown Valley Parkway, and it also intersects Interstate 5 north of the Project. The nearest airport is John Wayne Airport located approximately 13 miles to the north.

#### Discussion:

- a. **Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian facilities?**

**Less than Significant Impact.** The proposed Project would not conflict with any transit plan or ordinance. Traffic control will be needed to temporarily reduce available lanes during construction of the pipeline and street resurfacing, but full road closures are not anticipated during construction. These impacts would be short-term and temporary and would have a less than significant impact on circulation surrounding the site.

Once completed, inspections of the Project's air valves and the Master Meter will require one weekly vehicle trip. This should not result in a significant change in the number of trips in the vicinity of the Project site. Therefore, long-term impacts would be less than significant.

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

- b. **Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?**

**Less than Significant Impact.** As discussed in Section 3.4.17 (a), the Project would have less than significant impacts to traffic and circulation.

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

**c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

**Less Than Significant Impact.** The proposed Project would include pavement replacement over the pipeline trenches. These changes are not expected to result in any design features that would increase hazards, and impacts would be less than significant.

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

**d. Would the project result in inadequate emergency access?**

**Less Than Significant Impact.** Traffic control will be needed to temporarily reduce available lanes during construction of the pipeline and street resurfacing, but full road closures are not anticipated during construction. Construction equipment and staging for the Project would be at a designated location adjacent to, or within the Project site. These impacts would be short-term and temporary and would not limit access to emergency services; therefore, no significant impact would occur.

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

### 3.4.18 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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:				
a. 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		X		
b. 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, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

PRC section 21074 defines tribal resources as follows:

(a) “Tribal cultural resources” are either of the following:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

(A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.

(B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(2) 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a “nonunique archaeological resource” as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

### Existing Conditions:

The Project area is within the ancestral territory traditionally inhabited by the Juaneño, Takic speakers, historically associated with the Mission San Juan Capistrano. The Gabrieliño (Tongva) were to the north and the Luiseño to the south. The Juaneño are considered to be linguistically and ethnologically related to the Luiseño. The Juaneño occupied the coastal areas extending from Aliso Creek to the northwest, south along the coast to San Onofre and Las Pulgas, and inland to the Sierra Santa Ana. Similar to the Gabrieliño (Tongva) and Luiseño, the Juaneño were fisher-hunter-gatherers who exploited a variety of floral and faunal resources available within the coastal bay, littoral, riverine, marsh, and interior grassland valley ecological zones of their territory. Subsistence resources included items such as several species of oak trees, grasses, sage bushes, rabbits, deer, fish, shellfish, and other terrestrial and marine mammals. Today, the Juaneño Band of Mission Indians, Acjachemen Nation is governed by a Tribal Council. The tribe is active in government, has many citizens, tribal committees, community activities, and tribal gatherings.

### Discussion:

- 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 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)?**

**Less Than Significant Impact with Mitigation Incorporated.** The SCCIC search identified one prehistoric archaeological site (P-30-000033: potentially previously destroyed due to development) within the Project footprint (see Section 3.4.5) and this site was not evaluated for CRHR-eligibility. The NAHC Sacred Land File results were positive for the Project (see Section 3.4.5). The NAHC recommended contacting the Juaneño Band of Mission Indians, Acjachemen Nation-Belardes.

In conformance with Assembly Bill 52 tribal consultation requirements, the District notified the Native American Tribes/Tribal representatives that are traditionally and culturally affiliated with the Project site. The Juaneño Band of Mission Indians, Acjachemen Nation-Belardes requested consultation on this Project. Consultation between the District and representatives of the Juaneño Band of Mission Indians, Acjachemen Nation-Belardes is ongoing. To protect tribal cultural resources and potential unanticipated discoveries associated with tribal cultural resources CUL-1, CUL-2, and CUL-3 were incorporated into this Project. Therefore, Project impact would be less than significant with mitigation incorporated, and no further analysis is required.

- b. **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 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, the lead agency shall consider the significance of the resource to a California Native American tribe.**



**Less Than Significant with Mitigation Incorporated.** As identified in the response to 3.4.18 (a) above, consultation between the District and is ongoing. Mitigation measures CUL-1, CUL-2, and CUL-3 to protect potential unanticipated discoveries associated with tribal cultural resources were incorporated into this Project. Therefore, project impact would be less than significant, and no further analysis is required.

**Mitigation Measures:**

See Section 3.4.5.

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### 3.4.19 UTILITIES AND SERVICE SYSTEMS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b.	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				X
c.	Result in a determination by the wastewater treatment provider that 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?				X
d.	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e.	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				X

#### Existing Conditions:

The District delivers high-quality drinking water, recycled water, and wastewater services to approximately 172,000 customers in Laguna Niguel, Dana Point, and four other cities in southern Orange County (a service area encompassing 35 square miles). The District's sewer collection system consists of approximately 520 miles of gravity sewer lines and uses 16 active wastewater lift stations (District 2009). The District also operates a water distribution system which includes over 656 miles of water mains. The District's potable water supply is imported entirely from either (a) northern California, through the California State Water Project or (b) the Colorado River via the Colorado River Aqueduct, purchased from the Metropolitan Water District of Southern California (District 2021).

Both the city of Laguna Niguel and the city of Dana Point tie into the regional flood control systems and facilities operated and maintained by the Orange County Flood Control District. Specific flood control facilities that handle drainage from the project area include the Aliso Creek Channel (J01) and the Salt Creek Channel (K01) managed by the Orange County Flood Control District (County of Orange 2013). In addition, local drainage is provided by storm drain systems installed and maintained by each city. In addition, the NPDES Stormwater Permit issued to Orange County and its co-permittees (including both the city of Dana Point and the city of Laguna Niguel) requires that development projects incorporate appropriate BMPs to minimize pollutant levels in runoff (County of Orange 2019).

CR&R Environmental Services, Inc. provides collection and recycling services for solid waste in both the city of Dana Point and the city of Laguna Niguel. They have an operating agreement with the Orange County Landfill System for disposal and/or recycling of solid wastes. The closest county facility to these two communities is the Prima Deshecha landfill in San Juan Capistrano. In 2019, approximately 85 percent of the solid waste from Laguna Niguel and 91 percent from Dana Point was disposed of at this landfill (CalRecycle 2021).

**Discussion:**

- a. **Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

**Less than Significant Impact.** The proposed Project involves replacement of underground pipelines, as well as the construction of a minor number of associated facilities (both aboveground and underground). Construction of these pipelines and facilities would result in minor and temporary impacts to air, noise, and traffic during construction activities, but these have been reduced through mitigation, where necessary, to maintain impacts at a less than significant level. No impacts from post-construction use of these pipelines or other facilities are expected. Overall, impacts from construction and operation of the replaced pipelines would be less than significant.

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

- b. **Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

**No Impact.** Implementation of the pipeline replacement project would not result in exceedance of the District's existing water entitlements. It would improve reliability and efficiency of the supply system, by reducing the potential for pipeline failure. As such, no impacts would occur.

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

- c. **Would the project result in a determination by the wastewater treatment provider that 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.** The proposed Project would not require any new or additional wastewater treatment capacity, and therefore, no impact would occur.

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

- d. **Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?**

**Less than Significant Impact.** 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 pipelines, and other materials, etc.), the generation of these materials would be short-term in nature and would not substantially affect the capacity of the regional landfills; therefore, impacts would be less than significant.

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

- e. **Would the project comply with federal, state, and local management and reduction 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 District requirements for solid waste generated during the construction process; therefore, no impact would occur.

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

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### 3.4.20 WILDFIRE

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:					
a.	Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
b.	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X
c.	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			X	
d.	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

#### Existing Conditions:

The Project site is located in an urbanized and fully developed area and is not located within or near any wildland areas (County of Orange 2012). In addition, the Project site is linear and is located adjacent to, and possibly overlaps with, landslide risk zones; but the land within and near the Project site is relatively flat.

The OCFA provides emergency response to fires and hazardous materials incidents in both the city of Dana Point and the city of Laguna Niguel. The city of Dana Point maintains a Public Safety Element of the General Plan, while the city of Laguna Niguel's Police Services in conjunction with the American Red Cross and Orange County Sheriff's Department Emergency Management, has developed an emergency preparedness program. These planning efforts provide direction and guidance for officials, and citizens, in the event of emergency; including emergencies related to major fires and/or explosions, industrial accidents, traffic control, and hazardous materials spills (City of Dana Point 1995c; City of Laguna Niguel 2021b).

#### Discussion:

**If located in or near state responsibility areas or lands classified as very high fire hazard severity zones:**

- a. **Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?**

**Less than Significant Impact.** The Project site is not located within or near any wildland areas (County of Orange 2012). For construction of the proposed Project, traffic control will be needed



to temporarily reduce available lanes during the construction of the pipelines, utility services and street resurfacing; however, full road closures are not anticipated. In addition, a traffic control plan will be prepared to accommodate this work area width along the pipeline route. These impacts would be short-term and temporary and would have a less than significant impact to roadways utilized for emergency purposes. During operation, the Project would not require full-time employees at the site and thus would not increase the burden on existing emergency response plans. Only one weekly trip to the Project site would be required during operation and thus would not generate traffic congestion, nor obstruct traffic flow or emergency operations. During Project operation, emergency access would be maintained to all residences and public facilities since the existing adjacent roads would not be altered. Therefore, the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and impacts would be less than significant.

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

- b. Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?**

**No Impact.** The Project site is not located within or near any wildland areas (County of Orange 2012). The land within and near the pipeline route (i.e., the Project site and vicinity) is relatively flat. In addition, the Project involves pipeline installation and does not provide for, nor impact any existing habitable structures. Therefore, the Project would not expose people to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

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

- c. Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**

**Less Than Significant Impact.** The Project site is not located within or near any wildland areas (County of Orange 2012) and only involves construction of an underground pipeline. The facilities to be installed by this Project will not exacerbate fire risk during construction or after completion. Impacts would be less than significant.

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

- d. Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

**No Impact.** The land within and in the vicinity of the Project site is relatively flat. The Project site and adjacent land are not located in any Federal Emergency Management Agency Flood Zones. Finally, the Project site is not located within, or near to, any wildland areas. Therefore, the installation of an underground pipeline would not exacerbate any flooding or landslide risks associated with post-fire conditions, therefore, no impacts are expected.

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

### 3.4.21 MANDATORY FINDINGS OF SIGNIFICANCE

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Mandatory Findings of Significance					
a.	Does the project have the potential to substantially 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?		X		
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.)			X	
c.	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?		X		

#### Discussion:

- a. **Does the project have the potential to substantially 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?**

**Less than Significant Impact with Mitigation Incorporated.** As discussed in Section 3.4.4, Biological Resources, the Project is located in an urban area and does not provide biological habitat for species of concern or for federally listed species. In order to reduce indirect impacts to CAGN and nesting habitats for resident and migratory birds, the District will implement measures **BIO-1** to help further avoid, eliminate, and/or reduce impacts on the CAGN and **BIO-2** to avoid, eliminate, and reduce impacts on breeding birds to less than significant levels.

In addition, as discussed in Section 3.4.5, Cultural Resources, the Project site and surrounding area has been completely disturbed by development and has been subject to extensive ground disturbance in the past. As such, any historical, archaeological, and paleontological resources which may have existed in the Project site would have likely been disturbed. However, adherence to Mitigation Measures **CUL-1** through **CUL-3** and **GEO-1** will be required in the event unexpected resources are uncovered during the grading and excavation process. With

implementation of recommended mitigation, the proposed Project is not expected to eliminate important examples of the major periods of California history or prehistory, and impacts would be less than significant.

**Mitigation Measures:** Implement Mitigation Measures **BIO-1**, **BIO-2**, **CUL-1** through **CUL-3** (described in Section 3.4.4) and **GEO-1** (described in Section 3.4.7).

- b. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)**

**Less than Significant Impact.** As the Project involves replacement of existing water and sewer facilities, the Project would not result in substantial population growth within the area, either directly or indirectly. SCWD is planning to relocate a portion of the JTM into the Crown Valley Parkway right-of-way. This work will be adjacent to the Project, specifically the proposed alignments of the Lower Salada Lift Station Force Main and Crown Valley Parkway Transmission Main Lower Reach. The District will be coordinating with SCWD’s design firm on both the new location of the SCWD 39-inch JTM and the outlet for the Project’s relocated I.D. No. 1 Master Meter. The environmental impacts of the SCWD JTM project are expected to be similar to the Project’s and are unlikely to significantly affect environmental resources. Although the Project and the SCWD JTM project may incrementally affect environmental resources at a less than significant level, the Project’s contribution to these effects is not considered “cumulatively considerable”, in consideration of the relatively nominal impacts of the Project and the mitigation measures provided to lessen impacts. Therefore, cumulative impacts would be considered less than significant.

**Mitigation Measures:** No additional mitigation is required beyond what is already included previously.

- c. Does the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?**

**Less than Significant Impact with Mitigation Incorporated.** Previous sections of this Initial Study/Mitigated Negative Declaration reviewed the proposed Project’s potential impacts related to aesthetics, air quality, geology and soils, GHGs, hydrology/water quality, noise, hazards and hazardous materials, traffic, and other issues. As concluded in these previous discussions, the proposed Project would result in less than significant environmental impacts with implementation of the mitigation measures (e.g., for noise); therefore, the proposed Project would not result in environmental impacts that would cause substantial adverse effects on human beings and impacts would be less than significant.

**Mitigation Measures:** Implement Mitigation Measure **NOISE-1** to mitigate Project noise impacts.

## **4.0 LIST OF PREPARERS**

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Sierra Mars, Mapping/Graphics

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## FIGURES

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 Project Area



Figure 2-1  
Project Vicinity Map

Crown Valley Pipelines  
Replacement Project  
Orange County, California

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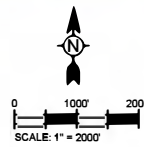



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### LEGEND

- EXIST 16"/12" CROWN VALLEY TRANSMISSION MAIN (CVTM)
- EXIST 12" SEWER FORCE MAIN
- EXIST 39" JOINT TRANSMISSION MAIN (JTM)
- PROP 39" JOINT TRANSMISSION MAIN (JTM)
- PROP 12" TRANSMISSION WATER MAIN
- PROP 12" DUAL SEWER FORCE MAIN
- PROP MASTER METER LOCATION



 <b>TETRA TECH</b> <a href="http://www.tetratech.com">www.tetratech.com</a> 17885 VON KARMAN AVE, SUITE 500 IRVINE, CA 92614 TEL: (949) 809-5000 FAX: (949) 809-5010	MOULTON NIGUEL WATER DISTRICT		Project No.: 200-09366-21001
	CROWN VALLEY PIPELINES REPLACEMENT PROJECT		Date: JUNE 2021
	OVERALL PROJECT LOCATION		Designed By: JDM
			FIGURE 2-2

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— RELOCATED 36" JOINT TRANSMISSION MAIN (JTM) (BY OTHERS)

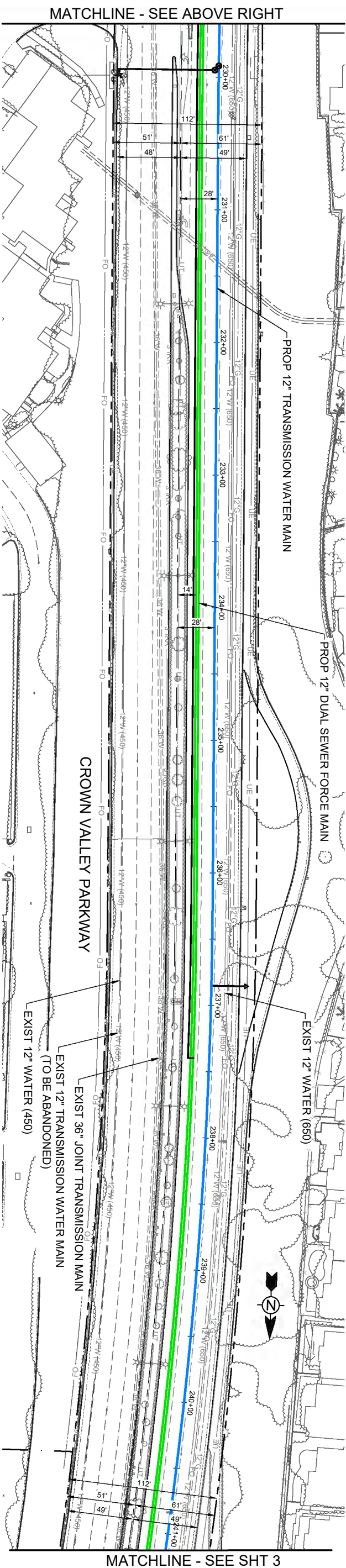
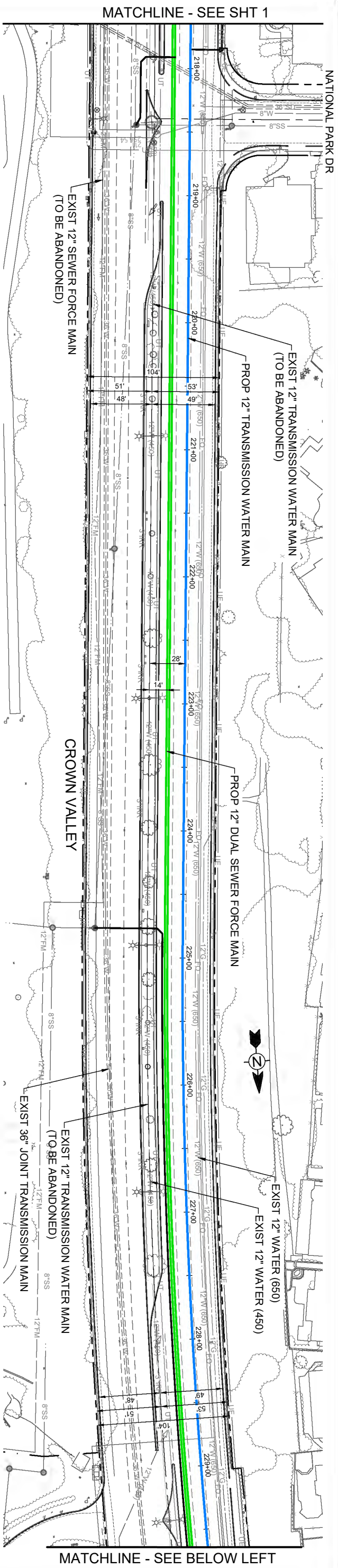
— PROP 12"/16" TRANSMISSION WATER MAIN

— PROP 12" DUAL SEWER FORCE MAIN


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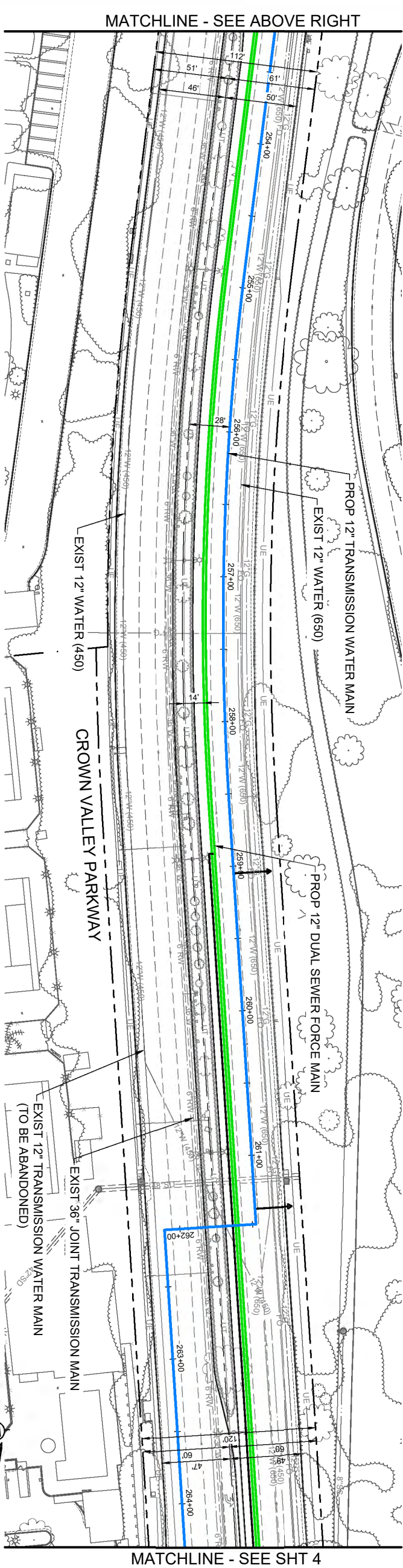


- RELOCATED 36" JOINT TRANSMISSION MAIN (JTM) (BY OTHERS)
- PROP 12"/16" TRANSMISSION WATER MAIN
- PROP 12" DUAL SEWER FORCE MAIN

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	Project No.: 200-09366-21001 Date: AUGUST 2021 Designed By: JDM	LOWER SALADA LS 12" DUAL FORCE MAIN CROWN VALLEY PKWY 12" TRANSMISSION WATER MAIN FIGURE <b>2-3b</b>

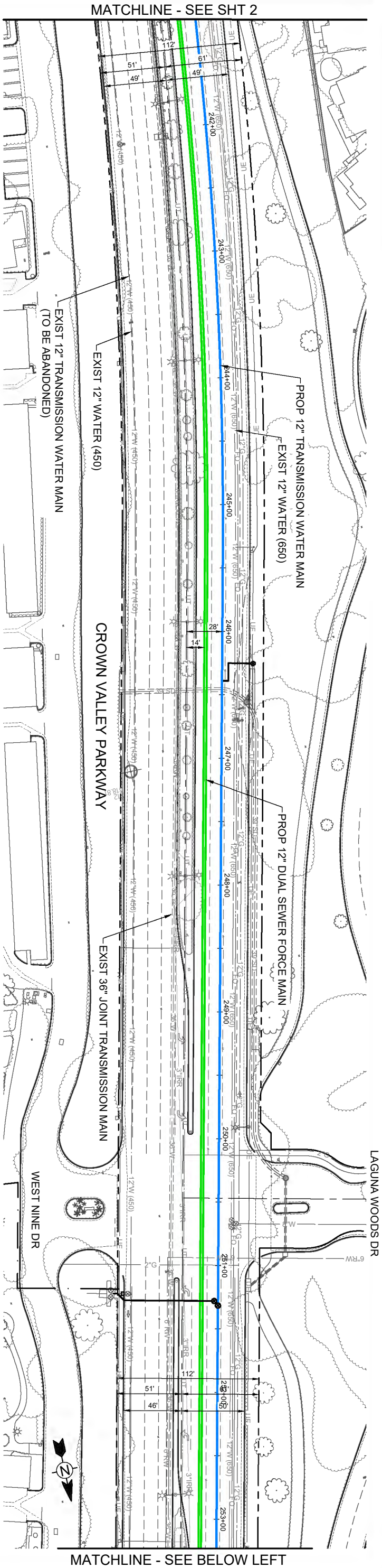
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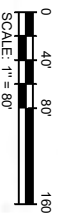


LEGEND

- RELOCATED 36" JOINT TRANSMISSION MAIN (JTM) (BY OTHERS)
- PROP 12" 16" TRANSMISSION WATER MAIN
- PROP 12" DUAL SEWER FORCE MAIN



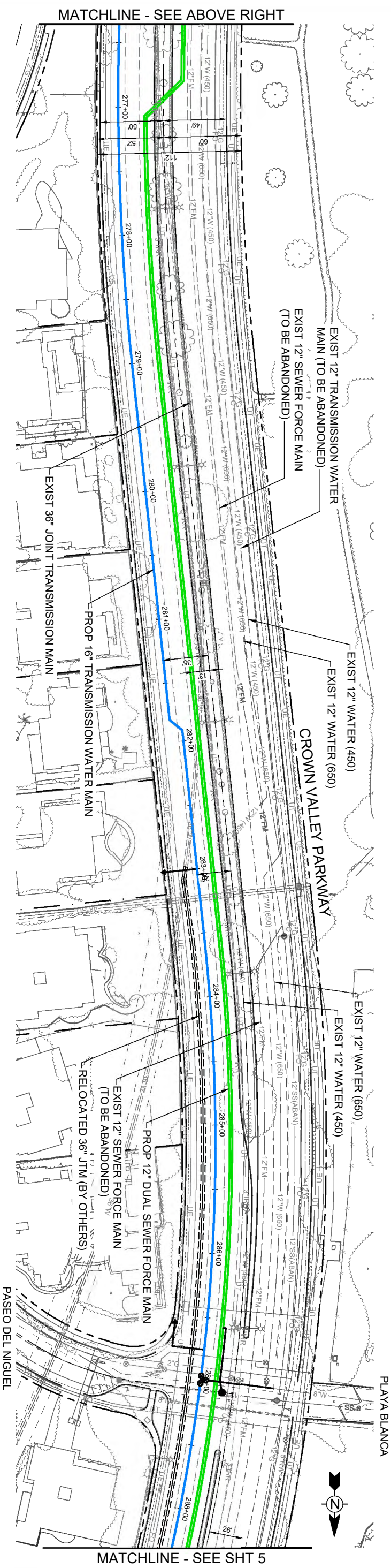
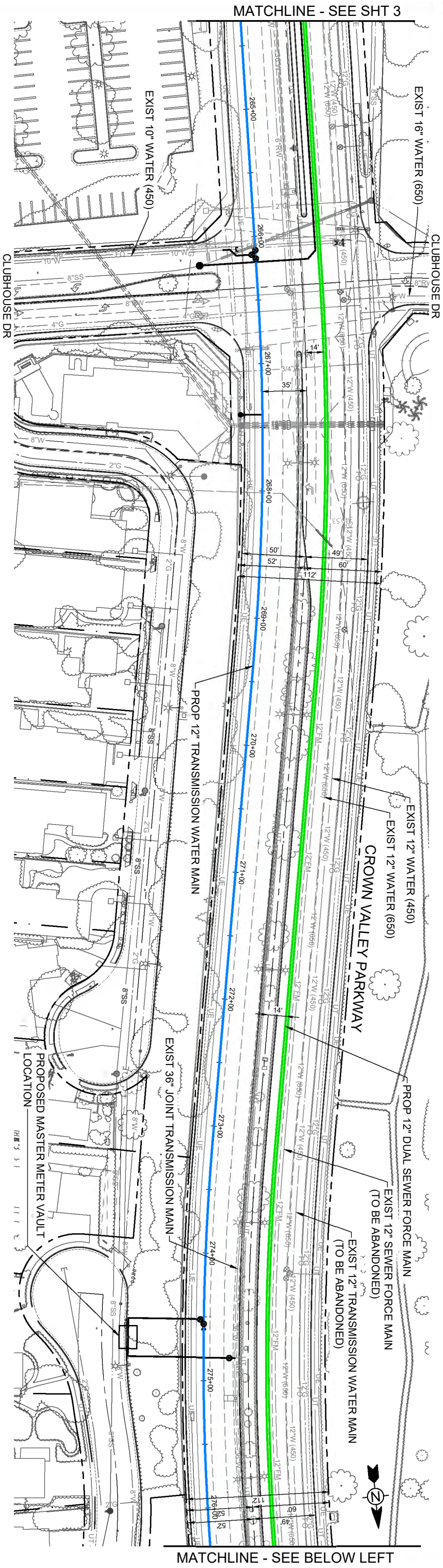
 <b>TETRA TECH</b> <a href="http://www.tetrattech.com">www.tetrattech.com</a>	<b>MOULTON NIGUEL WATER DISTRICT</b> CROWN VALLEY PIPELINES REPLACEMENT
17885 VON KARMAN AVE, SUITE 500 IRVINE, CA 92614 TEL: (949) 809-5000 FAX: (949) 809-5010	<b>LOWER SALADA LS 12" DUAL FORCE MAIN</b> CROWN VALLEY PKWY 12" TRANSMISSION WATER MAIN
Project No.: 200-09366-21001 Date: AUGUST 2021 Designed By: JDM	<b>FIGURE</b> <b>2-3C</b>



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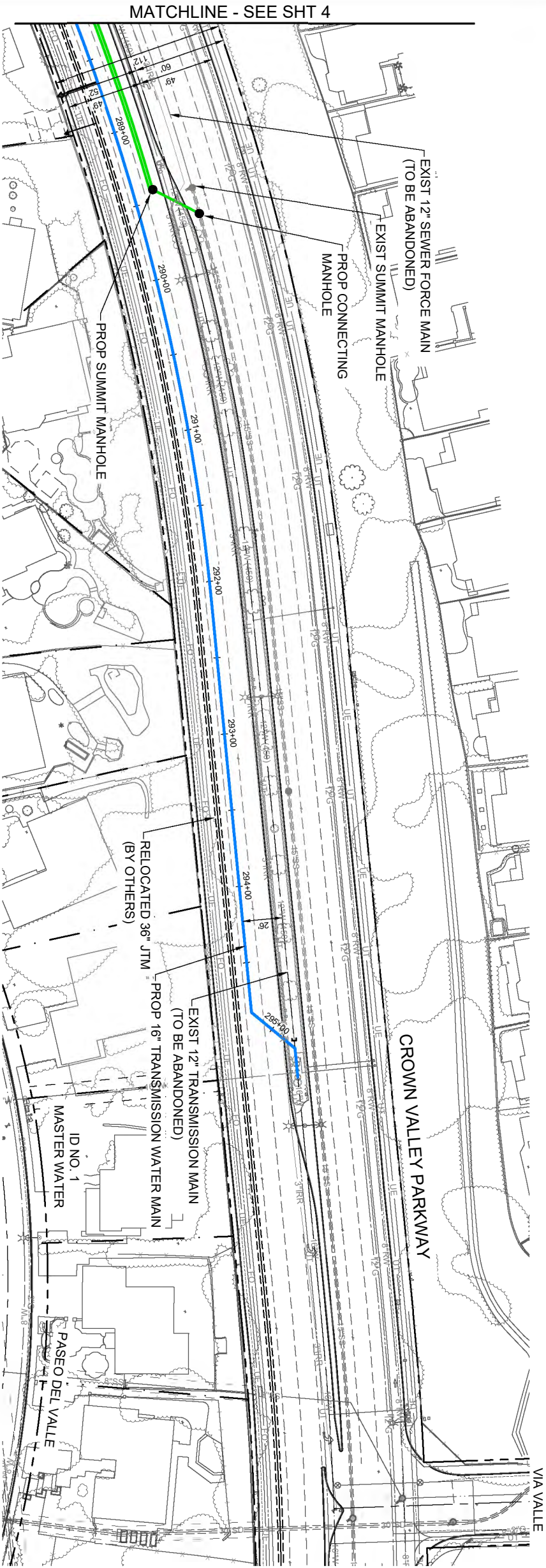
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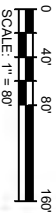
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LEGEND

- RELOCATED 36" JOINT TRANSMISSION MAIN (JTM) (BY OTHERS)
- PROP 12"/16" TRANSMISSION WATER MAIN
- PROP 12" DUAL SEWER FORCE MAIN

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	Crown Valley Pipelines Replacement		Date: AUGUST 2021
Lower Salada LS 12" Dual Force Main Crown Valley Pkwy 12" Transmission Water Main			Designed By: JDM
FIGURE			2-3e

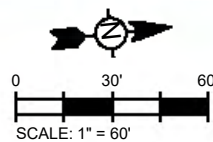
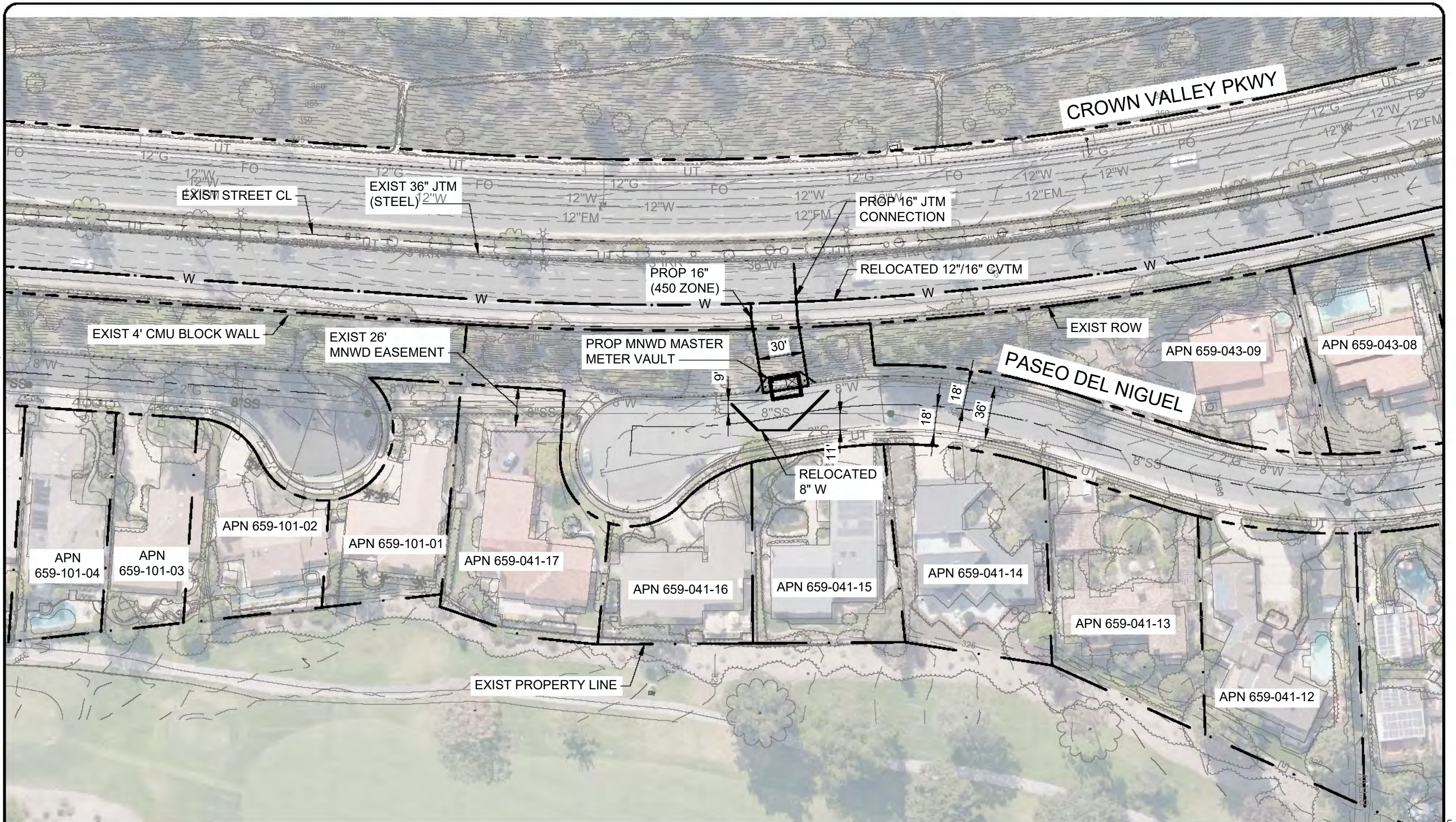


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**MOULTON NIGUEL WATER DISTRICT**  
CROWN VALLEY PIPELINES REPLACEMENT  
**MASTER METER VAULT LOCATION**  
**LOCATION**

Project No.: 200-09366-21001  
Date: AUGUST 2021  
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**FIGURE**  
**2-4**

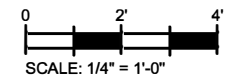
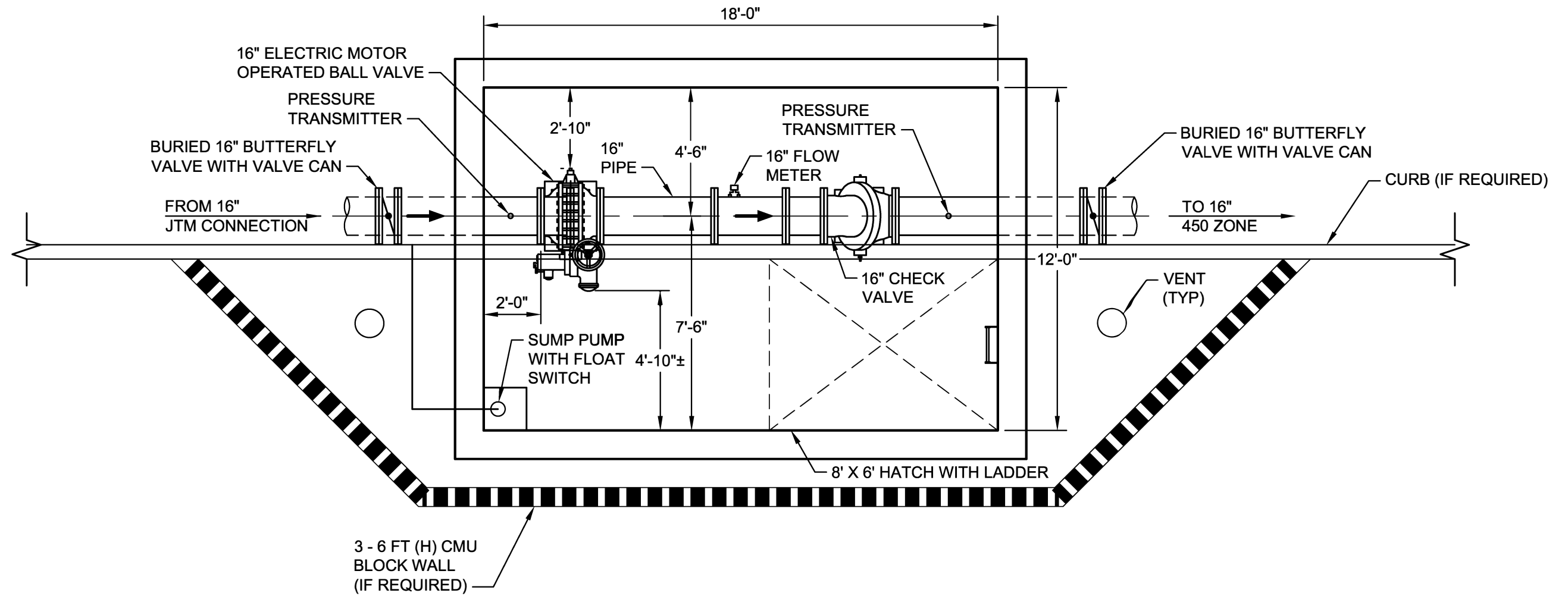
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MOULTON NIGUEL WATER DISTRICT

CROWN VALLEY PIPELINES REPLACEMENT

CONCEPTUAL MASTER METER VAULT

Project No.: 200-09366-21001

Date: AUGUST 2021

Designed By: JDM

FIGURE

**2-5**

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Laguna Niguel open space located at Crown Valley Parkway and Camino del Avion/Pacific Island Drive intersection. The coastal sage scrub plant community within the Laguna Niguel open space is dominated California sagebrush and lemonade berry. The site is steep and vegetative cover is dense with little open ground.

Figure 3-1

Crown Valley Pipelines  
Replacement Project  
Orange County, California



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The coastal sage scrub plant community within the Laguna Niguel open space is dominated California sagebrush and lemonade berry. The site is steep and vegetative cover is dense with little open ground.

Figure 3-2

Crown Valley Pipelines  
Replacement Project  
Orange County, California



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The Laguna Niguel open space is fenced with no public access.

Figure 3-3

Crown Valley Pipelines  
Replacement Project  
Orange County, California

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Looking north from the Crown Valley Parkway and Pacific Island Drive intersection. The Laguna Niguel open space is fenced and situated back from the Crown Valley Parkway sidewalk.

Figure 3-4

Crown Valley Pipelines  
Replacement Project  
Orange County, California

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Looking south towards the Crown Valley Parkway and Pacific Island Drive intersection. The coastal sage scrub is situated back from the Crown Valley Parkway sidewalk.

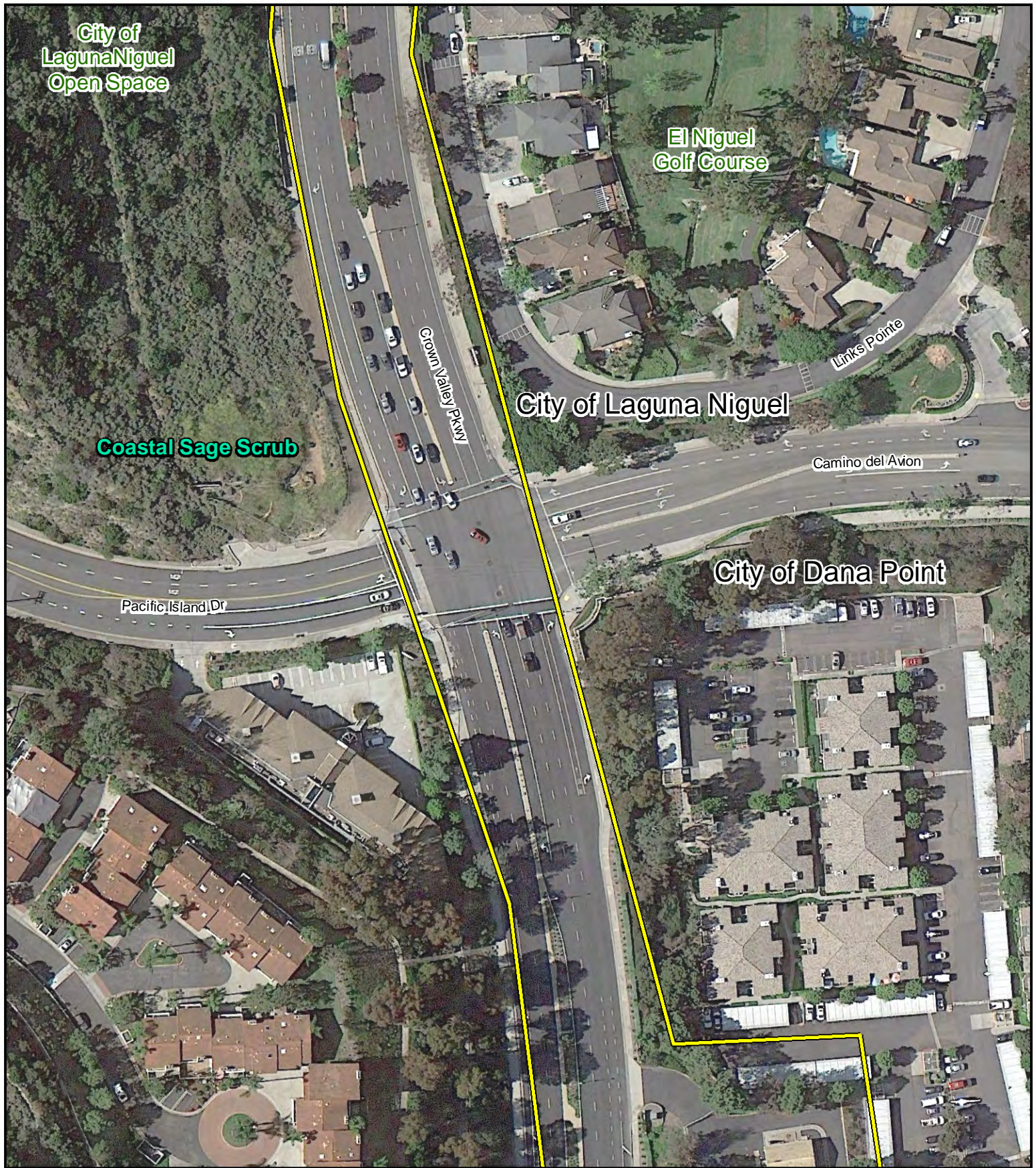
Figure 3-5

Crown Valley Pipelines  
Replacement Project  
Orange County, California



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 Project Area

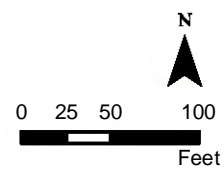


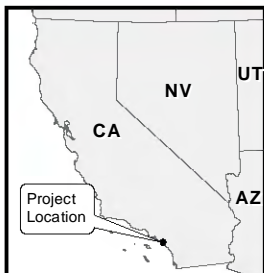
Figure 3-6  
Plant Community

Crown Valley Pipelines  
Replacement Project  
Orange County, California



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- Project Area
- Final Critical Habitat for Coastal California Gnatcatcher (Unit 7)

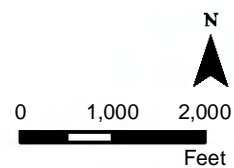


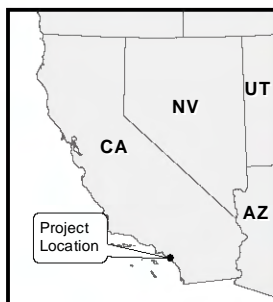
Figure 3-7  
USFWS Designated  
Critical Habitat

Crown Valley Pipelines  
Replacement Project  
Orange County, California



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- Project Area
- Tsunami Inundation Line
- Tsunami Inundation Area
- FEMA Flood Hazard Area
- 1% Annual Chance Flood Hazard
- 0.2% Annual Chance Flood Hazard

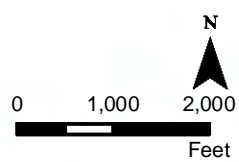


Figure 3-8  
Hydrology

Crown Valley Pipelines  
Replacement Project  
Orange County, California



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## **APPENDIX A**

### **MITIGATION MONITORING AND REPORTING PLAN**

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# **Moulton Niguel Water District Crown Valley Pipelines Replacement Project**

## **MITIGATION MONITORING AND REPORTING PROGRAM**

**Prepared For:**

**Moulton Niguel Water District**  
26161 Gordon Road  
Laguna Hills, CA 92653



### MITIGATION MONITORING AND REPORTING PROGRAM

Public Resources Code, Section 21081.6 (Assembly Bill 3180) requires that mitigation measures identified in environmental review documents prepared in accordance with California Environmental Quality Act (CEQA) are implemented after a project is approved. Therefore, this Mitigation Monitoring and Reporting Program (MMRP) has been prepared to ensure compliance with the adopted mitigation measures during the Moulton Niguel Water District Crown Valley Pipelines Replacement Project (Project). The Moulton Niguel Water District is the agency responsible for implementation of the mitigation measures identified in the Initial Study/Mitigated Negative Declaration.

This MMRP provides the Moulton Niguel Water District with a convenient mechanism for quickly reviewing all the mitigation measures including the ability to focus on select information such as timing. The MMRP includes the following information for each mitigation measure:

- The phase of the project during which the required mitigation measure must be implemented;
- The phase of the project during which the required mitigation measure must be monitored; and
- The monitoring agency.

The MMRP includes a checklist to be used during the mitigation monitoring period. The checklist will verify the name of the monitor, the date of the monitoring activity, and any related remarks for each mitigation measure.

MITIGATION MONITORING AND REPORTING PROGRAM					
Mitigation Measure	Implementation Phase	Monitoring Phase	Monitoring Agency	Compliance Verification	
				Initial	Date
<b>BIO-1: Seasonal Work Restrictions near the Laguna Niguel Open Space</b> Direct and indirect impacts on nesting Coastal California gnatcatchers (CAGNs) shall be avoided and/or reduced by time restrictions placed on construction activities near the Laguna Niguel open space. <ol style="list-style-type: none"> <li>Construction within 300 feet of coastal sage scrub habitat shall be conducted outside the CAGN breeding season. The breeding season of the CAGN generally extends from February 15 through July 15, with the peak of nest initiations occurring from mid-March through mid-May.</li> <li>If construction activities must be completed during the CAGN breeding season (February 15 through July 15), then a qualified biologist shall perform weekly surveys of the coastal sage scrub habitat to identify active nests.</li> <li>If active nests are found, the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife</li> </ol>	Pre-Construction, Construction	Pre-Construction, Construction	Moulton Niguel Water District		

MITIGATION MONITORING AND REPORTING PROGRAM					
Mitigation Measure	Implementation Phase	Monitoring Phase	Monitoring Agency	Compliance Verification	
				Initial	Date
<p>(CDFW) shall be contacted, and measures shall be taken to minimize impacts.</p> <p>d. If no nesting activity is observed, then work may proceed, but weekly monitoring of the area shall be required until July 15 to ensure that no new nests have been built.</p>					
<p><b>BIO-2: Pre-construction Breeding Bird Surveys</b></p> <p>The peak breeding season for birds generally runs from February 1 through September 1, but can vary slightly from year to year, usually depending on weather conditions. Raptors are known to begin nesting early in the year and some begin as early as January 1; however, there is little potential for raptors to breed within the tall trees located along Crown Valley Parkway and there is no raptor breeding habitat within the Laguna Niguel open space. To avoid and reduce impacts on migratory, non-game breeding birds, and their nests, young, and eggs, the District shall implement the following measures prior to Project mobilization, staging, and other disturbances.</p> <p>a. Project activities that could remove or disturb potential nest sites shall be scheduled outside the peak breeding season for birds (September 2 through January 31). Removing all physical features that could potentially serve as nest sites outside of the breeding season for birds will also help to prevent birds from nesting within the Project site during the breeding season and during construction activities. No further action is necessary if Project activities occur during the non-breeding season.</p> <p>b. If Project activities that could remove or disturb potential bird nest sites occur from February 1 through September 1, a qualified biologist experienced in conducting breeding bird surveys shall conduct a pre-construction clearance and nesting bird survey within the work site(s) three days prior to the work in the area.</p> <p>c. If no active nests are observed during the pre-construction bird nesting survey, or if they are observed and will not be disturbed by Project activities, then those activities may begin, and no further action shall be required. This will be determined by the biologist.</p>	Pre-Construction, Construction	Pre-Construction, Construction	Moulton Niguel Water District		

MITIGATION MONITORING AND REPORTING PROGRAM					
Mitigation Measure	Implementation Phase	Monitoring Phase	Monitoring Agency	Compliance Verification	
				Initial	Date
<p>d. If an active nest is identified and will potentially be disturbed by Project activities, a no-activity buffer zone shall be established between the Project activities and the active nest so that nesting activities are not interrupted. The buffer should be a minimum width of 100 feet (500 feet for special-status birds or raptors). The biologist shall determine the appropriate size of the buffer zone based on the type of activities planned near the nest and type of bird species nesting. Adjustments in the nest buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors. The buffer zone shall be delineated on maps and marked with flagging or other means. No Project construction shall occur within the buffer zone until the biologist has determined that the young have fledged, are no longer being fed by the parents, or have left the nest, and will no longer be impacted by Project activities. Once the nesting cycle is complete, Project activities may begin within the buffer zone.</p> <p>e. If special-status species are observed during the pre-construction survey, the biologist shall contact appropriate resource agencies to develop additional avoidance, minimization, and/or mitigation measures, prior to commencing Project activities. Appropriate permits, if necessary, shall also be obtained.</p>					
<p><b>CUL-1: Environmental Training:</b> Prior to Project construction, a qualified archaeologist will provide a cultural resource instruction for all on-site Project personnel. This instruction will cover the following:</p> <ul style="list-style-type: none"> <li>• all applicable laws and penalties for disturbing cultural resources,</li> <li>• discuss the prehistoric and historic regional context and archaeological sensitivity of the area,</li> <li>• describe the types of cultural resources found in the area,</li> <li>• instruct Project workers that they must halt construction if a cultural resource is inadvertently discovered during construction, and</li> </ul>	Pre-Construction; Construction	Pre-Construction; Construction	Moulton Niguel Water District		

MITIGATION MONITORING AND REPORTING PROGRAM					
Mitigation Measure	Implementation Phase	Monitoring Phase	Monitoring Agency	Compliance Verification	
				Initial	Date
<ul style="list-style-type: none"> <li>• present the procedures they are to follow in the event an inadvertent discovery is made (CUL-3).</li> </ul> <p>The Inadvertent Discovery Plan will describe appropriate procedures, notifications, and treatment of cultural resources, and respectful behavior after a discovery (e.g., no posting to social media or photographs). If requested by a local tribe(s), a tribal representative(s) shall be invited to participate in the environmental training to discuss or provide context from a tribal cultural perspective regarding the cultural resources within the region.</p>					
<p><b>CUL-2: Cultural Resource Monitoring Plan and Inadvertent Discovery Plan</b> – A qualified archaeologist that meets the Secretary of the Interior’s Professional Qualifications Standards (36 Code of Federal Regulations Part 61) will be retained for the Project to be on-call and prepare a Cultural Resource Monitoring and Inadvertent Discovery Plan (Plan) for the Project. The Plan will review applicable laws, provide a map of locations (and depth) where an archaeological monitor may be required to observe earthmoving activities within native soils. , The Plan will outline monitor responsibilities and procedures for monitoring ground disturbance, monitor reporting, and the procedures for an inadvertent discovery (CUL-3). In addition, the Plan will provide specific monitoring treatment measures for Project activities within the recorded boundary of site P-30-000033 (CA-ORA-000033). The Plan shall be developed in coordination and consultation with interested tribe(s) and shall provide procedures for discovery of tribal cultural resources. A qualified archaeological monitor will be retained to conduct archaeological monitoring of construction activities as identified by the Plan. If requested by interested tribe(s), a Native American monitor will be retained, as applicable. The archaeological monitor will follow the protocol outlined in the Plan. A final report summarizing the monitoring activities and the results of monitoring site P-30-000033 (CA-ORA-000033), including a site record (DPR-523) update, will be prepared by the Project archaeologist. The archaeological monitor will work in coordination with the Native American monitor (as applicable).</p>	Pre-Construction; Construction	Pre-Construction; Construction	Moulton Niguel Water District		

MITIGATION MONITORING AND REPORTING PROGRAM					
Mitigation Measure	Implementation Phase	Monitoring Phase	Monitoring Agency	Compliance Verification	
				Initial	Date
<b>CUL-3: Inadvertent Discovery of Archaeological Resources During Construction</b> – During Project-level construction, should subsurface archaeological resources be discovered, all activity within 50 feet of a “find” shall stop and the qualified on-call archaeologist shall be contacted to assess the significance of the find according to CEQA Guidelines Section 15064.5 and/or National Register of Historic Places criteria (as applicable). The archaeologist shall have the authority to halt any Project-related construction activities that could impact potentially significant resources. If any find is determined to be significant, the archaeologist shall determine, in consultation with the implementing agencies and any local Native American groups expressing interest, appropriate avoidance measures or other appropriate mitigation. Ground-disturbing activities shall not continue until the discovery has been assessed by the archaeologist. The archaeologist shall be afforded the necessary time to assess the find. With monitoring, construction activities may continue on other areas of the Project site during evaluation and treatment of historic or unique archaeological resources. Under CEQA Guidelines Section 15126.4(b)(3), preservation in place is the preferred means to avoid impacts to archaeological resources qualifying as historical resources. Methods of avoidance may include, but shall not be limited to, (i) Project re-route or re-design, (ii) Project cancellation, or (iii) identification of protection measures such as capping or fencing. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures, such as data recovery or other appropriate measures, in consultation with the implementing agency and any local Native American representatives expressing interest in prehistoric or tribal resources. If an archaeological site does not qualify as an historical resource but meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site shall be treated in accordance with the provisions of Section 21083.2.	Construction	Construction	Moulton Niguel Water District		
<b>GEO-1: Inadvertent Discoveries of Paleontological Resources</b> – If construction staff or others observe previously unidentified paleontological resources during ground disturbing activities, they will halt work within a 200-foot radius of the	Construction	Construction	Moulton Niguel Water District		



MITIGATION MONITORING AND REPORTING PROGRAM					
Mitigation Measure	Implementation Phase	Monitoring Phase	Monitoring Agency	Compliance Verification	
				Initial	Date
find(s), delineate the area of the find with flagging tape or rope (may also include dirt spoils from the find area), and immediately notify a qualified paleontologist. Construction will halt within the flagged or roped-off area. The paleontologist will assess the resource as soon as possible and determine appropriate next steps in coordination with the District. Such finds will be formally recorded and evaluated. The resource will be protected from further disturbance or looting pending evaluation.					
<p><b>NOISE-1:</b> Construction noise levels will fluctuate depending on the construction phase, equipment type and duration of use, distance between noise source and sensitive receptor, and the presence or absence of barriers between noise source and receptors. Standard construction activities shall be limited as follows:</p> <ul style="list-style-type: none"> <li>Equipment and trucks used for Project construction shall utilize the best available noise control techniques (e.g., equipped with manufacturer-rated high attenuation mufflers, specification of low noise equipment, use of air intake silencers, ducts, engine enclosures and acoustically-attenuating buildings, as needed, to meet regulatory criteria).</li> <li>Stationary noise sources shall be located as far from adjacent receptors as possible and shall be muffled and enclosed, incorporate insulation barriers or other measures to the extent feasible.</li> <li>Any impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for Project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically- powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 A-weighted decibels (dBA). External jackets on the tools themselves shall be used where feasible as this could achieve a reduction of 5 dBA. Quieter procedures shall be used such as drilling rather than impact equipment whenever feasible.</li> </ul>	Construction	Construction	Moulton Niguel Water District		

MITIGATION MONITORING AND REPORTING PROGRAM					
Mitigation Measure	Implementation Phase	Monitoring Phase	Monitoring Agency	Compliance Verification	
				Initial	Date
<ul style="list-style-type: none"><li>No specialized construction techniques that could generate high noise levels (i.e., greater than 90 dBA) will take place on weekends or federal holidays.</li></ul>					

## **APPENDIX B**

### **AIR QUALITY AND GREENHOUSE GAS EMISSIONS**

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MNWD Crown Valley Constrution Schedule																																																
Construction Phase	2022												2023												2024																							
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Pipeline						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Master Meter																				X	X																							X	X	X	X	



## Crown Valley Parkway Pipeline - Orange County, Annual

## Crown Valley Parkway Pipeline Orange County, Annual

### 1.0 Project Characteristics

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#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.70	User Defined Unit	1.70	0.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	30
<b>Climate Zone</b>	13			<b>Operational Year</b>	2023
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	720.49	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total area of disturbance 1.7 acres (Pipeline 1.4 acres, Master Meter 0.3 acres)

Construction Phase - Pipeline - 56 weeks, Master Meter construction - 6 weeks

Off-road Equipment - Equipment provided by applicant.

Off-road Equipment - Equipment provided by applicant.

Trips and VMT - Worker and hauling trips provided by applicant.

Grading - Material import/export provided by applicant.

Construction Off-road Equipment Mitigation - Compliance with SCAQMD Rule 403 requirements for fugitive dust suppression.

## Crown Valley Parkway Pipeline - Orange County, Annual

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	2.00	280.00
tblConstructionPhase	NumDays	2.00	30.00
tblGrading	MaterialExported	0.00	18,400.00
tblGrading	MaterialExported	0.00	300.00
tblGrading	MaterialImported	0.00	16,500.00
tblGrading	MaterialImported	0.00	160.00
tblLandUse	LotAcreage	0.00	1.70
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Pipeline Trenching
tblOffRoadEquipment	PhaseName		Pipeline Trenching
tblOffRoadEquipment	PhaseName		Pipeline Trenching
tblOffRoadEquipment	PhaseName		Pipeline Trenching
tblOffRoadEquipment	PhaseName		Pipeline Trenching
tblOffRoadEquipment	PhaseName		Pipeline Trenching
tblOffRoadEquipment	PhaseName		Pipeline Trenching
tblTripsAndVMT	HaulingTripNumber	0.00	7,540.00
tblTripsAndVMT	HaulingTripNumber	0.00	200.00
tblTripsAndVMT	VendorTripLength	6.90	20.00

## Crown Valley Parkway Pipeline - Orange County, Annual

tblTripsAndVMT	VendorTripLength	6.90	20.00
tblTripsAndVMT	WorkerTripLength	14.70	20.00
tblTripsAndVMT	WorkerTripLength	14.70	20.00
tblTripsAndVMT	WorkerTripNumber	23.00	50.00
tblTripsAndVMT	WorkerTripNumber	20.00	50.00

## 2.0 Emissions Summary

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## Crown Valley Parkway Pipeline - Orange County, Annual

**2.1 Overall Construction**  
**Unmitigated Construction**

Year	ROG	NOx	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	PM <sub>10</sub> Total	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>	PM <sub>2.5</sub> Total	Bio- CO <sub>2</sub>	NBio- CO <sub>2</sub>	Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
2022	0.2177	2.1152	1.7904	6.2700e-003	0.1133	0.0720	0.1853	0.0299	0.0672	0.0972	0.0000	570.7935	570.7935	0.1266	0.0000	573.9595
2023	0.2196	1.8651	1.8940	6.5500e-003	0.1176	0.0666	0.1842	0.0310	0.0622	0.0931	0.0000	593.1595	593.1595	0.1365	0.0000	596.5717
Maximum	0.2196	2.1152	1.8940	6.5500e-003	0.1176	0.0720	0.1853	0.0310	0.0672	0.0972	0.0000	593.1595	593.1595	0.1365	0.0000	596.5717

**Mitigated Construction**

Year	ROG	NOx	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	PM <sub>10</sub> Total	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>	PM <sub>2.5</sub> Total	Bio- CO <sub>2</sub>	NBio- CO <sub>2</sub>	Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
2022	0.2177	2.1152	1.7904	6.2700e-003	0.1045	0.0720	0.1765	0.0278	0.0672	0.0950	0.0000	570.7930	570.7930	0.1266	0.0000	573.9590
2023	0.2196	1.8651	1.8940	6.5500e-003	0.1084	0.0666	0.1750	0.0287	0.0622	0.0909	0.0000	593.1590	593.1590	0.1365	0.0000	596.5712
Maximum	0.2196	2.1152	1.8940	6.5500e-003	0.1084	0.0720	0.1765	0.0287	0.0672	0.0950	0.0000	593.1590	593.1590	0.1365	0.0000	596.5712

	ROG	NOx	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	PM <sub>10</sub> Total	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>	PM <sub>2.5</sub> Total	Bio- CO <sub>2</sub>	NBio- CO <sub>2</sub>	Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
Percent Reduction	0.00	0.00	0.00	0.00	7.77	0.00	4.86	7.23	0.00	2.31	0.00	0.00	0.00	0.00	0.00	0.00

## Crown Valley Parkway Pipeline - Orange County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-6-2022	9-5-2022	1.0150	1.0150
2	9-6-2022	12-5-2022	1.0068	1.0068
3	12-6-2022	3-5-2023	0.8917	0.8917
4	3-6-2023	6-5-2023	0.8663	0.8663
5	6-6-2023	9-5-2023	0.5993	0.5993
		Highest	1.0150	1.0150

## 2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005



## Crown Valley Parkway Pipeline - Orange County, Annual

**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Pipeline Trenching	Site Preparation	6/6/2022	6/30/2023	5	280	
2	Master Meter	Site Preparation	7/1/2023	8/11/2023	5	30	

## Crown Valley Parkway Pipeline - Orange County, Annual

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Pipeline Trenching	Bore/Drill Rigs	1	8.00	221	0.50
Pipeline Trenching	Concrete/Industrial Saws	1	8.00	81	0.73
Pipeline Trenching	Off-Highway Trucks	2	8.00	402	0.38
Pipeline Trenching	Plate Compactors	1	8.00	8	0.43
Pipeline Trenching	Rollers	1	8.00	80	0.38
Pipeline Trenching	Rubber Tired Loaders	1	8.00	203	0.36
Pipeline Trenching	Sweepers/Scrubbers	1	8.00	64	0.46
Pipeline Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Master Meter	Concrete/Industrial Saws	1	8.00	81	0.73
Master Meter	Excavators	1	8.00	158	0.38
Master Meter	Off-Highway Trucks	4	8.00	402	0.38
Master Meter	Plate Compactors	1	8.00	8	0.43
Master Meter	Tractors/Loaders/Backhoes	1	8.00	97	0.37

**Trips and VMT**

## Crown Valley Parkway Pipeline - Orange County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Pipeline Trenching	9	50.00	0.00	7,540.00	20.00	20.00	20.00	LD_Mix	HDT_Mix	HHDT
Master Meter	8	50.00	0.00	200.00	20.00	20.00	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Pipeline Trenching - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1871	1.6182	1.5135	4.2900e-003		0.0702	0.0702		0.0656	0.0656	0.0000	374.6123	374.6123	0.1098	0.0000	377.3573
<b>Total</b>	<b>0.1871</b>	<b>1.6182</b>	<b>1.5135</b>	<b>4.2900e-003</b>	<b>0.0000</b>	<b>0.0702</b>	<b>0.0702</b>	<b>0.0000</b>	<b>0.0656</b>	<b>0.0656</b>	<b>0.0000</b>	<b>374.6123</b>	<b>374.6123</b>	<b>0.1098</b>	<b>0.0000</b>	<b>377.3573</b>

## Crown Valley Parkway Pipeline - Orange County, Annual

**3.2 Pipeline Trenching - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0140	0.4860	0.1447	1.4900e-003	0.0573	1.4100e-003	0.0587	0.0151	1.3400e-003	0.0164	0.0000	151.3744	151.3744	0.0160	0.0000	151.7731
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0167	0.0111	0.1321	5.0000e-004	0.0560	3.5000e-004	0.0564	0.0149	3.3000e-004	0.0152	0.0000	44.8068	44.8068	8.9000e-004	0.0000	44.8290
<b>Total</b>	<b>0.0306</b>	<b>0.4971</b>	<b>0.2768</b>	<b>1.9900e-003</b>	<b>0.1133</b>	<b>1.7600e-003</b>	<b>0.1150</b>	<b>0.0299</b>	<b>1.6700e-003</b>	<b>0.0316</b>	<b>0.0000</b>	<b>196.1811</b>	<b>196.1811</b>	<b>0.0168</b>	<b>0.0000</b>	<b>196.6021</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1871	1.6182	1.5135	4.2900e-003		0.0702	0.0702		0.0656	0.0656	0.0000	374.6119	374.6119	0.1098	0.0000	377.3569
<b>Total</b>	<b>0.1871</b>	<b>1.6182</b>	<b>1.5135</b>	<b>4.2900e-003</b>	<b>0.0000</b>	<b>0.0702</b>	<b>0.0702</b>	<b>0.0000</b>	<b>0.0656</b>	<b>0.0656</b>	<b>0.0000</b>	<b>374.6119</b>	<b>374.6119</b>	<b>0.1098</b>	<b>0.0000</b>	<b>377.3569</b>

## Crown Valley Parkway Pipeline - Orange County, Annual

**3.2 Pipeline Trenching - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0140	0.4860	0.1447	1.4900e-003	0.0529	1.4100e-003	0.0543	0.0140	1.3400e-003	0.0153	0.0000	151.3744	151.3744	0.0160	0.0000	151.7731
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0167	0.0111	0.1321	5.0000e-004	0.0516	3.5000e-004	0.0520	0.0138	3.3000e-004	0.0141	0.0000	44.8068	44.8068	8.9000e-004	0.0000	44.8290
<b>Total</b>	<b>0.0306</b>	<b>0.4971</b>	<b>0.2768</b>	<b>1.9900e-003</b>	<b>0.1045</b>	<b>1.7600e-003</b>	<b>0.1063</b>	<b>0.0278</b>	<b>1.6700e-003</b>	<b>0.0294</b>	<b>0.0000</b>	<b>196.1811</b>	<b>196.1811</b>	<b>0.0168</b>	<b>0.0000</b>	<b>196.6021</b>

**3.2 Pipeline Trenching - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1530	1.2686	1.2993	3.7200e-003		0.0536	0.0536		0.0500	0.0500	0.0000	324.8933	324.8933	0.0951	0.0000	327.2695
<b>Total</b>	<b>0.1530</b>	<b>1.2686</b>	<b>1.2993</b>	<b>3.7200e-003</b>	<b>0.0000</b>	<b>0.0536</b>	<b>0.0536</b>	<b>0.0000</b>	<b>0.0500</b>	<b>0.0500</b>	<b>0.0000</b>	<b>324.8933</b>	<b>324.8933</b>	<b>0.0951</b>	<b>0.0000</b>	<b>327.2695</b>



## Crown Valley Parkway Pipeline - Orange County, Annual

**3.2 Pipeline Trenching - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.2900e-003	0.2675	0.1188	1.2400e-003	0.0562	5.2000e-004	0.0567	0.0146	5.0000e-004	0.0151	0.0000	126.0013	126.0013	0.0133	0.0000	126.3341
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0137	8.7300e-003	0.1067	4.1000e-004	0.0485	3.0000e-004	0.0488	0.0129	2.8000e-004	0.0132	0.0000	37.3404	37.3404	7.0000e-004	0.0000	37.3579
<b>Total</b>	<b>0.0220</b>	<b>0.2763</b>	<b>0.2256</b>	<b>1.6500e-003</b>	<b>0.1047</b>	<b>8.2000e-004</b>	<b>0.1055</b>	<b>0.0275</b>	<b>7.8000e-004</b>	<b>0.0283</b>	<b>0.0000</b>	<b>163.3417</b>	<b>163.3417</b>	<b>0.0140</b>	<b>0.0000</b>	<b>163.6919</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1530	1.2686	1.2993	3.7200e-003		0.0536	0.0536		0.0500	0.0500	0.0000	324.8929	324.8929	0.0951	0.0000	327.2692
<b>Total</b>	<b>0.1530</b>	<b>1.2686</b>	<b>1.2993</b>	<b>3.7200e-003</b>	<b>0.0000</b>	<b>0.0536</b>	<b>0.0536</b>	<b>0.0000</b>	<b>0.0500</b>	<b>0.0500</b>	<b>0.0000</b>	<b>324.8929</b>	<b>324.8929</b>	<b>0.0951</b>	<b>0.0000</b>	<b>327.2692</b>

## Crown Valley Parkway Pipeline - Orange County, Annual

**3.2 Pipeline Trenching - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.2900e-003	0.2675	0.1188	1.2400e-003	0.0518	5.2000e-004	0.0523	0.0136	5.0000e-004	0.0141	0.0000	126.0013	126.0013	0.0133	0.0000	126.3341
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0137	8.7300e-003	0.1067	4.1000e-004	0.0447	3.0000e-004	0.0450	0.0120	2.8000e-004	0.0122	0.0000	37.3404	37.3404	7.0000e-004	0.0000	37.3579
<b>Total</b>	<b>0.0220</b>	<b>0.2763</b>	<b>0.2256</b>	<b>1.6500e-003</b>	<b>0.0965</b>	<b>8.2000e-004</b>	<b>0.0973</b>	<b>0.0255</b>	<b>7.8000e-004</b>	<b>0.0263</b>	<b>0.0000</b>	<b>163.3417</b>	<b>163.3417</b>	<b>0.0140</b>	<b>0.0000</b>	<b>163.6919</b>

**3.3 Master Meter - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0409	0.3029	0.3377	1.0200e-003		0.0121	0.0121		0.0113	0.0113	0.0000	89.1089	89.1089	0.0265	0.0000	89.7715
<b>Total</b>	<b>0.0409</b>	<b>0.3029</b>	<b>0.3377</b>	<b>1.0200e-003</b>	<b>0.0000</b>	<b>0.0121</b>	<b>0.0121</b>	<b>0.0000</b>	<b>0.0113</b>	<b>0.0113</b>	<b>0.0000</b>	<b>89.1089</b>	<b>89.1089</b>	<b>0.0265</b>	<b>0.0000</b>	<b>89.7715</b>

## Crown Valley Parkway Pipeline - Orange County, Annual

**3.3 Master Meter - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.7000e-004	0.0153	6.7900e-003	7.0000e-005	1.7100e-003	3.0000e-005	1.7400e-003	4.7000e-004	3.0000e-005	5.0000e-004	0.0000	7.1986	7.1986	7.6000e-004	0.0000	7.2176
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1700e-003	2.0100e-003	0.0246	1.0000e-004	0.0112	7.0000e-005	0.0113	2.9700e-003	6.0000e-005	3.0400e-003	0.0000	8.6170	8.6170	1.6000e-004	0.0000	8.6211
<b>Total</b>	<b>3.6400e-003</b>	<b>0.0173</b>	<b>0.0314</b>	<b>1.7000e-004</b>	<b>0.0129</b>	<b>1.0000e-004</b>	<b>0.0130</b>	<b>3.4400e-003</b>	<b>9.0000e-005</b>	<b>3.5400e-003</b>	<b>0.0000</b>	<b>15.8156</b>	<b>15.8156</b>	<b>9.2000e-004</b>	<b>0.0000</b>	<b>15.8387</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0409	0.3029	0.3377	1.0200e-003		0.0121	0.0121		0.0113	0.0113	0.0000	89.1088	89.1088	0.0265	0.0000	89.7714
<b>Total</b>	<b>0.0409</b>	<b>0.3029</b>	<b>0.3377</b>	<b>1.0200e-003</b>	<b>0.0000</b>	<b>0.0121</b>	<b>0.0121</b>	<b>0.0000</b>	<b>0.0113</b>	<b>0.0113</b>	<b>0.0000</b>	<b>89.1088</b>	<b>89.1088</b>	<b>0.0265</b>	<b>0.0000</b>	<b>89.7714</b>

## Crown Valley Parkway Pipeline - Orange County, Annual

**3.3 Master Meter - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.7000e-004	0.0153	6.7900e-003	7.0000e-005	1.6000e-003	3.0000e-005	1.6300e-003	4.4000e-004	3.0000e-005	4.7000e-004	0.0000	7.1986	7.1986	7.6000e-004	0.0000	7.2176
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1700e-003	2.0100e-003	0.0246	1.0000e-004	0.0103	7.0000e-005	0.0104	2.7600e-003	6.0000e-005	2.8200e-003	0.0000	8.6170	8.6170	1.6000e-004	0.0000	8.6211
<b>Total</b>	<b>3.6400e-003</b>	<b>0.0173</b>	<b>0.0314</b>	<b>1.7000e-004</b>	<b>0.0119</b>	<b>1.0000e-004</b>	<b>0.0120</b>	<b>3.2000e-003</b>	<b>9.0000e-005</b>	<b>3.2900e-003</b>	<b>0.0000</b>	<b>15.8156</b>	<b>15.8156</b>	<b>9.2000e-004</b>	<b>0.0000</b>	<b>15.8387</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Crown Valley Parkway Pipeline - Orange County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.563406	0.043070	0.209298	0.109958	0.015015	0.005784	0.026182	0.017546	0.001775	0.001524	0.004941	0.000598	0.000904

## 5.0 Energy Detail

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Historical Energy Use: N



## Crown Valley Parkway Pipeline - Orange County, Annual

## 5.1 Mitigation Measures Energy

[illegible]

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

[illegible]

## 5.2 Energy by Land Use - NaturalGas

## Mitigated

[illegible]

### 5.3 Energy by Land Use - Electricity

Unmitigated

[illegible]

## Crown Valley Parkway Pipeline - Orange County, Annual

**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Unmitigated	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005

## Crown Valley Parkway Pipeline - Orange County, Annual

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>

**7.0 Water Detail**

## Crown Valley Parkway Pipeline - Orange County, Annual

**7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

**7.2 Water by Land Use****Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>



## Crown Valley Parkway Pipeline - Orange County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

Waste Disposed	Land Use	tons	MT/yr			
			Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
User Defined Industrial	0		0.0000	0.0000	0.0000	0.0000
Total			0.0000	0.0000	0.0000	0.0000

Mitigated

Waste Disposed	Land Use	tons	MT/yr			
			Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
User Defined Industrial	0		0.0000	0.0000	0.0000	0.0000
Total			0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## Crown Valley Parkway Pipeline - Orange County, Annual

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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## Crown Valley Parkway Pipeline - Orange County, Summer

## Crown Valley Parkway Pipeline Orange County, Summer

### 1.0 Project Characteristics

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#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.70	User Defined Unit	1.70	0.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	30
<b>Climate Zone</b>	13			<b>Operational Year</b>	2023
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	720.49	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total area of disturbance 1.7 acres (Pipeline 1.4 acres, Master Meter 0.3 acres)

Construction Phase - Pipeline - 56 weeks, Master Meter construction - 6 weeks

Off-road Equipment - Equipment provided by applicant.

Off-road Equipment - Equipment provided by applicant.

Trips and VMT - Worker and hauling trips provided by applicant.

Grading - Material import/export provided by applicant.

Construction Off-road Equipment Mitigation - Compliance with SCAQMD Rule 403 requirements for fugitive dust suppression.

## Crown Valley Parkway Pipeline - Orange County, Summer

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	2.00	280.00
tblConstructionPhase	NumDays	2.00	30.00
tblGrading	MaterialExported	0.00	18,400.00
tblGrading	MaterialExported	0.00	300.00
tblGrading	MaterialImported	0.00	16,500.00
tblGrading	MaterialImported	0.00	160.00
tblLandUse	LotAcreage	0.00	1.70
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Pipeline Trenching
tblOffRoadEquipment	PhaseName		Pipeline Trenching
tblOffRoadEquipment	PhaseName		Pipeline Trenching
tblOffRoadEquipment	PhaseName		Pipeline Trenching
tblOffRoadEquipment	PhaseName		Pipeline Trenching
tblOffRoadEquipment	PhaseName		Pipeline Trenching
tblOffRoadEquipment	PhaseName		Pipeline Trenching
tblTripsAndVMT	HaulingTripNumber	0.00	7,540.00
tblTripsAndVMT	HaulingTripNumber	0.00	200.00
tblTripsAndVMT	VendorTripLength	6.90	20.00



## Crown Valley Parkway Pipeline - Orange County, Summer

tblTripsAndVMT	VendorTripLength	6.90	20.00
tblTripsAndVMT	WorkerTripLength	14.70	20.00
tblTripsAndVMT	WorkerTripLength	14.70	20.00
tblTripsAndVMT	WorkerTripNumber	23.00	50.00
tblTripsAndVMT	WorkerTripNumber	20.00	50.00

## 2.0 Emissions Summary

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Crown Valley Parkway Pipeline - Orange County, Summer

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	Year	lb/day										lb/day									
	ROG	NOx	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	PM <sub>10</sub> Total	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>	PM <sub>2.5</sub> Total	Bio- CO <sub>2</sub>	NBio- CO <sub>2</sub>	Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e					
2022	2.8958	27.9969	23.9465	0.0840	1.5376	0.9595	2.4970	0.4057	0.8962	1.3018	0.0000	8,430.462	8,430.462	4	1.8598	0.0000	8,476.956	2	2	2	2
2023	2.9666	23.6589	24.7070	0.0829	1.6398	0.8367	2.4765	0.4308	0.7811	1.2118	0.0000	8,319.293	8,319.293	8	2.0157	0.0000	8,365.501	3	3	3	3
Maximum	2.9666	27.9969	24.7070	0.0840	1.6398	0.9595	2.4970	0.4308	0.8962	1.3018	0.0000	8,430.462	8,430.462	4	2.0157	0.0000	8,476.956	2	2	2	2

**Mitigated Construction**

	Year	lb/day										lb/day									
	ROG	NOx	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	PM <sub>10</sub> Total	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>	PM <sub>2.5</sub> Total	Bio- CO <sub>2</sub>	NBio- CO <sub>2</sub>	Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e					
2022	2.8958	27.9969	23.9465	0.0840	1.4183	0.9595	2.3777	0.3764	0.8962	1.2726	0.0000	8,430.462	8,430.462	4	1.8598	0.0000	8,476.956	2	2	2	2
2023	2.9666	23.6589	24.7070	0.0829	1.5113	0.8367	2.3480	0.3992	0.7811	1.1803	0.0000	8,319.293	8,319.293	8	2.0157	0.0000	8,365.501	3	3	3	3
Maximum	2.9666	27.9969	24.7070	0.0840	1.5113	0.9595	2.3777	0.3992	0.8962	1.2726	0.0000	8,430.462	8,430.462	4	2.0157	0.0000	8,476.956	2	2	2	2

	ROG	NOx	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	PM <sub>10</sub> Total	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>	PM <sub>2.5</sub> Total	Bio- CO <sub>2</sub>	NBio- CO <sub>2</sub>	Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e	Percent Reduction
	0.00	0.00	0.00	0.00	7.80	0.00	4.98	7.27	0.00	2.42	0.00	0.00	0.00	0.00	0.00	0.00	

## Crown Valley Parkway Pipeline - Orange County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.7000e-004	3.7000e-004	0.0000		4.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>3.7000e-004</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-004</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.7000e-004	3.7000e-004	0.0000		4.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>3.7000e-004</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-004</b>

## Crown Valley Parkway Pipeline - Orange County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Pipeline Trenching	Site Preparation	6/6/2022	6/30/2023	5	280	
2	Master Meter	Site Preparation	7/1/2023	8/11/2023	5	30	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

#### OffRoad Equipment

## Crown Valley Parkway Pipeline - Orange County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Pipeline Trenching	Bore/Drill Rigs	1	8.00	221	0.50
Pipeline Trenching	Concrete/Industrial Saws	1	8.00	81	0.73
Pipeline Trenching	Off-Highway Trucks	2	8.00	402	0.38
Pipeline Trenching	Plate Compactors	1	8.00	8	0.43
Pipeline Trenching	Rollers	1	8.00	80	0.38
Pipeline Trenching	Rubber Tired Loaders	1	8.00	203	0.36
Pipeline Trenching	Sweepers/Scrubbers	1	8.00	64	0.46
Pipeline Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Master Meter	Concrete/Industrial Saws	1	8.00	81	0.73
Master Meter	Excavators	1	8.00	158	0.38
Master Meter	Off-Highway Trucks	4	8.00	402	0.38
Master Meter	Plate Compactors	1	8.00	8	0.43
Master Meter	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Pipeline Trenching	9	50.00	0.00	7,540.00	20.00	20.00	20.00	LD_Mix	HDT_Mix	HHDT
Master Meter	8	50.00	0.00	200.00	20.00	20.00	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

## Crown Valley Parkway Pipeline - Orange County, Summer

**3.2 Pipeline Trenching - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.4945	21.5757	20.1802	0.0571		0.9362	0.9362		0.8741	0.8741		5,505.8589	5,505.8589	1.6138		5,546.2035
<b>Total</b>	<b>2.4945</b>	<b>21.5757</b>	<b>20.1802</b>	<b>0.0571</b>	<b>0.0000</b>	<b>0.9362</b>	<b>0.9362</b>	<b>0.0000</b>	<b>0.8741</b>	<b>0.8741</b>		<b>5,505.8589</b>	<b>5,505.8589</b>	<b>1.6138</b>		<b>5,546.2035</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1841	6.2903	1.8905	0.0200	0.7774	0.0186	0.7960	0.2041	0.0178	0.2219		2,239.1641	2,239.1641	0.2323		2,244.9720
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2172	0.1310	1.8757	6.8700e-003	0.7602	4.7200e-003	0.7649	0.2016	4.3500e-003	0.2059		685.4394	685.4394	0.0137		685.7807
<b>Total</b>	<b>0.4013</b>	<b>6.4212</b>	<b>3.7662</b>	<b>0.0269</b>	<b>1.5376</b>	<b>0.0233</b>	<b>1.5609</b>	<b>0.4057</b>	<b>0.0221</b>	<b>0.4278</b>		<b>2,924.6034</b>	<b>2,924.6034</b>	<b>0.2460</b>		<b>2,930.7526</b>



## Crown Valley Parkway Pipeline - Orange County, Summer

**3.2 Pipeline Trenching - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.4945	21.5757	20.1802	0.0571		0.9362	0.9362		0.8741	0.8741	0.0000	5,505.8589	5,505.8589	1.6138		5,546.2035
<b>Total</b>	<b>2.4945</b>	<b>21.5757</b>	<b>20.1802</b>	<b>0.0571</b>	<b>0.0000</b>	<b>0.9362</b>	<b>0.9362</b>	<b>0.0000</b>	<b>0.8741</b>	<b>0.8741</b>	<b>0.0000</b>	<b>5,505.8589</b>	<b>5,505.8589</b>	<b>1.6138</b>		<b>5,546.2035</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1841	6.2903	1.8905	0.0200	0.7176	0.0186	0.7361	0.1894	0.0178	0.2072		2,239.1641	2,239.1641	0.2323		2,244.9720
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2172	0.1310	1.8757	6.8700e-003	0.7007	4.7200e-003	0.7054	0.1870	4.3500e-003	0.1913		685.4394	685.4394	0.0137		685.7807
<b>Total</b>	<b>0.4013</b>	<b>6.4212</b>	<b>3.7662</b>	<b>0.0269</b>	<b>1.4183</b>	<b>0.0233</b>	<b>1.4416</b>	<b>0.3764</b>	<b>0.0221</b>	<b>0.3985</b>		<b>2,924.6034</b>	<b>2,924.6034</b>	<b>0.2460</b>		<b>2,930.7526</b>

## Crown Valley Parkway Pipeline - Orange County, Summer

**3.2 Pipeline Trenching - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.3543	19.5172	19.9896	0.0572		0.8242	0.8242		0.7693	0.7693		5,509.747 0	5,509.747 0	1.6119		5,550.044 9
<b>Total</b>	<b>2.3543</b>	<b>19.5172</b>	<b>19.9896</b>	<b>0.0572</b>	<b>0.0000</b>	<b>0.8242</b>	<b>0.8242</b>	<b>0.0000</b>	<b>0.7693</b>	<b>0.7693</b>		<b>5,509.747 0</b>	<b>5,509.747 0</b>	<b>1.6119</b>		<b>5,550.044 9</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1262	4.0227	1.8005	0.0191	0.8796	7.8700e-003	0.8875	0.2292	7.5200e-003	0.2367		2,150.468 9	2,150.468 9	0.2240		2,156.068 9
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2060	0.1190	1.7503	6.6100e-003	0.7602	4.6400e-003	0.7648	0.2016	4.2700e-003	0.2059		659.0779	659.0779	0.0124		659.3876
<b>Total</b>	<b>0.3322</b>	<b>4.1417</b>	<b>3.5508</b>	<b>0.0257</b>	<b>1.6398</b>	<b>0.0125</b>	<b>1.6523</b>	<b>0.4308</b>	<b>0.0118</b>	<b>0.4425</b>		<b>2,809.546 8</b>	<b>2,809.546 8</b>	<b>0.2364</b>		<b>2,815.456 4</b>

## Crown Valley Parkway Pipeline - Orange County, Summer

**3.2 Pipeline Trenching - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.3543	19.5172	19.9896	0.0572		0.8242	0.8242		0.7693	0.7693	0.0000	5,509.747 0	5,509.747 0	1.6119		5,550.044 8
<b>Total</b>	<b>2.3543</b>	<b>19.5172</b>	<b>19.9896</b>	<b>0.0572</b>	<b>0.0000</b>	<b>0.8242</b>	<b>0.8242</b>	<b>0.0000</b>	<b>0.7693</b>	<b>0.7693</b>	<b>0.0000</b>	<b>5,509.747 0</b>	<b>5,509.747 0</b>	<b>1.6119</b>		<b>5,550.044 8</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1262	4.0227	1.8005	0.0191	0.8106	7.8700e-003	0.8184	0.2122	7.5200e-003	0.2197		2,150.468 9	2,150.468 9	0.2240		2,156.068 9
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2060	0.1190	1.7503	6.6100e-003	0.7007	4.6400e-003	0.7054	0.1870	4.2700e-003	0.1913		659.0779	659.0779	0.0124		659.3876
<b>Total</b>	<b>0.3322</b>	<b>4.1417</b>	<b>3.5508</b>	<b>0.0257</b>	<b>1.5113</b>	<b>0.0125</b>	<b>1.5238</b>	<b>0.3992</b>	<b>0.0118</b>	<b>0.4110</b>		<b>2,809.546 8</b>	<b>2,809.546 8</b>	<b>0.2364</b>		<b>2,815.456 4</b>

## Crown Valley Parkway Pipeline - Orange County, Summer

**3.3 Master Meter - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.7293	20.1914	22.5109	0.0679		0.8057	0.8057		0.7523	0.7523		6,548.381 2	6,548.381 2	1.9478		6,597.076 9
<b>Total</b>	<b>2.7293</b>	<b>20.1914</b>	<b>22.5109</b>	<b>0.0679</b>	<b>0.0000</b>	<b>0.8057</b>	<b>0.8057</b>	<b>0.0000</b>	<b>0.7523</b>	<b>0.7523</b>		<b>6,548.381 2</b>	<b>6,548.381 2</b>	<b>1.9478</b>		<b>6,597.076 9</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0312	0.9959	0.4458	4.7400e-003	0.1161	1.9500e-003	0.1180	0.0318	1.8600e-003	0.0336		532.3884	532.3884	0.0555		533.7748
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2060	0.1190	1.7503	6.6100e-003	0.7602	4.6400e-003	0.7648	0.2016	4.2700e-003	0.2059		659.0779	659.0779	0.0124		659.3876
<b>Total</b>	<b>0.2372</b>	<b>1.1149</b>	<b>2.1961</b>	<b>0.0114</b>	<b>0.8763</b>	<b>6.5900e-003</b>	<b>0.8829</b>	<b>0.2334</b>	<b>6.1300e-003</b>	<b>0.2395</b>		<b>1,191.466 3</b>	<b>1,191.466 3</b>	<b>0.0679</b>		<b>1,193.162 4</b>

## Crown Valley Parkway Pipeline - Orange County, Summer

**3.3 Master Meter - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.7293	20.1914	22.5109	0.0679		0.8057	0.8057		0.7523	0.7523	0.0000	6,548.381 2	6,548.381 2	1.9478		6,597.076 9
<b>Total</b>	<b>2.7293</b>	<b>20.1914</b>	<b>22.5109</b>	<b>0.0679</b>	<b>0.0000</b>	<b>0.8057</b>	<b>0.8057</b>	<b>0.0000</b>	<b>0.7523</b>	<b>0.7523</b>	<b>0.0000</b>	<b>6,548.381 2</b>	<b>6,548.381 2</b>	<b>1.9478</b>		<b>6,597.076 9</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0312	0.9959	0.4458	4.7400e-003	0.1081	1.9500e-003	0.1101	0.0298	1.8600e-003	0.0317		532.3884	532.3884	0.0555		533.7748
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2060	0.1190	1.7503	6.6100e-003	0.7007	4.6400e-003	0.7054	0.1870	4.2700e-003	0.1913		659.0779	659.0779	0.0124		659.3876
<b>Total</b>	<b>0.2372</b>	<b>1.1149</b>	<b>2.1961</b>	<b>0.0114</b>	<b>0.8088</b>	<b>6.5900e-003</b>	<b>0.8154</b>	<b>0.2168</b>	<b>6.1300e-003</b>	<b>0.2229</b>		<b>1,191.466 3</b>	<b>1,191.466 3</b>	<b>0.0679</b>		<b>1,193.162 4</b>

**4.0 Operational Detail - Mobile**

## Crown Valley Parkway Pipeline - Orange County, Summer

## 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.563406	0.043070	0.209298	0.109958	0.015015	0.005784	0.026182	0.017546	0.001775	0.001524	0.004941	0.000598	0.000904



## Crown Valley Parkway Pipeline - Orange County, Summer

**5.0 Energy Detail**

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Historical Energy Use: N

**5.1 Mitigation Measures Energy**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Crown Valley Parkway Pipeline - Orange County, Summer

## 5.2 Energy by Land Use - NaturalGas

Unmitigated

Total																			
0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Land Use	Industrial	lb/day																	
NaturalGas Use		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		

Mitigated

Total																			
0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Land Use	Industrial	lb/day																	
NaturalGas Use		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

## Crown Valley Parkway Pipeline - Orange County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.7000e-004	3.7000e-004	0.0000		4.0000e-004
Unmitigated	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.7000e-004	3.7000e-004	0.0000		4.0000e-004

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.7000e-004	3.7000e-004	0.0000		4.0000e-004
<b>Total</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>1.7000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>3.7000e-004</b>	<b>3.7000e-004</b>	<b>0.0000</b>		<b>4.0000e-004</b>

## Crown Valley Parkway Pipeline - Orange County, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.7000e-004	3.7000e-004	0.0000		4.0000e-004
<b>Total</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>1.7000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>3.7000e-004</b>	<b>3.7000e-004</b>	<b>0.0000</b>		<b>4.0000e-004</b>

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

## Crown Valley Parkway Pipeline - Orange County, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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## Crown Valley Parkway Pipeline - Orange County, Winter

## Crown Valley Parkway Pipeline Orange County, Winter

### 1.0 Project Characteristics

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#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.70	User Defined Unit	1.70	0.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	30
<b>Climate Zone</b>	13			<b>Operational Year</b>	2023
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	720.49	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total area of disturbance 1.7 acres (Pipeline 1.4 acres, Master Meter 0.3 acres)

Construction Phase - Pipeline - 56 weeks, Master Meter construction - 6 weeks

Off-road Equipment - Equipment provided by applicant.

Off-road Equipment - Equipment provided by applicant.

Trips and VMT - Worker and hauling trips provided by applicant.

Grading - Material import/export provided by applicant.

Construction Off-road Equipment Mitigation - Compliance with SCAQMD Rule 403 requirements for fugitive dust suppression.



## Crown Valley Parkway Pipeline - Orange County, Winter

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	2.00	280.00
tblConstructionPhase	NumDays	2.00	30.00
tblGrading	MaterialExported	0.00	18,400.00
tblGrading	MaterialExported	0.00	300.00
tblGrading	MaterialImported	0.00	16,500.00
tblGrading	MaterialImported	0.00	160.00
tblLandUse	LotAcreage	0.00	1.70
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Pipeline Trenching
tblOffRoadEquipment	PhaseName		Pipeline Trenching
tblOffRoadEquipment	PhaseName		Pipeline Trenching
tblOffRoadEquipment	PhaseName		Pipeline Trenching
tblOffRoadEquipment	PhaseName		Pipeline Trenching
tblOffRoadEquipment	PhaseName		Pipeline Trenching
tblOffRoadEquipment	PhaseName		Pipeline Trenching
tblTripsAndVMT	HaulingTripNumber	0.00	7,540.00
tblTripsAndVMT	HaulingTripNumber	0.00	200.00
tblTripsAndVMT	VendorTripLength	6.90	20.00

## Crown Valley Parkway Pipeline - Orange County, Winter

tblTripsAndVMT	VendorTripLength	6.90	20.00
tblTripsAndVMT	WorkerTripLength	14.70	20.00
tblTripsAndVMT	WorkerTripLength	14.70	20.00
tblTripsAndVMT	WorkerTripNumber	23.00	50.00
tblTripsAndVMT	WorkerTripNumber	20.00	50.00

## 2.0 Emissions Summary

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Crown Valley Parkway Pipeline - Orange County, Winter

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	PM <sub>10</sub> Total	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>	PM <sub>2.5</sub> Total	Bio- CO <sub>2</sub>	NBio- CO <sub>2</sub>	Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
Year	lb/day										lb/day					
2022	2.9326	28.0781	23.8746	0.0833	1.5376	0.9598	2.4974	0.4057	0.8965	1.3022	0.0000	8,359.496	8,359.496	1.8638	0.0000	8,406.092
2023	2.9986	23.6911	24.5698	0.0823	1.6398	0.8370	2.4768	0.4308	0.7814	1.2121	0.0000	8,251.401	8,251.401	2.0159	0.0000	8,297.689
Maximum	2.9986	28.0781	24.5698	0.0833	1.6398	0.9598	2.4974	0.4308	0.8965	1.3022	0.0000	8,359.496	8,359.496	2.0159	0.0000	8,406.092

**Mitigated Construction**

	ROG	NOx	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	PM <sub>10</sub> Total	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>	PM <sub>2.5</sub> Total	Bio- CO <sub>2</sub>	NBio- CO <sub>2</sub>	Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
Year	lb/day										lb/day					
2022	2.9326	28.0781	23.8746	0.0833	1.4183	0.9598	2.3781	0.3764	0.8965	1.2729	0.0000	8,359.496	8,359.496	1.8638	0.0000	8,406.092
2023	2.9986	23.6911	24.5698	0.0823	1.5113	0.8370	2.3483	0.3992	0.7814	1.1806	0.0000	8,251.401	8,251.401	2.0159	0.0000	8,297.689
Maximum	2.9986	28.0781	24.5698	0.0833	1.5113	0.9598	2.3781	0.3992	0.8965	1.2729	0.0000	8,359.496	8,359.496	2.0159	0.0000	8,406.092

	ROG	NOx	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	PM <sub>10</sub> Total	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>	PM <sub>2.5</sub> Total	Bio- CO <sub>2</sub>	NBio- CO <sub>2</sub>	Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
Percent Reduction	0.00	0.00	0.00	0.00	7.80	0.00	4.98	7.27	0.00	2.42	0.00	0.00	0.00	0.00	0.00	0.00

## Crown Valley Parkway Pipeline - Orange County, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.7000e-004	3.7000e-004	0.0000		4.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>3.7000e-004</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-004</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.7000e-004	3.7000e-004	0.0000		4.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>3.7000e-004</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-004</b>

## Crown Valley Parkway Pipeline - Orange County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Pipeline Trenching	Site Preparation	6/6/2022	6/30/2023	5	280	
2	Master Meter	Site Preparation	7/1/2023	8/11/2023	5	30	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

#### OffRoad Equipment

## Crown Valley Parkway Pipeline - Orange County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Pipeline Trenching	Bore/Drill Rigs	1	8.00	221	0.50
Pipeline Trenching	Concrete/Industrial Saws	1	8.00	81	0.73
Pipeline Trenching	Off-Highway Trucks	2	8.00	402	0.38
Pipeline Trenching	Plate Compactors	1	8.00	8	0.43
Pipeline Trenching	Rollers	1	8.00	80	0.38
Pipeline Trenching	Rubber Tired Loaders	1	8.00	203	0.36
Pipeline Trenching	Sweepers/Scrubbers	1	8.00	64	0.46
Pipeline Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Master Meter	Concrete/Industrial Saws	1	8.00	81	0.73
Master Meter	Excavators	1	8.00	158	0.38
Master Meter	Off-Highway Trucks	4	8.00	402	0.38
Master Meter	Plate Compactors	1	8.00	8	0.43
Master Meter	Tractors/Loaders/Backhoes	1	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Pipeline Trenching	9	50.00	0.00	7,540.00	20.00	20.00	20.00	LD_Mix	HDT_Mix	HHDT
Master Meter	8	50.00	0.00	200.00	20.00	20.00	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads



## Crown Valley Parkway Pipeline - Orange County, Winter

**3.2 Pipeline Trenching - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.4945	21.5757	20.1802	0.0571		0.9362	0.9362		0.8741	0.8741		5,505.8589	5,505.8589	1.6138		5,546.2035
<b>Total</b>	<b>2.4945</b>	<b>21.5757</b>	<b>20.1802</b>	<b>0.0571</b>	<b>0.0000</b>	<b>0.9362</b>	<b>0.9362</b>	<b>0.0000</b>	<b>0.8741</b>	<b>0.8741</b>		<b>5,505.8589</b>	<b>5,505.8589</b>	<b>1.6138</b>		<b>5,546.2035</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1886	6.3585	1.9795	0.0197	0.7774	0.0189	0.7963	0.2041	0.0181	0.2222		2,205.0177	2,205.0177	0.2372		2,210.9475
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2495	0.1439	1.7149	6.5000e-003	0.7602	4.7200e-003	0.7649	0.2016	4.3500e-003	0.2059		648.6194	648.6194	0.0129		648.9410
<b>Total</b>	<b>0.4381</b>	<b>6.5024</b>	<b>3.6944</b>	<b>0.0262</b>	<b>1.5376</b>	<b>0.0237</b>	<b>1.5612</b>	<b>0.4057</b>	<b>0.0225</b>	<b>0.4281</b>		<b>2,853.6371</b>	<b>2,853.6371</b>	<b>0.2501</b>		<b>2,859.8885</b>

## Crown Valley Parkway Pipeline - Orange County, Winter

**3.2 Pipeline Trenching - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.4945	21.5757	20.1802	0.0571		0.9362	0.9362		0.8741	0.8741	0.0000	5,505.8589	5,505.8589	1.6138		5,546.2035
<b>Total</b>	<b>2.4945</b>	<b>21.5757</b>	<b>20.1802</b>	<b>0.0571</b>	<b>0.0000</b>	<b>0.9362</b>	<b>0.9362</b>	<b>0.0000</b>	<b>0.8741</b>	<b>0.8741</b>	<b>0.0000</b>	<b>5,505.8589</b>	<b>5,505.8589</b>	<b>1.6138</b>		<b>5,546.2035</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1886	6.3585	1.9795	0.0197	0.7176	0.0189	0.7365	0.1894	0.0181	0.2075		2,205.0177	2,205.0177	0.2372		2,210.9475
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2495	0.1439	1.7149	6.5000e-003	0.7007	4.7200e-003	0.7054	0.1870	4.3500e-003	0.1913		648.6194	648.6194	0.0129		648.9410
<b>Total</b>	<b>0.4381</b>	<b>6.5024</b>	<b>3.6944</b>	<b>0.0262</b>	<b>1.4183</b>	<b>0.0237</b>	<b>1.4419</b>	<b>0.3764</b>	<b>0.0225</b>	<b>0.3988</b>		<b>2,853.6371</b>	<b>2,853.6371</b>	<b>0.2501</b>		<b>2,859.8885</b>

## Crown Valley Parkway Pipeline - Orange County, Winter

**3.2 Pipeline Trenching - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.3543	19.5172	19.9896	0.0572		0.8242	0.8242		0.7693	0.7693		5,509.747 0	5,509.747 0	1.6119		5,550.044 9
<b>Total</b>	<b>2.3543</b>	<b>19.5172</b>	<b>19.9896</b>	<b>0.0572</b>	<b>0.0000</b>	<b>0.8242</b>	<b>0.8242</b>	<b>0.0000</b>	<b>0.7693</b>	<b>0.7693</b>		<b>5,509.747 0</b>	<b>5,509.747 0</b>	<b>1.6119</b>		<b>5,550.044 9</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1293	4.0431	1.8619	0.0188	0.8796	8.1300e-003	0.8877	0.2292	7.7800e-003	0.2369		2,117.949 2	2,117.949 2	0.2279		2,123.647 8
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2373	0.1307	1.5980	6.2500e-003	0.7602	4.6400e-003	0.7648	0.2016	4.2700e-003	0.2059		623.7052	623.7052	0.0117		623.9968
<b>Total</b>	<b>0.3666</b>	<b>4.1738</b>	<b>3.4599</b>	<b>0.0251</b>	<b>1.6398</b>	<b>0.0128</b>	<b>1.6526</b>	<b>0.4308</b>	<b>0.0121</b>	<b>0.4428</b>		<b>2,741.654 4</b>	<b>2,741.654 4</b>	<b>0.2396</b>		<b>2,747.644 5</b>

## Crown Valley Parkway Pipeline - Orange County, Winter

**3.2 Pipeline Trenching - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.3543	19.5172	19.9896	0.0572		0.8242	0.8242		0.7693	0.7693	0.0000	5,509.747 0	5,509.747 0	1.6119		5,550.044 8
<b>Total</b>	<b>2.3543</b>	<b>19.5172</b>	<b>19.9896</b>	<b>0.0572</b>	<b>0.0000</b>	<b>0.8242</b>	<b>0.8242</b>	<b>0.0000</b>	<b>0.7693</b>	<b>0.7693</b>	<b>0.0000</b>	<b>5,509.747 0</b>	<b>5,509.747 0</b>	<b>1.6119</b>		<b>5,550.044 8</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1293	4.0431	1.8619	0.0188	0.8106	8.1300e-003	0.8187	0.2122	7.7800e-003	0.2200		2,117.949 2	2,117.949 2	0.2279		2,123.647 8
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2373	0.1307	1.5980	6.2500e-003	0.7007	4.6400e-003	0.7054	0.1870	4.2700e-003	0.1913		623.7052	623.7052	0.0117		623.9968
<b>Total</b>	<b>0.3666</b>	<b>4.1738</b>	<b>3.4599</b>	<b>0.0251</b>	<b>1.5113</b>	<b>0.0128</b>	<b>1.5241</b>	<b>0.3992</b>	<b>0.0121</b>	<b>0.4113</b>		<b>2,741.654 4</b>	<b>2,741.654 4</b>	<b>0.2396</b>		<b>2,747.644 5</b>

## Crown Valley Parkway Pipeline - Orange County, Winter

**3.3 Master Meter - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.7293	20.1914	22.5109	0.0679		0.8057	0.8057		0.7523	0.7523		6,548.381 2	6,548.381 2	1.9478		6,597.076 9
<b>Total</b>	<b>2.7293</b>	<b>20.1914</b>	<b>22.5109</b>	<b>0.0679</b>	<b>0.0000</b>	<b>0.8057</b>	<b>0.8057</b>	<b>0.0000</b>	<b>0.7523</b>	<b>0.7523</b>		<b>6,548.381 2</b>	<b>6,548.381 2</b>	<b>1.9478</b>		<b>6,597.076 9</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0320	1.0010	0.4610	4.6600e-003	0.1161	2.0100e-003	0.1181	0.0318	1.9300e-003	0.0337		524.3376	524.3376	0.0564		525.7483
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2373	0.1307	1.5980	6.2500e-003	0.7602	4.6400e-003	0.7648	0.2016	4.2700e-003	0.2059		623.7052	623.7052	0.0117		623.9968
<b>Total</b>	<b>0.2693</b>	<b>1.1317</b>	<b>2.0589</b>	<b>0.0109</b>	<b>0.8763</b>	<b>6.6500e-003</b>	<b>0.8829</b>	<b>0.2334</b>	<b>6.2000e-003</b>	<b>0.2396</b>		<b>1,148.042 8</b>	<b>1,148.042 8</b>	<b>0.0681</b>		<b>1,149.745 1</b>

## Crown Valley Parkway Pipeline - Orange County, Winter

**3.3 Master Meter - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.7293	20.1914	22.5109	0.0679		0.8057	0.8057		0.7523	0.7523	0.0000	6,548.381 2	6,548.381 2	1.9478		6,597.076 9
<b>Total</b>	<b>2.7293</b>	<b>20.1914</b>	<b>22.5109</b>	<b>0.0679</b>	<b>0.0000</b>	<b>0.8057</b>	<b>0.8057</b>	<b>0.0000</b>	<b>0.7523</b>	<b>0.7523</b>	<b>0.0000</b>	<b>6,548.381 2</b>	<b>6,548.381 2</b>	<b>1.9478</b>		<b>6,597.076 9</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0320	1.0010	0.4610	4.6600e-003	0.1081	2.0100e-003	0.1101	0.0298	1.9300e-003	0.0318		524.3376	524.3376	0.0564		525.7483
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2373	0.1307	1.5980	6.2500e-003	0.7007	4.6400e-003	0.7054	0.1870	4.2700e-003	0.1913		623.7052	623.7052	0.0117		623.9968
<b>Total</b>	<b>0.2693</b>	<b>1.1317</b>	<b>2.0589</b>	<b>0.0109</b>	<b>0.8088</b>	<b>6.6500e-003</b>	<b>0.8155</b>	<b>0.2168</b>	<b>6.2000e-003</b>	<b>0.2230</b>		<b>1,148.042 8</b>	<b>1,148.042 8</b>	<b>0.0681</b>		<b>1,149.745 1</b>

**4.0 Operational Detail - Mobile**



## Crown Valley Parkway Pipeline - Orange County, Winter

## 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.563406	0.043070	0.209298	0.109958	0.015015	0.005784	0.026182	0.017546	0.001775	0.001524	0.004941	0.000598	0.000904

## Crown Valley Parkway Pipeline - Orange County, Winter

**5.0 Energy Detail**

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Historical Energy Use: N

**5.1 Mitigation Measures Energy**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Crown Valley Parkway Pipeline - Orange County, Winter

**5.2 Energy by Land Use - Natural Gas**

Unmitigated

		Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kgBTU/yr	lb/day																
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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**6.0 Area Detail**

**6.1 Mitigation Measures Area**

## Crown Valley Parkway Pipeline - Orange County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.7000e-004	3.7000e-004	0.0000		4.0000e-004
Unmitigated	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.7000e-004	3.7000e-004	0.0000		4.0000e-004

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.7000e-004	3.7000e-004	0.0000		4.0000e-004
<b>Total</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>1.7000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>3.7000e-004</b>	<b>3.7000e-004</b>	<b>0.0000</b>		<b>4.0000e-004</b>

## Crown Valley Parkway Pipeline - Orange County, Winter

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.7000e-004	3.7000e-004	0.0000		4.0000e-004
<b>Total</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>1.7000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>3.7000e-004</b>	<b>3.7000e-004</b>	<b>0.0000</b>		<b>4.0000e-004</b>

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

## Crown Valley Parkway Pipeline - Orange County, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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## **APPENDIX C**

### **CULTURAL RESOURCE LETTER REPORT**

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September 20, 2021

Todd Dmytryshyn, P.E.  
Engineering Manager  
Moulton Niguel Water District  
P.O. Box 30203  
Laguna Niguel, CA 92607  
Email: [TDmytryshyn@mnwd.com](mailto:TDmytryshyn@mnwd.com)

**RE:** Cultural Resource Letter Report for the Crown Valley Pipeline Replacement Project, Dana Point, California (Orange County)

Dear Mr. Dmytryshyn:

The purpose of this letter is to describe the results of a cultural resources record search and literature review for the proposed Crown Valley Pipeline Replacement Project (Project), Dana Point, California.

## **PROJECT DESCRIPTION**

The Moulton Niguel Water District (District) is proposing to replace approximately 9,250 feet of the Lower Salada Lift Station's existing sewer force main with approximately 9,400 feet of new, dual-pipe force main, replace approximately 9,650 feet of the existing Crown Valley Parkway Transmission Main Lower Reach potable water pipeline, and relocate the Master Meter of Improvement District Number 1 (I.D. No. 1 Master Meter). The pipelines (sewer main and potable water main) and I.D. No.1 Master Meter are all owned and maintained by the District. The majority of construction activities to replace both the force main and potable water main will use open-trench techniques within the paved sections of Crown Valley Parkway. The depth of disturbance for trenching activities will average 6 to 7 feet. Trenchless construction is being considered for the intersection of Crown Valley Parkway and Pacific Island Drive/Camino del Avion and the intersection of Crown Valley Parkway and Clubhouse Drive. Trenchless construction methods are expected to use bore and jack techniques. The Project is needed to address the conditions of the sewer force main and the potable water pipeline as it is due for replacement. The relocation of the I.D. No. 1 Master Meter is required due to a separate South Coast Water District (SCWD) project involving the relocation of 2,500 linear feet of the existing 39-inch Joint Transmission Main onto Crown Valley Parkway. The District will require coordination with SCWD's design firm regarding the final location of the SCWD's relocated 39-inch Joint Transmission Main and outlet for the Project's relocated I.D. No. 1 Master Meter. The Project Area is defined as the linear corridor and associated features.

Following initial review of the proposed Project, the District has determined that it is subject to the guidelines and regulations of the California Environmental Quality Act (CEQA).

**Tetra Tech, Inc.**

17885 Von Karman Avenue, Suite 500, Irvine, CA 92614  
Tel 916.852.8300 Fax 916.852.0307 [tetratech.com](http://tetratech.com)

## **PROJECT LOCATION**

The proposed Project site is located in the city of Dana Point and the city of Laguna Niguel, in the southern portion of Orange County. The Project will be located in and adjacent to Crown Valley Parkway from the Moulton Niguel Water District's Lower Salada Lift Station, located at 32332 Crown Valley Parkway to approximately the Crown Valley Parkway intersection with Hillhurst Drive (Attachment 1, Figures 1–3).

## **REGULATORY COMPLIANCE**

Applicable state and local laws, ordinances, and regulations are discussed below.

### **California Environmental Quality Act**

CEQA (Section 21084.1) requires a lead agency determine whether a project could have a significant effect on historical resources and tribal cultural resources (Public Resource Code [PRC] Section 21074 [a][1][A]-[B]). Under the CEQA (Section 15064.5), a historic resource (e.g. buildings, structures, or archaeological resources) is resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR) or a local register or landmark, identified as significant in a historical resource survey (meeting the requirements of Section 5024.1(g) of the PRC), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (Section 15064.5[a][3]). Under the California Code of Regulations (CCR), Title 14, Chapter 11.5, properties listed on or formally determined to be eligible for listing in the National Register of Historic Places (NRHP) are automatically eligible for listing in the CRHR. A resource is generally considered to be historically significant under CEQA if it meets the criteria for listing in the CRHR (see PRC Section 5024.1, Title 14 CCR, Section 5024.1).

### **California Health and Safety Code, Sections 7050.5**

Section 7050.5 (a) states that it is a misdemeanor (except as provided in Section 5097.99, see below) to knowingly mutilate or disinter, wantonly disturb, or willfully remove any human remains in or from any location other than a dedicated cemetery without the authority of law. The provisions of this subdivision shall not apply to any person carrying out an agreement developed pursuant to subdivision (l) of Section 5097.94 of the Public Resources Code or to any person authorized to implement Section 5097.98 of the Public Resources Code. Section 7050.5 (b) requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner of the County (in which the human remains are discovered) can determine whether the remains are subject to the coroner's authority. The coroner shall make their determination within two working days from the time the person responsible for the excavation, or that person's authorized representative, notifies the coroner of the discovery of human remains. Per Section 7050.5 (c), if the coroner determines the remains are not subject to their authority and recognizes the remains to be Native American, or has reason to believe they are those of a Native American, the coroner shall contact, by telephone within 24 hours, the California Native American Heritage Commission (NAHC). California Native American Historical, Cultural, and Sacred Sites Act.

The California Native American Historical, Cultural, and Sacred Sites Act (Act) applies to both state and private lands. The Act requires that upon discovery of human remains, construction or excavation activity cease and that the county coroner be notified. If the remains are Native American, the coroner must notify the NAHC. The NAHC will then identify and notify a most likely descendant (MLD). The Act

stipulates the procedures the MLD may follow for treating or disposing of the remains and associated grave goods.

### **California Public Resource Code, Section 5097.5 and 5097.99**

Section 5097.5 of the Code states:

No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

As used in this section, "public lands" means lands owned by, or under the jurisdiction of the state or any city, county, district, authority, public corporation, or any agency thereof.

Section 5097.99 of the Code states:

- (a) No person shall obtain or possess any Native American artifacts or human remains which are taken from a Native American grave or cairn on or after January 1, 1984, except as otherwise provided by law or in accordance with an agreement reached pursuant to subdivision (l) of Section 5097.94 or pursuant to Section 5097.98.
- (b) Any person who knowingly or willfully obtains or possesses any Native American artifacts or human remains which are taken from a Native American grave or cairn after January 1, 1988, except as otherwise provided by law or in accordance with an agreement reached pursuant to subdivision (l) of Section 5097.94 or pursuant to Section 5097.98, is guilty of a felony which is punishable by imprisonment pursuant to subdivision (h) of Section 1170 of the Penal Code.
- (c) Any person who removes, without authority of law, any Native American artifacts or human remains from a Native American grave or cairn with an intent to sell or dissect or with malice or wantonness is guilty of a felony which is punishable by imprisonment pursuant to subdivision (h) of Section 1170 of the Penal Code.

### **Assembly Bill 52**

Under CEQA, Assembly Bill 52 requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. Consultations must include discussing the type of environmental review necessary, the significance of tribal cultural resources, and the significance of the project's impacts on the tribal cultural resources, and alternatives and mitigation measures recommended by the tribe. That consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project.

### **California State Senate Bill 18**

California State Senate Bill 18, signed into law in September 2004 and implemented March 1, 2005, requires cities and counties to notify and consult with California-recognized Native American Tribes

about proposed local land use planning decisions for the purpose of protecting Traditional Tribal Cultural Places. The Governor's Office of Planning and Research was mandated to amend its General Plan Guidelines to include the stipulations of Senate Bill 18 and to add advice for consulting with California Native American Tribes.

## RECORD SEARCH RESULTS

A record search of the cultural resources site and Project file collection at the South Central Coast Information Center (SCCIC), California State University at Fullerton, of the California Historical Resources Information System, was conducted on April 9, 2021 (see Attachment 2). As part of this records search, the SCCIC database of survey reports and overviews was consulted, as well as documented cultural resources, cultural landscapes, and ethnic resources. Additionally, the search included a review of the following publications and lists: California Office of Historic Preservation Historic Properties Directory, NRHP, California Office of Historic Preservation Archaeological Determinations of Eligibility, California Inventory of Historical Resources/CRHR, California Points of Historical Interest, and California Historical Landmarks. A literature search of ethnographic information, historical literature, historical maps and plats, and local historic resource inventories was also conducted. The records search focused specifically on the proposed Project and a 0.25-mile buffer centered on the Project Area.

The SCCIC records search identified 14 previously conducted reports within the Project Area. The previous surveys within the Project Area were conducted between 1977 and 2014 and overlap with portions of the Project Area (approximately 70 percent). Eighteen previously conducted surveys were identified within 0.25 mile of the Project. These surveys were conducted between 1976 and 2014. These previous investigations consist of archaeological and paleontological surveys, monitoring, testing, and cultural resources literature reviews.

One previously recorded prehistoric archaeological site was identified in the Project's direct area of impact (P-30-000033, discussed below). Eight previously recorded cultural resources were identified within 0.5 mile of the Project. Of the eight formally recorded resources identified within 0.5 mile, one is an isolated piece of groundstone and the remaining seven are all recorded as prehistoric shell midden site types.

The records search results for previously conducted surveys within the Project are listed in Table 1 and Attachment 1. The record search results for previously recorded sites within 0.25 mile are listed in Table 2 and attached SCCIC data sheet (Attachment 2).

**Table 1. Cultural Resource Surveys that Overlap Within the Project.**

Report No.	Year	Author(s)/Affiliation	Title	Survey Type
OR-00255	1977	Scientific Resources Survey, Inc.	<i>Archaeological Report on the Aliso Creek Corridor- Planning Units 2 &amp; 3 Orange County, California</i>	Archaeological Field Survey
OR-00540	1977	Archaeological Research, Inc.	<i>Archaeological Resource Survey of the Bear Brand Ranch</i>	Archaeological Field Survey
OR-00549	1976	Archaeological Research, Inc.	<i>Archaeological Survey and Resource Assessment of a Portion of Laguna Niguel, Orange County, California</i>	Archaeological Field Survey
OR-00580	1977	Scientific Resources Survey, Inc.	<i>The Aliso Creek Watershed, Orange County, California a Proposal for Creating an Archaeological District for the National Register of Historic Places and a Suggested Research and Study Design</i>	Literature Review
OR-00691	1979	Archaeological Planning Collaborative	<i>Archaeological Reconnaissance Salt Creek Area Orange County, California</i>	Archaeological Field Survey



Report No.	Year	Author(s)/Affiliation	Title	Survey Type
OR-00823	1986	RMW Paleo Associates, Inc.	<i>Cultural Resources Assessment of Shea Company Property and Surface Collection of Sites CA-ORA-493 and CA-ORA-540, Laguna Niguel, Orange County, California</i>	Archaeological Field Survey
OR-00831	1986	Archaeological Advisory Group	<i>Archaeological, Paleontological, and Historical Resources Assessment for the Salt Creek General Development Plan, County of Orange, California</i>	Archaeological Field Survey
OR-00850	1986	RMW Paleo Associates, Inc.	<i>Archaeological Site CA-ORA-1108: a Seed and Vegetable Fiber Collecting and Processing Station in Laguna Niguel, Orange County, California</i>	Archaeological Field Survey
OR-01183	1991	RMW Paleo Associates, Inc.	<i>A Cultural Resources Reconnaissance of the Hon Property O Approximately 60.9 Acres Located in Laguna Niguel, Orange County, California</i>	Archaeological Field Survey
OR-01241	1992	LSA Associates, Inc.	<i>Archaeological Assessment, South Peak Bicycle Trail</i>	Archaeological Field Survey
OR-01465	1990	Scientific Resource Surveys, Inc.	<i>Archaeological, Paleontological and Historical Literature Search and Records Check for South Coastal Orange County Central Pool Relief</i>	Archaeological, Architectural/Historical, Literature search
OR-01712	1963	Department of Anthropology-Sociology, UCLA	<i>Archaeological Investigations at Laguna Niguel, Orange County</i>	Excavation
OR-04371	2014	LSA Associates, Inc.	<i>Draft Environmental Impact Report Volume I South Shores Church Master Plan City of Dana Point</i>	Archaeological, Architectural/Historical, Field study, Management/planning
OR-04456	2012	LSA Associates, Inc.	<i>Cultural Resources Assessment South Shores Church, City of Dana Point Orange County, California</i>	Archaeological, Architectural/Historical, Field study

\*see attached data sheets

### Previously Recorded Archaeological Sites within the Project Area:

**P-30-000033 (CA-ORA-000033):** This site is originally recorded as a shell midden with groundstone, a stone pendant, scrapers and choppers and partially destroyed due to development<sup>1</sup>. The site was excavated in the early 1960s by the University of California at Los Angeles and is later described as destroyed by 1976 due to urban development.<sup>2,3</sup> In 2013, the SCCIC noted that the previously recorded boundary of the site is unverified due to insufficient location information. Based on modern google earth aerial imagery, the previously recorded site boundary is currently within a built environment with roads, a residential housing development, and a golf course.

**Table 2. Archaeological Resources Previously Recorded within and within 0.5 mile of the Project Area.**

Primary or Trinomial #	Time Period	Site Type/Name	Date/Recorder	CRHR/NRHP Eligibility
<b>Site within Project Area</b>				
P-30-000033	Prehistoric	Shell Midden: tested and noted as destroyed due to urban development .	1960/C. Lytton	No data.

<sup>1</sup> Lytton, C. 1960. University of California, Archaeological Site Survey Record P-30-000031 (CA-ORA-33). On file at the SCCIC.

<sup>2</sup> Scientific Resources Surveys, Inc. 1977. Archaeological Report on the Aliso Creek Corridor – Planning Units 2 & 3 Orange County, California Purchase Order No. C 56684 Control No. 34254. On file at the SCCIC.

<sup>3</sup> Archaeological Research Inc. 1976. Archaeological Survey and Resource Assessment of a Portion of Laguna Niguel, Orange County, California. On file at the SCCIC.

Primary or Trinomial #	Time Period	Site Type/Name	Date/Recorder	CRHR/NRHP Eligibility
<b>Site within 0.5 mile of the Project Area</b>				
P-30-000127	Prehistoric	Shell Midden: due to impacts from past grading of the site area a salvage excavation occurred in 1972.	1977/C. Reeves	No data.
P-30-000129	Prehistoric	Shell Midden: lithic, midden, shell. Impacted due to development.	1960/C. Lytton	No data.
P-30-000131	Prehistoric	Shell Midden: impacted and noted as destroyed due to urban development.	1963/PC Archaeological Society	No data.
P-30-000539	Prehistoric	Isolate: metate	1976/C. Singer	No data.
P-30-000567	Prehistoric	Shell Midden originally recorded in 1960s, revisited in 1983 and no evidence of site observed, the form notes the site area is under fill from a housing development project.	1975/N. Leonard 1983/B. Pardon	No data.
P-30-000568	Prehistoric	Shell and lithic scatter.	1975/N. Leonard and M. Brandmon 1983/B. Pardon	No data.
P-30-000569	Prehistoric	Shell Midden.	1975/N. Leonard and M. Brandmon 1983/B. Pardon	No data.
P-30-000570	Prehistoric	Shell Midden: record notes the site area impacted by development and may be under fill from a housing development project.	1975/N. Leonard and M. Brandmon	No data.
P-30-000571	Prehistoric	Shell Midden: record notes the site area impacted by development.	1975/N. Leonard and M. Brandmon	No data.

\* Disclosure of site locations prohibited. Information contained in this document is confidential, in compliance with 36 CFR 800.11(c), and access to this information is restricted by the National Historic Preservation Act of 1966 (as amended) Section 1 (16 USC 470), and the Archaeological Resources Protection Act of 1979 (as amended).

### Historic United States Geological Survey Map and General Land Office Plat Map and Historic Aerial Review

Review of historic maps and aerial imagery provides information regarding potential unrecorded historic features or sites within the Project. Based on the map review, the Project site was undeveloped land in 1949. By 1968, the Project appears with paved major roads and freeways, and residential subdivisions to the west. By 1972, increased development of residential subdivisions and a golf course appear along either side of Crown Valley Way. Between 1980 to 2016, the undeveloped land is developed with major infrastructure including commercial areas, residential subdivisions, major roads, and a golf course. The results of the review of available historic aerials and United States Geological Survey (USGS) quadrangle maps are presented in Table 3 below.

**Table 3. Review of Historic USGS Maps and Aerial Photographs.**

Map Name	Date(s)	Author	Legal Description	Description of Potential Resource within Project Study Area
GLO Plat	1875	General Land Office	T8S, R8W	The Project Area is within and adjacent to the former Rancho Niguel, Arroyo Salado is to south.
USGS 1:24,000 Dana Point, CA	1949, 1968	USGS staff	T8S, R8W	1949: No potential resources appear illustrated within the Project Area. Salt Creek (Arroyo Salado) is to the south. 1968: Crown Valley Parkway is present in the Project Area and residential development is located to the northwest.

Map Name	Date(s)	Author	Legal Description	Description of Potential Resource within Project Study Area
USGS 1:24,000, San Juan Capistrano, CA	1968	USGS staff	T8S, R8W; T7S, R8W	Crown Valley Parkway is present within the Project Area. A residential subdivision is to the north and east of, and El Niguel Country Club is east of the northern segment of the Project Area. A residential subdivision is also near the southern segment of the Project Area.
Historic Aerial Photo	1938, 1946, 1952	Netonline	T8S, R8W T7S, R8W	The Project Area appears as undeveloped land.
Historic Aerial Photo	1967, 1972	Netonline	T8S, R8W T7S, R8W	Residential subdivisions and associated infrastructure are present along either side of Crown Valley Parkway. By 1972, increased development of residential subdivisions and a golf course appear along either side of Crown Valley Way.
Historic Aerial Photo	1980, 2012	Netonline	T8S, R8W T7S, R8W	1980: Additional development beyond that on the 1970 photos is shown within the Project Area. 2012: The Project Area is completely developed with paved roads as well as residential and commercial infrastructure and appears as it does today.

T=Township, R=Range, USGS=United States Geological Survey; Netonline=Historic Aerials by Netonline 2018. Electronic database located at <https://www.historicaerials.com/viewer> accessed 4/23/2019.

### Federal Land Patent Search

A search of federal land patents through the Bureau of Land Management's General Land Office Records website identified two early patent holders for Township 8 South, Range 8 West, Section 9; one is the State of California (1876) and the other is Amardo Amarisca (1877) (see Table 4). Federal land patents provide information on the initial transfer of land titles from the federal government to private (individuals or companies) or local governments by the title transfer authority. No historic information was available for Amardo Amarisca through census and genealogic sources, historic newspaper articles, or other online sources.

**Table 4. BLM Database Historic Land Patents of T8S, R8W, 9, San Bernardino Baseline Meridian**

Patent # or BLM Accession #	Date	Patentee	Legal Description	Transfer Authority
CA0500 .353	1/30/1877	Amardo Amarisca	T8S, R8W, S9: E ½, SE ¼, S ½, SE ¼ : 163.27 acres	April 24, 1820: Sale-Cash Entry (3 Stat. 566)
CACAAA 075855 01	3/9/1876	The State of California	T8S, R8W, S9: NW¼NW¼	January 21, 1927: Indemnity Selections (44 Stat. 1022)

BLM=Bureau of Land Management, T=Township, R=Range

### NATIVE AMERICAN HERITAGE COMMISSION SACRED LAND FILE SEARCH

The NAHC was contacted on March 12, 2021 and a request made for a Sacred Land File search. The NAHC replied on March 24, 2021, that the Sacred Land File results were positive for the Project and provided a list of local Native American contacts with knowledge of the region (see Attachment 3). Specifically, the NAHC recommended contacting the Juaneño Band of Mission Indians, Acjachemen Nation-Belardes. The NAHC recommended that outreach to the listed tribes or individuals be made as they may have knowledge of cultural resources within or near the Project Area. Native American government to government consultation is part of the lead CEQA agency's responsibilities under Assembly Bill 52. Per Assembly Bill 52, the District provided written notification on April 22, 2021 to the tribal governments listed by the NAHC, including the Juaneño Band of Mission Indians, Acjachemen Nation-Belardes. On May 10, 2021, Joyce Stanfield Perry, Juaneño Band of Mission Indians, Acjachemen Nation-Belardes, Tribal Manager, Cultural Resource Director, replied to the District.

Ms. Stanfield Perry stated that the tribe would like to consult regarding the Project. The District is consulting with the Juaneño Band of Mission Indians, Acjachemen Nation-Belardes, and consultation is ongoing.

## **ENVIRONMENTAL AND ARCHAEOLOGICAL BACKGROUND AND RESOURCE SENSITIVITY**

The prehistory of the southern California region has been summarized within four major horizons or cultural periods: Horizon I – Early Period (12,000 to 7,500 years before present [BP]), Horizon II – Millingstone Horizon (7,500 to 3,000 BP), Horizon III – Intermediate Cultures (3,000 to 1,000 BP), and Horizon IV – Late Prehistoric (1,000 years BP to European historic contact, approximately the mid-1500s anno domini). The Project Area is within the ancestral territory traditionally inhabited by the Juaneño, Takic speakers, historically associated with the Mission San Juan Capistrano. The Gabrieliño (Tongva) were to the north and the Luiseño to the south. The Juaneño are considered to be linguistically and ethnologically related to the Luiseño. The Juaneño occupied the coastal areas extending from Aliso Creek to the northwest, south along the coast to San Onofre and Las Pulgas, and inland to the Sierra Santa Ana. Similar to the Gabrieliño (Tongva) and Luiseño, the Juaneño were fisher-hunter-gatherers who exploited a variety of floral and faunal resources available within the coastal bay, littoral, riverine, marsh, and interior grassland valley ecological zones of their territory. Subsistence resources included items such as several species of oak trees, grasses, sage bushes, rabbits, deer, fish, shellfish, and other terrestrial and marine mammals. Today, the Juaneño Band of Mission Indians, Acjachemen Nation is governed by a Tribal Council. The tribe is active in government, has many citizens, tribal committees, community activities, and tribal gatherings.

European settlement began in 1771, when Spanish missionaries started to settle along the California coast and adjacent inland areas (about 1771 to 1834). Following the Mexican American War and secularization of the nearby missions in 1834, the region was transferred to private landowners who established a primary economy of cattle ranching (ranchos). Specifically, the Project Area is within the former Rancho Niguel. After the fall of the rancho system, European settlers purchased substantial land holdings in the area. The economy in the region included large-scale farming and fruit orchards and ranching.

Vegetation in the Project site and adjacent area consists primarily of nonnative species and landscaping. Prior to water diversions in the nineteenth century for agricultural use, and the introduction of nonnative species, the Dana Point region had a variety of vegetation zones and a rich biological diversity. This diversity was supported by climatic and hydrological conditions that were conducive to abundant resource availability and allowed subsistence procurement by pre-contact populations and historic populations. Three freshwater resources are near the Project Area; Salt Creek (Arroyo Salada) is west and two unnamed springs are to the east. Prior to historic alterations to the landscape, the region was characterized by vegetation communities such as coastal scrub, grasslands and seasonal wetlands and riparian forest along rivers and drainages. Wildlife in the region included aquatic resources (anadromous fish and freshwater mussels), mammals such as deer, rabbits, foxes, small rodents, various birds, reptiles, and insects.

Regionally, this area is in the western end of the Peninsular Ranges Geomorphic Province. The Project site is within an alluvial valley with deposits mostly of young stream sediments upslope from the Pacific Ocean. Adjoining the Project along both sides of the valley are exposures of the older Niguel Formation (Pliocene) and Capistrano Formation (Miocene-Pliocene). Sediments within the Project Area

consist of Quaternary aged deposits: Holocene (recent to 10,000 years old) and Pleistocene (10,000 to 2 million years old) marine and non-marine terrace deposits, to older Pliocene to Late Miocene (3.6 to 11.62 million years ago) marine basin deposits. It is generally accepted that human occupation of southern California region did not occur until approximately 12,000 years ago. Therefore, landforms that are Pleistocene (approximately 1.8 million years to 11,650 years before present) in age or older are less likely to contain subsurface archaeological material. Conversely, intact Holocene (approximately 11,650 years before present) age deposits are considered more likely to contain archaeological material. Therefore, late Pleistocene and Holocene deposits are generally considered more likely to contain prehistoric archaeological deposits.

The surficial deposits within the Project have been subjected to previous ground disturbance and fill due to historic and modern development. The Project is within an entirely built environment with paved areas, landscaping, residential and commercial development, and a golf course. Based on the geotechnical report for the Project, artificial fill underlies the paved areas across the Project site.<sup>4</sup> The artificial fill ranges in depth below asphalt between 5 to 8 feet in the northern portion of the Project and 3 to 5 feet in the central and southern portion of the Project. The fill is primarily underlain by Quaternary aged (late Pleistocene and Holocene) young alluvial deposits that range between approximately 3 to 13 feet in depth. If construction ground disturbance depths range within native soils, there would be a potential to impact previously unrecorded subsurface cultural resources. An archaeological survey was not conducted for the Project due to the built environment and no visible non-disturbed or natural ground surface.

Although the Project and surrounding area is relatively densely developed, several archaeological studies have been conducted throughout the region and several previously recorded cultural resources have been identified within and near the Project. The One previously recorded prehistoric resources P-30-000033 (CA-ORA-000033) is within the Project footprint within developed areas. This resource is previously documented as destroyed due to urban development.

## **SUMMARY AND RECOMMENDATIONS**

### **Archaeological**

The summary and recommended management measures resulting from this study of the Project are discussed below. The background research, consultation, cultural resource inventory, recommendations, and impact analysis discussed in this report were conducted to partially fulfill CEQA requirements for the proposed Project.

One previously recorded prehistoric resource P-30-000033 (CA-ORA-000033) is within the Project footprint and is documented as destroyed due to urban development. As such, the is not listed or eligible for listing in the CRHR. Although the site has been substantially altered (most likely destroyed) due to past development, there is a potential that cultural artifacts or deposits remain within the previously recorded boundary of the site in undisturbed subsurface soils.

Based on the natural setting, NAHC SLF results, SCCIC records search results and literature review, previous surveys, and distribution patterns of previously recorded sites within and near the Project, and previous disturbance to native surface and subsurface soils (i.e., modern development, artificial fill), the

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<sup>4</sup> Leighton Consulting, Inc. 2021. Geotechnical Exploration Project Moulton Niguel Water District Crown Valley Pipeline Replacement Projects Cites of Dana Point and Laguna Niguel, California.



Project Area is assessed as having an overall low to moderate sensitivity for significant buried precontact or historic archaeological resources within undisturbed subsurface deposits. Hence, there is a possibility that buried archaeological deposits may be encountered during Project-related subsurface excavation (e.g., Holocene age alluvial deposits), which is proposed at depths of up to approximately 6 to 7 feet.

If construction ground disturbance depths range within undisturbed native soils, there would be a potential to impact previously unrecorded subsurface cultural resources. Mitigation addressing inadvertent discoveries of archaeological resources is included as Mitigation Measure CUL-1 below. With Mitigation Measures CUL-1, CUL-2, and CUL-3 incorporated, a less than significant impact is anticipated.

1. **Environmental Training** – prior to construction of the Project, a qualified archaeologist will provide a cultural resource instruction for all on-site project personnel. This instruction will cover all applicable laws and penalties for disturbing cultural resources, it will discuss the prehistoric and historic regional context and archaeological sensitivity of the area, describe the types of cultural resources found in the area, instruct Project workers that they must halt construction if a cultural resource is inadvertently discovered during construction, and present the procedures they are to follow in the event an inadvertent discovery is made (CUL-3). An Inadvertent Discovery Plan will describe appropriate procedures, notifications, and treatment of cultural resources, and respectful behavior after a discovery (e.g., no posting to social media or photographs). If requested by the local tribe, a tribal representative(s) shall be invited to participate in the environmental training to discuss or provide context from a tribal cultural perspective regarding the cultural resources within the region.
2. **Cultural Resource Monitoring Plan and Inadvertent Discovery Plan** – A qualified archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards (36 Code of Federal Regulations Part 61) will be retained for the Project to be on-call and prepare a Cultural Resource Monitoring and Inadvertent Discovery Plan (Plan) for the Project. The plan will review applicable laws, provide a map of locations (and depth) where an archaeological monitor will be required to observe earthmoving activities within native soils, the plan will outline monitor responsibilities and procedures for monitoring ground disturbance, monitor reporting, and the procedures for an inadvertent discovery (CUL-3). In addition, the plan will provide specific monitoring treatment measures for Project activities within the recorded boundary of site P-30-000033 (CA-ORA-000033). The plan shall be developed in coordination and consultation with interested tribe(s) and shall provide procedures for discovery of tribal cultural resources. A qualified Archaeological monitor will be retained to conduct archaeological monitoring of construction activities as identified by the Plan. If requested by interested tribe(s), a Native American monitor will be retained, as applicable. The Archaeological monitor will follow the protocol outlined in the Cultural Resource Monitoring and Inadvertent Discovery Plan.. A final report summarizing the monitoring activities and the results of monitoring site P-30-000033 (CA-ORA-000033), including a site record (DPR-523) update, will be prepared by the Project Archaeologist. The Archaeological monitor will work in coordination with the Native American monitor (as applicable).
3. **Inadvertent Discovery of Archaeological Resources During Construction** – During Project-level construction, should subsurface archaeological resources be discovered, all activity 50 feet of a "find" shall stop and a qualified archaeologist shall be contacted to assess the significance of the find according to CEQA Guidelines Section 15064.5 and/or NRHP criteria (as applicable). The archaeologist shall have the authority to halt any project-related construction activities that could impact potentially significant resources. If any find is determined to be significant, the

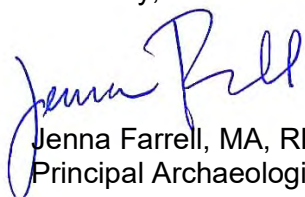


archaeologist shall determine, in consultation with the implementing agencies and any local Native American groups expressing interest, appropriate avoidance measures or other appropriate mitigation. Ground-disturbing activities shall not continue until the discovery has been assessed by the Archaeologist (in coordination with the Native American monitor, as applicable). The Archaeologist shall be afforded the necessary time to assess the find. With monitoring, construction activities may continue on other areas of the Project site during evaluation and treatment of historic or unique archaeological resources. Under CEQA Guidelines Section 15126.4(b)(3), preservation in place is the preferred means to avoid impacts to archaeological resources qualifying as historical resources. Methods of avoidance may include, but shall not be limited to, (i) Project re-route or re-design, (ii) Project cancellation, or (iii) identification of protection measures such as capping or fencing. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures, such as data recovery or other appropriate measures, in consultation with the implementing agency and any local Native American representatives expressing interest in prehistoric or tribal resources. If an archaeological site does not qualify as an historical resource but meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site shall be treated in accordance with the provisions of Section 21083.2.

Existing regulations require that if human remains and/or cultural items defined by Health and Safety Code, Section 7050.5, are inadvertently discovered, all work in the vicinity of the find would cease and the Orange County Coroner would be contacted immediately. If the remains are found to be Native American as defined by Health and Safety Code, Section 7050.5, the Orange County Coroner will contact the NAHC by telephone within 24 hours.

Should you have any questions regarding the information provided above, please contact Tetra Tech's Cultural Resource Specialist, Jenna Farrell at [jenna.farrell@tetrattech.com](mailto:jenna.farrell@tetrattech.com) or (916) 206-8705.

Sincerely,



Jenna Farrell, MA, RPA  
Principal Archaeologist, Tetra Tech, Inc.

Attachments:

Attachment 1. Figures

Attachment 2. Record Search Results

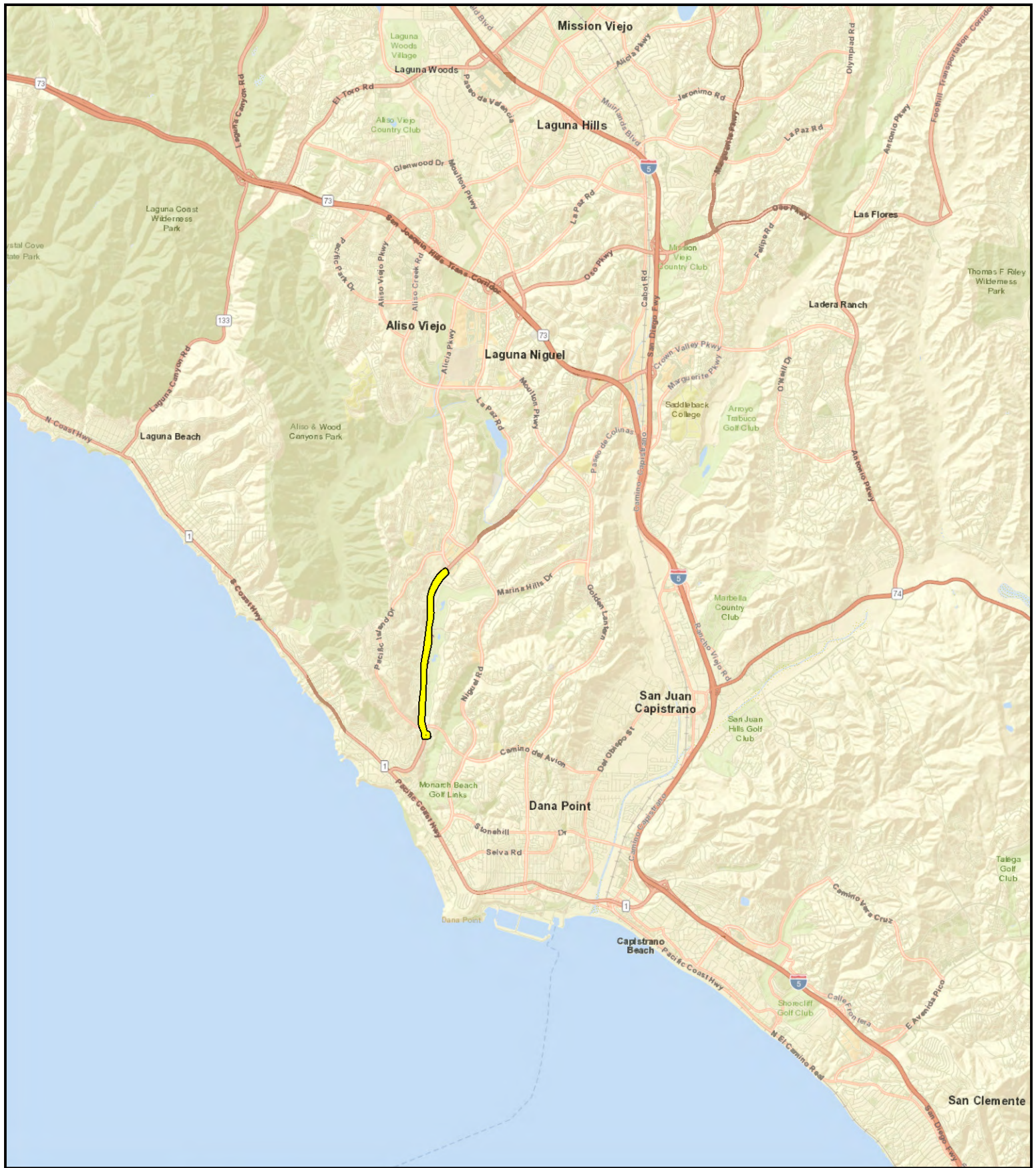
Attachment 3. Native American Heritage Commission Results

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# **Attachment 1**

## **Figures**

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 Project Area

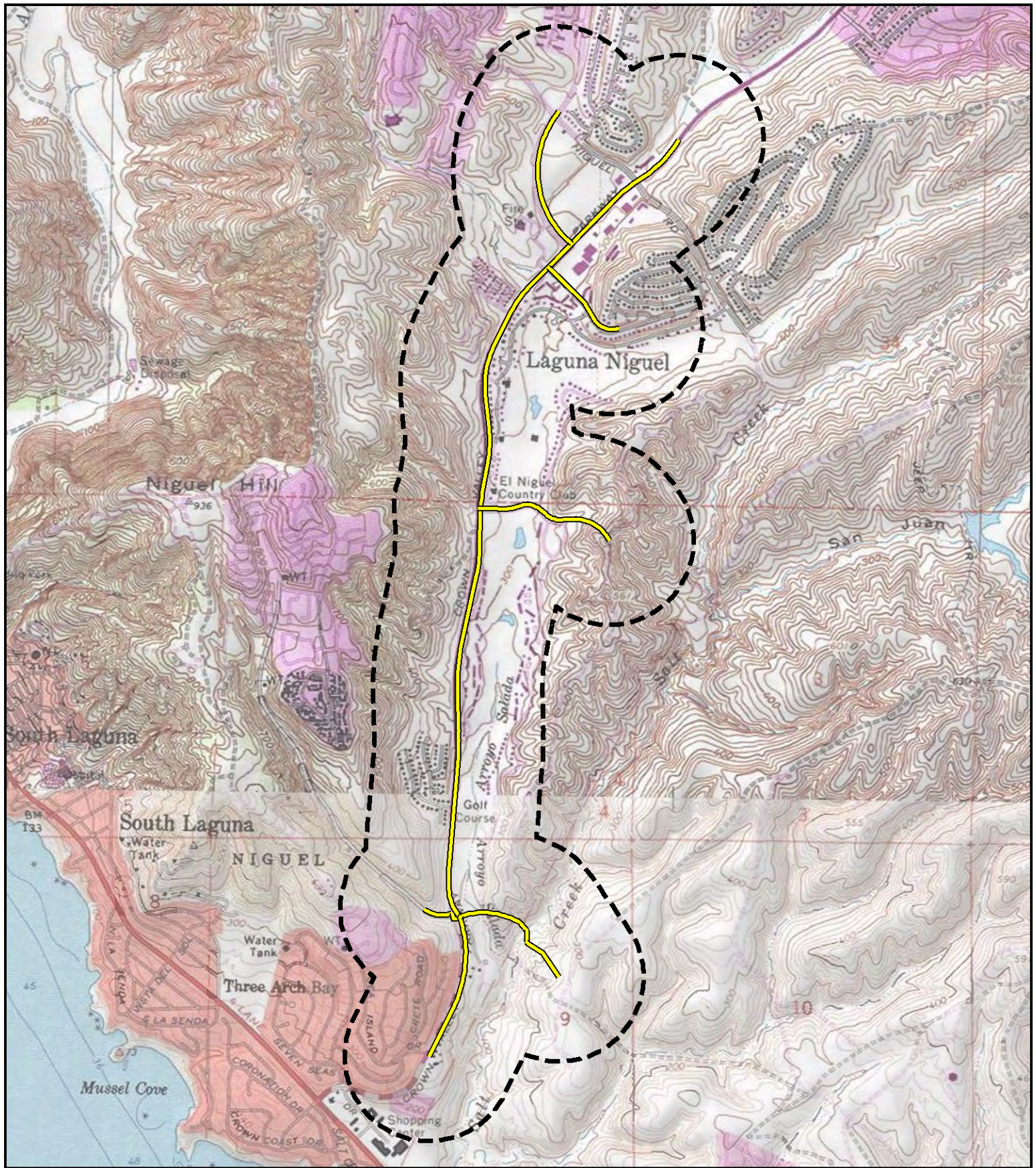


Figure 1  
Project Vicinity Map

Crown Valley Pipelines  
Replacement Project  
Orange County, California

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— Project Area  
 - - - Search Area

USGS 7.5' Quad: San Juan Capistrano (1977),  
 Dana Point (1978)  
 PLSS: T8S R8W S9, 10; Remainder outside PLSS

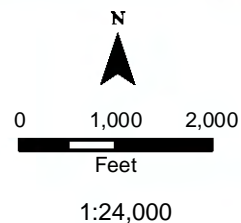
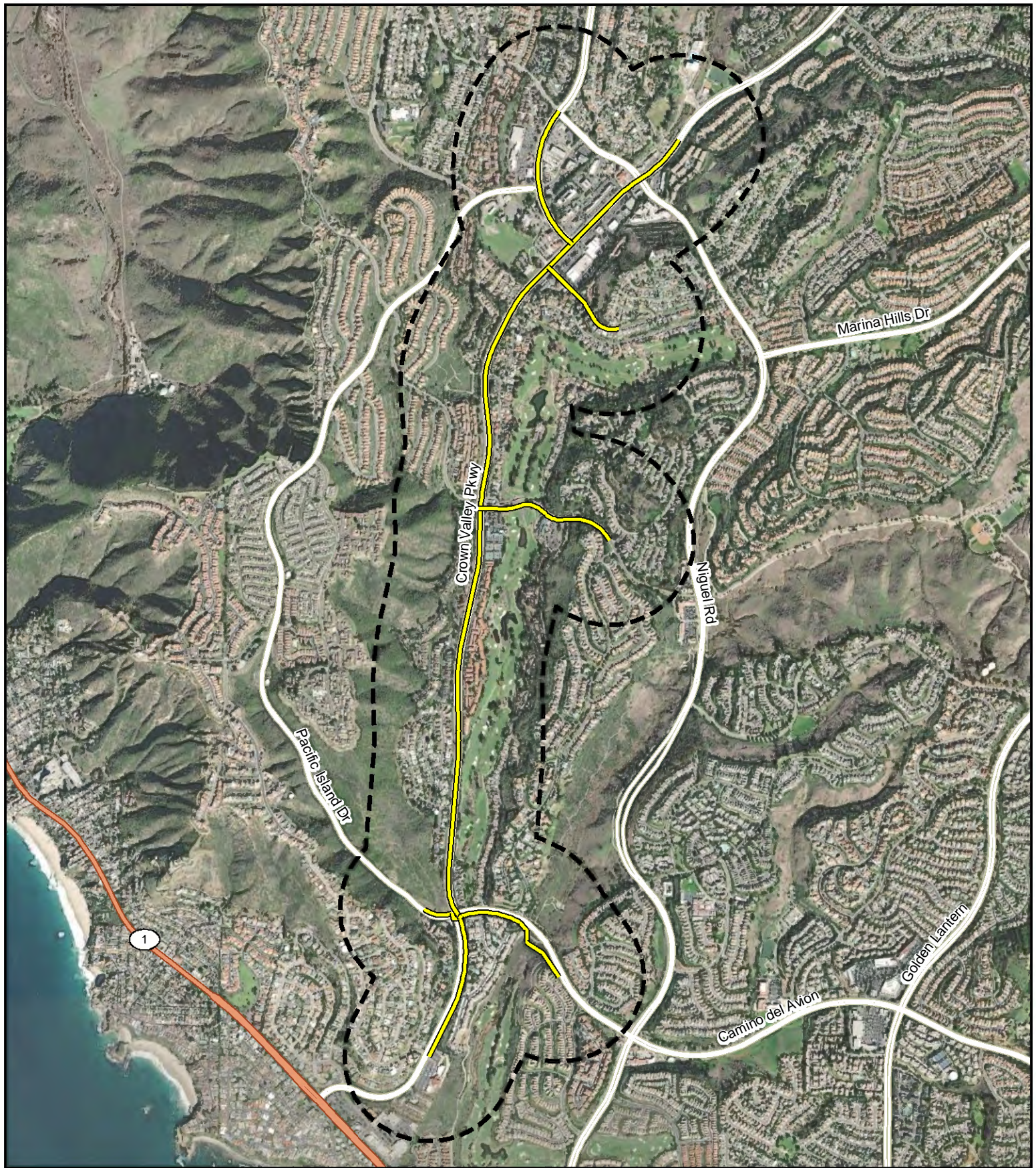


Figure 2  
 Project Location Map  
 (Topographical)  
 Crown Valley Pipelines  
 Replacement Project  
 Orange County, California



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— Project Area  
- - - Search Area

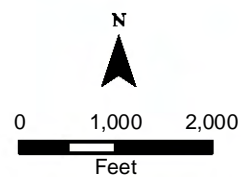


Figure 3  
Project Location Map  
(Aerial)

Crown Valley Pipelines  
Replacement Project  
Orange County, California



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# **Attachment 2**

## **Record Search Results**

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## South Central Coastal Information Center

California State University, Fullerton  
Department of Anthropology MH-426  
800 North State College Boulevard  
Fullerton, CA 92834-6846  
657.278.5395 / FAX 657.278.5542

[sccic@fullerton.edu](mailto:sccic@fullerton.edu)

*California Historical Resources Information System*  
*Orange, Los Angeles, and Ventura Counties*

4/9/2021

Records Search File No.: 22219.8371

Jenna Farrell  
Tetra Tech, Inc.  
3101 Zinfandel Drive, Bldg B, Suite 200  
Rancho Cordova CA 95670

Re: Records Search Results for the Crown Valley Parkway Replacement Project

The South Central Coastal Information Center received your records search request for the project area referenced above, located on the Dana Point and San Juan Capistrano, CA USGS 7.5' quadrangles. Due to the COVID-19 emergency, we have temporarily implemented new records search protocols. With the exception of some reports that have not yet been scanned, we are operationally digital for Los Angeles, Orange, and Ventura Counties. See attached document for your reference on what data is available in this format. The following reflects the results of the records search for the project area and a ¼-mile radius:

As indicated on the data request form, the locations of resources and reports are provided in the following format: ☐ custom GIS maps ☒ shape files ☐ hand drawn maps

Resources within project area: 2	30-000033, 30-000131
Resources within ¼-mile radius: 8	SEE ATTACHED LIST
Reports within project area: 14	OR-00255, OR-00540, OR-00549 OR-00580, OR-00691, OR-00823, OR-00831, OR-00850, OR-01183, OR-01241, OR-01465, OR-01712, OR-04371, OR-04456
Reports within ¼-mile radius: 18	SEE ATTACHED LIST

**Resource Database Printout (list):**

☒ enclosed ☐ not requested ☐ nothing listed

**Resource Database Printout (details):**

☒ enclosed ☐ not requested ☐ nothing listed

**Resource Digital Database (spreadsheet):**

☒ enclosed ☐ not requested ☐ nothing listed

**Report Database Printout (list):**

☒ enclosed ☐ not requested ☐ nothing listed

**Report Database Printout (details):**

☒ enclosed ☐ not requested ☐ nothing listed

**Report Digital Database (spreadsheet):**

☒ enclosed ☐ not requested ☐ nothing listed

**Resource Record Copies:**

☒ enclosed ☐ not requested ☐ nothing listed

**Report Copies:**

☒ enclosed ☐ not requested ☐ nothing listed

**OHP Built Environment Resources Directory (BERD) 2019:** ☒ available online; please go to

[https://ohp.parks.ca.gov/?page\\_id=30338](https://ohp.parks.ca.gov/?page_id=30338)

**Archaeo Determinations of Eligibility 2012:** ☐ enclosed ☐ not requested ☒ nothing listed

**Historical Maps:** ☐ enclosed ☒ not requested ☐ nothing listed

**Ethnographic Information:** ☒ not available at SCCIC

**Historical Literature:** ☒ not available at SCCIC

**GLO and/or Rancho Plat Maps:** ☒ not available at SCCIC

**Caltrans Bridge Survey:** ☒ not available at SCCIC; please go to

<http://www.dot.ca.gov/hq/structur/strmaint/historic.htm>

**Shipwreck Inventory:** ☒ not available at SCCIC; please go to

[http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks\\_Database.asp](http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks_Database.asp)

**Soil Survey Maps: (see below)** ☒ not available at SCCIC; please go to

<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

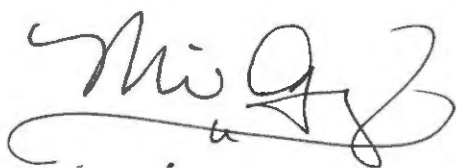
Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System,



Digitally signed by Michelle Galaz

Date: 2021.04.09 23:43:57 -07'00'

Michelle Galaz  
Assistant Coordinator

## Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
OR-00108		1976	Desautels, Roger J.	Archaeological Survey Report on 4.78 Acres of Land Located in the Laguna Niguel Area of the County of Orange, California	Scientific Resource Surveys, Inc.	
OR-00237		1976	Craib, John L.	Report of the Results of an Archaeological Survey for a Project Located in Laguna Niguel, California.	Environmental Research Archaeologists	
OR-00255		1977	Anonymous	Archaeological Report on the Aliso Creek Corridor- Planning Units 2 & 3 Orange County, California	Scientific Resource Surveys, Inc.	30-000006, 30-000008, 30-000009, 30-000010, 30-000017, 30-000018, 30-000019, 30-000020, 30-000033, 30-000040, 30-000074, 30-000110, 30-000126, 30-000131, 30-000133, 30-000135, 30-000388, 30-000389, 30-000390, 30-000395, 30-000396, 30-000397, 30-000398, 30-000399, 30-000400, 30-000401, 30-000402, 30-000403, 30-000404, 30-000405, 30-000406, 30-000407, 30-000512, 30-000515, 30-000580
OR-00540		1977	Anonymous	Archaeological Resource Survey of the Bear Brand Ranch	Archaeological Research, Inc.	30-000129, 30-000567, 30-000568, 30-000569, 30-000570
OR-00549	Paleo -	1976	Singer, Clay A.	Archaeological Survey and Resource Assessment of a Portion of Laguna Niguel, Orange County, California	Archaeological Research, Inc.	30-000493, 30-000538, 30-000539, 30-000540
OR-00580		1977	Anonymous	The Aliso Creek Watershed, Orange County, California a Proposal for Creating an Archaeological District for the National Register of Historic Places and a Suggested Research and Study Design	Scientific Resource Surveys, Inc.	
OR-00633		1982	Schroth, Adella and Del Chario, Kathleen C.	Archaeological Interpretation of the Salt Creek Sites: CA-ORA-568 and CA-ORA-569	ARMC	30-000568, 30-000569
OR-00691		1979	Mabry, Theo N.	Archaeological Reconnaissance Salt Creek Area Orange County, California	Archaeological Planning Collaborative	30-000129, 30-000360, 30-000568, 30-000569, 30-000570, 30-000571
OR-00765	Paleo -	1983	Padon, Beth	Archaeological/paleontological Assessment Salt Creek Disposal Site Orange County, California	LSA Associates, Inc.	
OR-00792		1985	Whitney-Desautels, Nancy A.	Report on Archaeological Site Re-evaluation for the Monarch Beach Project, Laguna Niguel/South Laguna, Orange County, California	Scientific Resource Surveys, Inc.	30-000011, 30-000127, 30-000128, 30-000129, 30-000182, 30-000360, 30-000568, 30-000569, 30-000570, 30-000571

## Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
OR-00811		1986	Demcak, Carol R.	Archaeological Salvage Investigations at CA-ORA-129, Laguna Niguel, Orange County, California (PCAS Quarterly)	Archaeological Resource Management Corp.	30-000129
OR-00823		1986	Bissell, Ronald M.	Cultural Resources Assessment of Shea Company Property and Surface Collection of Sites CA-ORA-493 and CA-ORA-540, Laguna Niguel, Orange County, California	RMW Paleo Associates, Inc.	30-000493, 30-000540
OR-00824		1986	Bissell, Ronald M.	A Report of the Status of Archaeological Sites on and Near Property Owned by the S&S Construction Company in Laguna Niguel, Orange County, California	RMW Paleo Associates, Inc.	30-000018, 30-000019, 30-000133, 30-000389, 30-000390, 30-000423, 30-000424, 30-000509, 30-000512, 30-000580, 30-000581, 30-000605, 30-000606, 30-000607, 30-000947, 30-001072
OR-00831	Paleo -	1986	Brock, James P.	Archaeological, Paleontological, and Historical Resources Assessment for the Salt Creek General Development Plan, County of Orange, California.	Archaeological Advisory Group	30-000567, 30-000568, 30-000569
OR-00850		1986	Bissell, Ronald M.	Archaeological Site CA-ORA-1108: a Seed and Vegetable Fiber Collecting and Processing Station in Laguna Niguel, Orange County, California	RMW Paleo Associates, Inc.	30-001108
OR-00931		1988	Bissell, Ronald M.	Cultural Resources Reconnaissance of Tract 13306, Laguna Niguel, Orange County, California	RMW Paleo Associates, Inc.	
OR-00938		1988	Bissell, Ronald M.	Status of Cultural Resources in the Wood Canyon Area, Southern Orange County, California	RMW Paleo Associates, Inc.	30-000006, 30-000013, 30-000019, 30-000020, 30-000126, 30-000133, 30-000177, 30-000266, 30-000388, 30-000389, 30-000390, 30-000395, 30-000396, 30-000397, 30-000398, 30-000399, 30-000400, 30-000401, 30-000402, 30-000403, 30-000404, 30-000405, 30-000406, 30-000407, 30-000412, 30-000413, 30-000415, 30-000418, 30-000422, 30-000423, 30-000424, 30-000427, 30-000436
OR-00962		1989	Bissell, Ronald M.	Cultural Resources Reconnaissance of the Clubhouse Plaza Parcel, Approximately Ten Acres in Laguna Niguel, Orange County, California.	RMW Paleo Associates, Inc.	
OR-01041		1989	Jertberg, Patricia R.	Archaeological Monitoring for Tentative Tracts 9947 and 12315	LSA Associates, Inc.	

## Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
OR-01183		1991	Shinn, Juanita R.	A Cultural Resources Reconnaissance of the Hon Property O Approximately 60.9 Acres Located in Laguna Niguel, Orange County, California	RMW Paleo Associates, Inc.	
OR-01224		1988	Demcak, Carol R.	Archaeological Salvage Investigations at CA-ORA-129, Laguna Niguel, Orange County, California		30-000129, 30-000568, 30-000569
OR-01241		1992	Rosenthal, Jane	Archaeological Assessment, South Peak Bicycle Trail	LSA Associates, Inc.	30-000567, 30-000569
OR-01465	Paleo -	1990		Archaeological, Paleontological and Historical Literature Search and Records Check for South Coastal Orange County Central Pool Relief	Scientific Resource Surveys, Inc.	
OR-01712		1963	Lytton, Alma C	Archaeological Investigations at Laguna Niguel, Orange County	Department of Anthropology-Sociology, UCLA	30-000018, 30-000038, 30-000129
OR-01924		1976	Singer, Clay A.	Archaeological Survey and Resource Assessment of a Portion of Laguna Niguel, Orange County, California	Archaeological Research, Inc.	30-000033, 30-000131, 30-000493, 30-000512
OR-02402		2002	Duke, Curt	Cultural Resource Assessment At&t Wireless Services Facility No. 13351a Orange County, California	LSA Associates, Inc.	
OR-02409	Cellular -	2002	Duke, Curt	Cultural Resource Assessment At&t Wireless Facility No. 13107a Orange County, California	LSA Associates, Inc.	
OR-02878		2001	Demcak, Carol R.	Report of Records Search for Tract 14505, Dana Point	Archaeological Resource Management Corp.	30-000011, 30-000127
OR-03135	Cellular -	2004	Billat, Lorna	South Crown Valley/CA-8224a 29731 Crown Valley Pkwy, Laguna Niguel, Ca, Orange County	EarthTouch Inc.	
OR-03573		2009	Joan C. Brown and Patrick O. Maxon	Phase I Cultural Resources Study- Proposed Salt Creek Enhancement Project, Laguna Niguel, CA.	BonTerra Consulting	30-000023, 30-000493, 30-000538, 30-000540, 30-000855, 30-000963, 30-000964, 30-001035, 30-001036, 30-001037, 30-001038, 30-001039, 30-001040, 30-001113, 30-001278, 30-001279, 30-001306, 30-001338, 30-001343, 30-120018, 30-120019, 30-176663, 30-176664
OR-04371	Paleo -	2014	Davis, Ashley	Draft Environmental Impact Report Volume I South Shores Church Master Plan City of Dana Point	LSA	

## Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
OR-04456		2012	Strudwick, Ivan and Conkling, Steven	Cultural Resources Assessment South Shores Church, City of Dana Point Orange County, California	LSA	



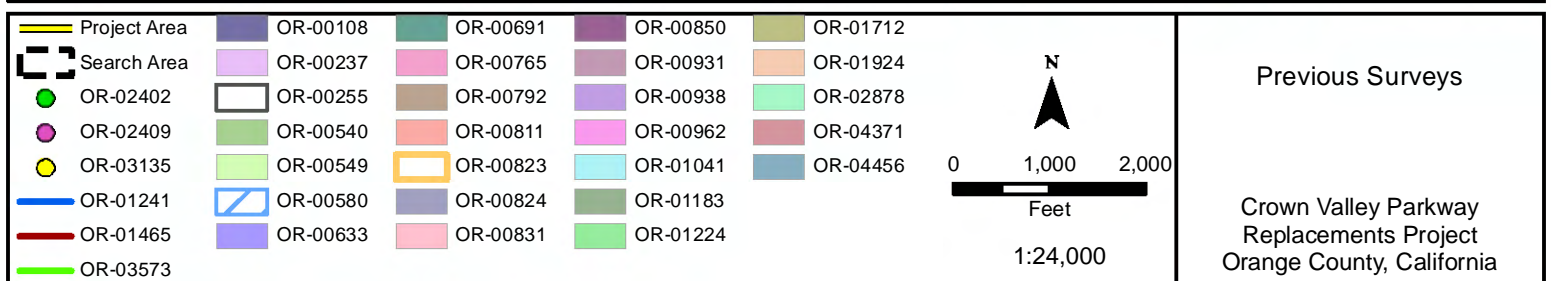
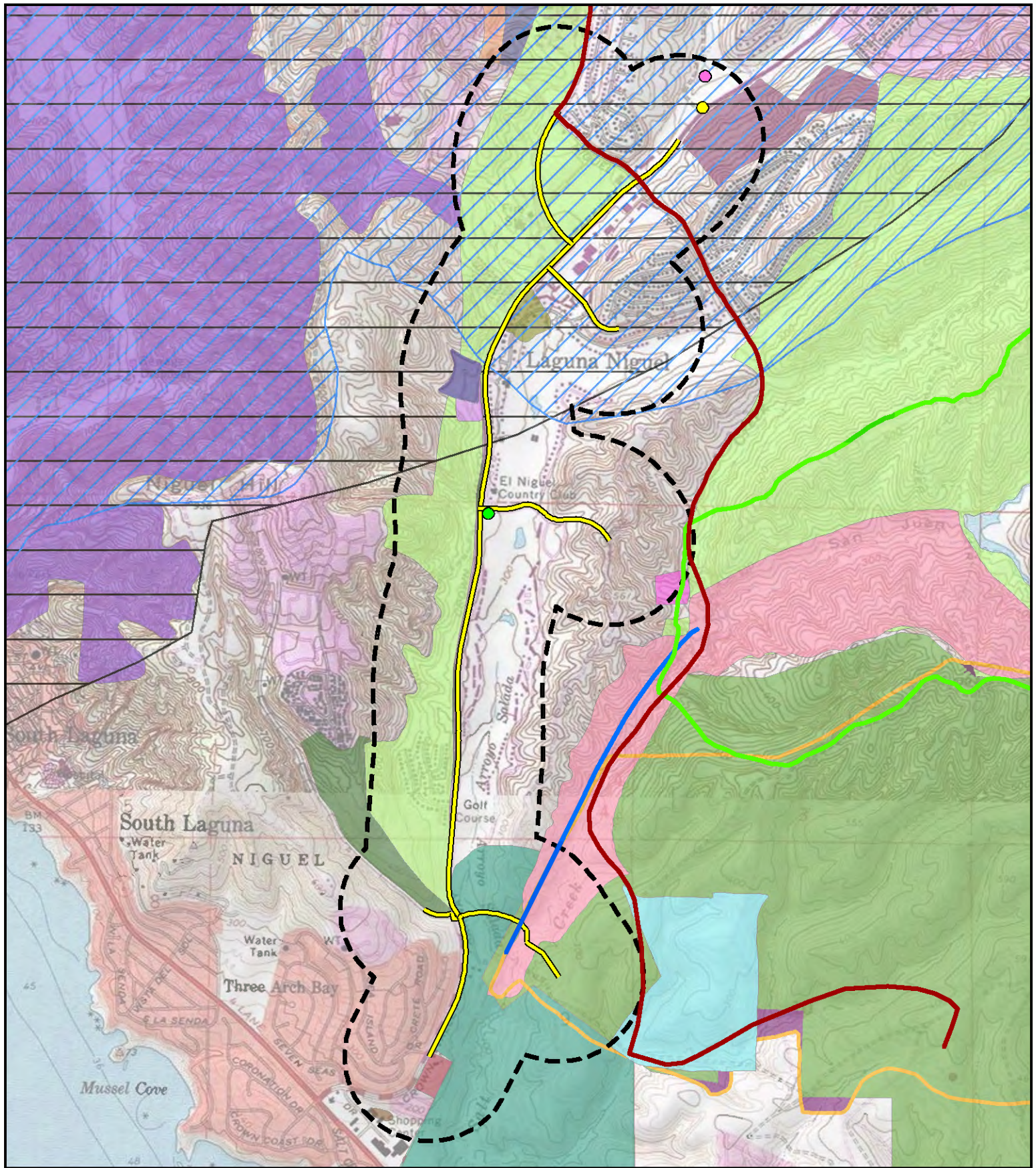
## Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-30-000033	CA-ORA-000033	Resource Name - Standpipe Site		Prehistoric	AP02; AP15; AP16	1960 (Lytton, C.)	OR-00255, OR-00286, OR-01924, OR-01995
P-30-000127	CA-ORA-000127		Site	Prehistoric	AP02; AP15	1963 (LYTTON); 1985 (Hemphill, M.L., Scientific Resources Surveys, Inc.)	OR-00354, OR-00792, OR-01299, OR-01995, OR-02878, OR-03363, OR-04476
P-30-000129	CA-ORA-000129		Site	Prehistoric	AP02; AP15	1963 (LYTTON); 1985 (Hemphill, M.L., Scientific Resources Surveys, Inc.)	OR-00540, OR-00691, OR-00792, OR-00811, OR-01224, OR-01299, OR-01712, OR-01995
P-30-000131	CA-ORA-000131		Site	Prehistoric	AP01	1963 (PCAS)	OR-00255, OR-01924, OR-01995
P-30-000539	CA-ORA-000539		Site	Prehistoric	AP02	1976 (Singer, C., Archaeological Research, Inc.)	OR-00549, OR-01995
P-30-000567	CA-ORA-000567	Resource Name - "Site 6"	Site	Prehistoric	AP02	1975 (Leonard, N. and M. Brandman); 1983 (Padon, Beth, LSA)	OR-00540, OR-00831, OR-01241, OR-01299, OR-01995
P-30-000568	CA-ORA-000568	Resource Name - "site 5"	Site	Prehistoric	AP02; AP15	1975 (LEONARD); 1980 (Ronald Douglas, Archaeological Planning Collaborative); 1982 (Schroth, Adella, ARMC); 1985 (M. L. Hemphill, Scientific Resource Surveys, Inc.)	OR-00540, OR-00633, OR-00691, OR-00792, OR-00831, OR-01224, OR-01299, OR-01995
P-30-000569	CA-ORA-000569	Resource Name - "site 4"	Site	Prehistoric	AP02; AP15	1975 (LEONARD); 1980 (Ronald Douglas, Archaeological Planning Collaborative); 1982 (Schroth, Adella, ARMC); 1985 (M. L. Hemphill, Scientific Resource Surveys)	OR-00540, OR-00633, OR-00691, OR-00792, OR-00831, OR-01224, OR-01241, OR-01299, OR-01995
P-30-000570	CA-ORA-000570	Resource Name - "Site 3"	Site	Prehistoric	AP02; AP09; AP15	1975 (LEONARD); 1979 (SUCHEY, CSUF); 1985 (M. L. Hemphill, Scientific Resources Surveys, Inc.)	OR-00540, OR-00691, OR-00748, OR-00792, OR-01299, OR-01995

## Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-30-000571	CA-ORA-000571	Resource Name - "Site 2"	Site	Prehistoric	AP02; AP15	1975 (LEONARD); 1979 (Mabry, Theo N., Archaeological Planning Collaborative); 1985 (M. L. Hemphill, Scientific Resource Surveys)	OR-00691, OR- 00792, OR-01299, OR-01995







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## **Attachment 3**

# **Native American Heritage Commission Results**

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## NATIVE AMERICAN HERITAGE COMMISSION

March 24, 2021

Jenna Farrell  
Tetra Tech, Inc.

Via Email to: [jenna.farrell@tetrattech.com](mailto:jenna.farrell@tetrattech.com)

CHAIRPERSON  
**Laura Miranda**  
Luiseño

VICE CHAIRPERSON  
**Reginald Pagaling**  
Chumash

SECRETARY  
**Merri Lopez-Keifer**  
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Paiute/White Mountain  
Apache

COMMISSIONER  
**Julie Tumamait-Stenslie**  
Chumash

COMMISSIONER  
[Vacant]

COMMISSIONER  
[Vacant]

COMMISSIONER  
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**Christina Snider**  
Pomo

**NAHC HEADQUARTERS**  
1550 Harbor Boulevard  
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California 95691  
(916) 373-3710  
[nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)  
[NAHC.ca.gov](http://NAHC.ca.gov)

### Re: Crown Valley Parkway Replacement Project, Orange County

Dear Ms. Farrell:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were positive. Please contact the Juaneno Band of Mission Indians Acjachemen Nation - Belardes on the attached list for more information. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: [Andrew.Green@nahc.ca.gov](mailto:Andrew.Green@nahc.ca.gov).

Sincerely,

Andrew Green  
Cultural Resources Analyst

Attachment

**Native American Heritage Commission  
Native American Contact List  
Orange County  
3/24/2021**

***Juaneno Band of Mission Indians***

Sonia Johnston, Chairperson  
P.O. Box 25628  
Santa Ana, CA, 92799  
sonia.johnston@sbcglobal.net  
Juaneno

***La Jolla Band of Luiseno Indians***

Norma Contreras, Chairperson  
22000 Highway 76  
Pauma Valley, CA, 92061  
Phone: (760) 742 - 3771  
Luiseno

***Juaneno Band of Mission Indians Acjachemen Nation - Belardes***

Matias Belardes, Chairperson  
32161 Avenida Los Amigos  
San Juan Capistrano, CA, 92675  
Phone: (949) 293 - 8522  
kaamalam@gmail.com  
Juaneno

***Pala Band of Mission Indians***

Shasta Gaughen, Tribal Historic Preservation Officer  
PMB 50, 35008 Pala Temecula Rd.  
Pala, CA, 92059  
Phone: (760) 891 - 3515  
Fax: (760) 742-3189  
sgaughen@palatribe.com  
Cupeno  
Luiseno

***Juaneno Band of Mission Indians Acjachemen Nation - Belardes***

Joyce Perry, Tribal Manager  
4955 Paseo Segovia  
Irvine, CA, 92603  
Phone: (949) 293 - 8522  
kaamalam@gmail.com  
Juaneno

***Pauma Band of Luiseno Indians***

Temet Aguilar, Chairperson  
P.O. Box 369  
Pauma Valley, CA, 92061  
Phone: (760) 742 - 1289  
Fax: (760) 742-3422  
bennaecalac@aol.com  
Luiseno

***Juaneno Band of Mission Indians Acjachemen Nation - Romero***

Teresa Romero, Chairperson  
31411-A La Matanza Street  
San Juan Capistrano, CA, 92675  
Phone: (949) 488 - 3484  
Fax: (949) 488-3294  
tromero@juaneno.com  
Juaneno

***San Luis Rey Band of Mission Indians***

1889 Sunset Drive  
Vista, CA, 92081  
Phone: (760) 724 - 8505  
Fax: (760) 724-2172  
cjmojado@slrmissionindians.org  
Luiseno

***Juaneno Band of Mission Indians Acjachemen Nation - Romero***

Heidi Lucero, Cultural Resources Director  
31411-A La Matanza Street  
San Juan Capistrano, CA, 92675  
Phone: (949) 488 - 3484  
sos@juaneno.com  
Juaneno

***San Luis Rey Band of Mission Indians***

San Luis Rey, Tribal Council  
1889 Sunset Drive  
Vista, CA, 92081  
Phone: (760) 724 - 8505  
Fax: (760) 724-2172  
cjmojado@slrmissionindians.org  
Luiseno

***Santa Rosa Band of Cahuilla Indians***

Lovina Redner, Tribal Chair  
P.O. Box 391820  
Anza, CA, 92539  
Phone: (951) 659 - 2700  
Fax: (951) 659-2228  
Isaul@santarosa-nsn.gov  
Cahuilla

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Crown Valley Parkway Replacement Project, Orange County.

Native American Heritage Commission  
Native American Contact List  
Orange County  
3/24/2021

***Soboba Band of Luiseno  
Indians***

Joseph Ontiveros, Cultural  
Resource Department  
P.O. BOX 487  
San Jacinto, CA, 92581  
Phone: (951) 663 - 5279  
Fax: (951) 654-4198  
jontiveros@soboba-nsn.gov

Cahuilla  
Luiseno

***Soboba Band of Luiseno  
Indians***

Isaiah Vivanco, Chairperson  
P. O. Box 487  
San Jacinto, CA, 92581  
Phone: (951) 654 - 5544  
Fax: (951) 654-4198  
ivivanco@soboba-nsn.gov

Cahuilla  
Luiseno

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

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