

Final Initial Study and Mitigated Negative Declaration

BNSF Waterline Crossing at Veterans Village and Highland Avenue

Prepared for

Yorba Linda Water District
1717 East Miraloma Avenue
Placentia, California 92870
Contact: Reza Afshar, PE, PMP
714.701.3106

Prepared by

Psomas
5 Hutton Centre Drive, Suite 300
Santa Ana, California 92707
Contact: Jennifer Marks
714.751.7373

September 2022

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F	Mitigation Monitoring and Reporting Program

LIST OF ACRONYMS

A

Air Quality Management Plan (AQMP)
Ambient Air Quality Standards (AAQS)
Assembly Bill (AB)
A-weighted decibels (dBA)

B

Best Management Practices (BMPs)

C

California Air Pollution Control Officers Association (CAPCOA)
California Air Resources Board (CARB)
California Association of Governments (SCAG)
California Building Code (CBC)
California Department of Fish and Wildlife (CDFW)
California Department of Transportation (Caltrans)
California Emissions Estimator Model (CalEEMod)
California Environmental Quality Act (CEQA)
California Facility Inventory Database underground storage tanks (CA FID UST)
California Historical Resources Information System (CHRIS)
California Native Plant Society (CNPS)
California Office of the State Fire Marshal (CAL FIRE)
California Regional Water Quality Control Board (RWQCB)
California Register of Historic Resources (CRHR)
California State Water Resources Control Board (SWRCB)
Carbon Dioxide (CO₂)
Carbon Dioxide Equivalent (CO₂e)
Carbon Monoxide (CO)
City of Placentia Municipal Code (CPMC)
Community Noise Equivalent Level (CNEL)
cubic yards (cy)

D

Diesel Particulate Matter (diesel PM)

E

Enforcement and Compliance History Online (ECHO)
Environmental Data Resources (EDR)
Environmental Impact Report (EIR)
Equivalent Continuous Sound Level (L_{eq})

F

Facility Index System (FINDS)
Fine Particulate Matter with a Diameter of 2.5 Microns or Less (PM_{2.5})

G

Global Warming Potential (GWP)
Greenhouse Gases (GHG)

H

Hazardous Waste and Substances Sites (CORTESE)
Hazardous Waste Tracking System (HWTS)
Hydrofluorocarbons (HFCs)

I

Inch(es) Per Second (in/sec)
Initial Study (IS)

K

Kilometer (KM)

L

Natural History Museum of Los Angeles County (LACM)
leaking underground storage tank (LUST)
Level of Service (LOS)
linear feet (lf)
Localized Significance Threshold (LST)

M

Methane (CH₄)
Metric Tons of CO₂ Equivalent Per Year (MTCO₂e/yr)
Metric Tons Per Year of Carbon Dioxide Equivalents (MT/yr CO₂e)
Micrograms Per Cubic Meter (µg/m³)
Migratory Bird Treaty Act (MBTA)
Mitigated Negative Declaration (MND)
Mitigation Measures (MMs)

N

National Pollutant Discharge Elimination System (NPDES)
Native American Heritage Commission (NAHC)
Nitric Oxide (NO)
Nitrogen Dioxide (NO₂)
Nitrogen Oxides (NO_x)
Nitrous Oxide (N₂O)
Non Generators (NonGen/NLR)

O

Orange County Flood Control District (OCFCD)
Ozone (O₃)

P

Parts Per Million (PPM)
Particulate Matter with a Diameter of 10 Microns or Less (PM₁₀)
PM 2.5 (no callout)
Peak Particle Velocity (PPV)
Perfluorocarbons (PFCs)
Pounds Per Day (lbs/day)

R

Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)
Regional Water Quality Control Board (RWQCB)
Resource Conservation and Recovery Act (RCRA)

S

Sacred Lands File (SLF)
Senate Bill (SB)
Small Quantity Generator (SQG)
South-Central Coastal Information Center (SCCIC)
South Coast Air Basin (SoCAB)
South Coast Air Quality Management District (South Coast AQMD)
square feet (sf)
Standard Conditions and Regulations (SCs)
State Route (SR)
State Water Resources Control Board (SWRCB)
Statewide Environmental Evaluation and Planning System (SWEEPS)
Storm Water Pollution Prevention Plan (SWPPP)
State Water Resources Control Board (SWRCB)
Sulfur Dioxide (SO₂)
Sulfur Hexafluoride (SF₆)
Sulfur Oxides (SO_x)

T

Tons Per Day (tbd)
Toxic Air Contaminants (TACs)

U

underground storage tank (UST)
United States Environmental Protection Agency (USEPA)
United States Army Corps of Engineers (USACE)

V

Vehicles Miles Traveled (VMT)
Very High Fire Hazard Severity Zone (VHFHSZ)
Volatile Organic Compounds (VOCs)

Y

Year (yr)
Yorba Linda Water District (YLWD)

SECTION 1.0 INTRODUCTION

1.1 PURPOSE OF THE INITIAL STUDY

The purpose of this Initial Study (IS) is to (1) describe the proposed Burlington Northern and Santa Fe (BNSF) Waterline Crossing at Veterans Village and Highland Avenue (hereinafter referred to as the "Project"), which would occur in the City of Placentia and (2) provide an evaluation of potential environmental effects associated with the Project's construction and operation. This IS has been prepared pursuant to the California Environmental Quality Act (CEQA), as amended (*Public Resources Code* §21000 et seq.) and in accordance with the State CEQA Guidelines (*California Code of Regulations* §15000 et seq.).

Pursuant to Section 15367 of the State CEQA Guidelines, Yorba Linda Water District (YLWD) is the lead agency for the Project. The lead agency is the public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect on the environment. YLWD, as the lead agency, has the authority for Project approval and certification of the accompanying environmental documentation.

The purpose of this document is to evaluate the potential environmental impacts associated with construction and operation of two segments of a new waterline.

1.2 SUMMARY OF FINDINGS

Based on the environmental checklist form prepared for the Project (see Section 4, below) and supporting environmental analysis (Section 5), the proposed Project would have no impact or less than significant impacts in the following environmental areas: agriculture and forest land resources, aesthetics, air quality, energy, greenhouse gases, hazards and hazardous materials, land use, mineral resources, noise, public services, recreation, transportation, utilities and services systems, and wildfire. The proposed Project has the potential to have significant impacts on the following topics unless the mitigation measures recommended herein are incorporated into the Project: biological resources, cultural resources, geology and soils, hydrology and water quality, and tribal cultural resources.

According to the State CEQA Guidelines, it is appropriate to prepare a Mitigated Negative Declaration (MND) for the proposed Project because, after incorporation of the recommended mitigation measures, potentially significant environmental impacts would be eliminated or reduced to a level considered less than significant.

1.3 PROJECT APPROVAL

This IS/MND has been submitted to potentially affected agencies and individuals. A Notice of Availability of the IS/MND for review and comment as well as the environmental documentation are available on YLWD's website (<https://www.ylwd.com/about/transparency/>) for review.

This IS/MND will be available for public review for a period of 30 days, in accordance with Section 15073 of the State CEQA Guidelines. During review of the IS/MND, affected public agencies and the interested public have an opportunity to focus on the document's adequacy in identifying and analyzing the potential environmental impacts and the ways in which the potentially significant effects of the Project area can be avoided or mitigated. Comments on the IS/MND and the

analysis contained herein must be received by 5:00 p.m., September 12, 2022 and should be addressed to:

Yorba Linda Water District
Attn: Reza Afshar, Senior Engineer
1717 East Miraloma Avenue
Placentia CA, 92870

Email: RAfshar@ylwd.com
Phone: 714.701.3106

Following receipt and evaluation of comments from agencies, organizations, and/or individuals, YLWD will determine whether any substantial new environmental issues have been raised. If so, further documentation—such as an Environmental Impact Report (EIR) or an expanded IS/MND—may be required. If not, the Project and the environmental documentation are tentatively scheduled to be submitted to the Board of Directors for consideration.

1.4 ORGANIZATION OF THE INITIAL STUDY

The IS/MND is organized as described below.

- **Section 1: Introduction.** This section provides an introduction and overview of the conclusions in the IS/MND.
- **Section 2: Project Location and Environmental Setting.** This section provides a brief description of the Project location, relevant background information, and a description of the existing conditions of the Project site and vicinity.
- **Section 3: Project Description.** This section provides a description of the proposed Project, a statement of purpose and need, and necessary discretionary approvals.
- **Section 4: Environmental Checklist.** The completed Environmental Checklist Form from the State CEQA Guidelines provides an overview of the potential impacts that may or may not result from Project implementation. The Environmental Checklist Form also includes “mandatory findings of significance”, as required by CEQA.
- **Section 5: Discussion of Environmental Checklist Questions.** This section contains an analysis of environmental impacts identified in the environmental checklist and identifies standard conditions and regulations (SC) and mitigation measures (MM) that have been recommended to eliminate any potentially significant effects or to reduce them to a level considered less than significant.
- **Section 6: Report Preparers.** This section lists the authors, including staff members from YLWD, who assisted in preparing and reviewing the IS/MND.
- **Section 7: References.** This section identifies the references used to prepare the IS/MND.

SECTION 2.0 PROJECT LOCATION AND ENVIRONMENTAL SETTING

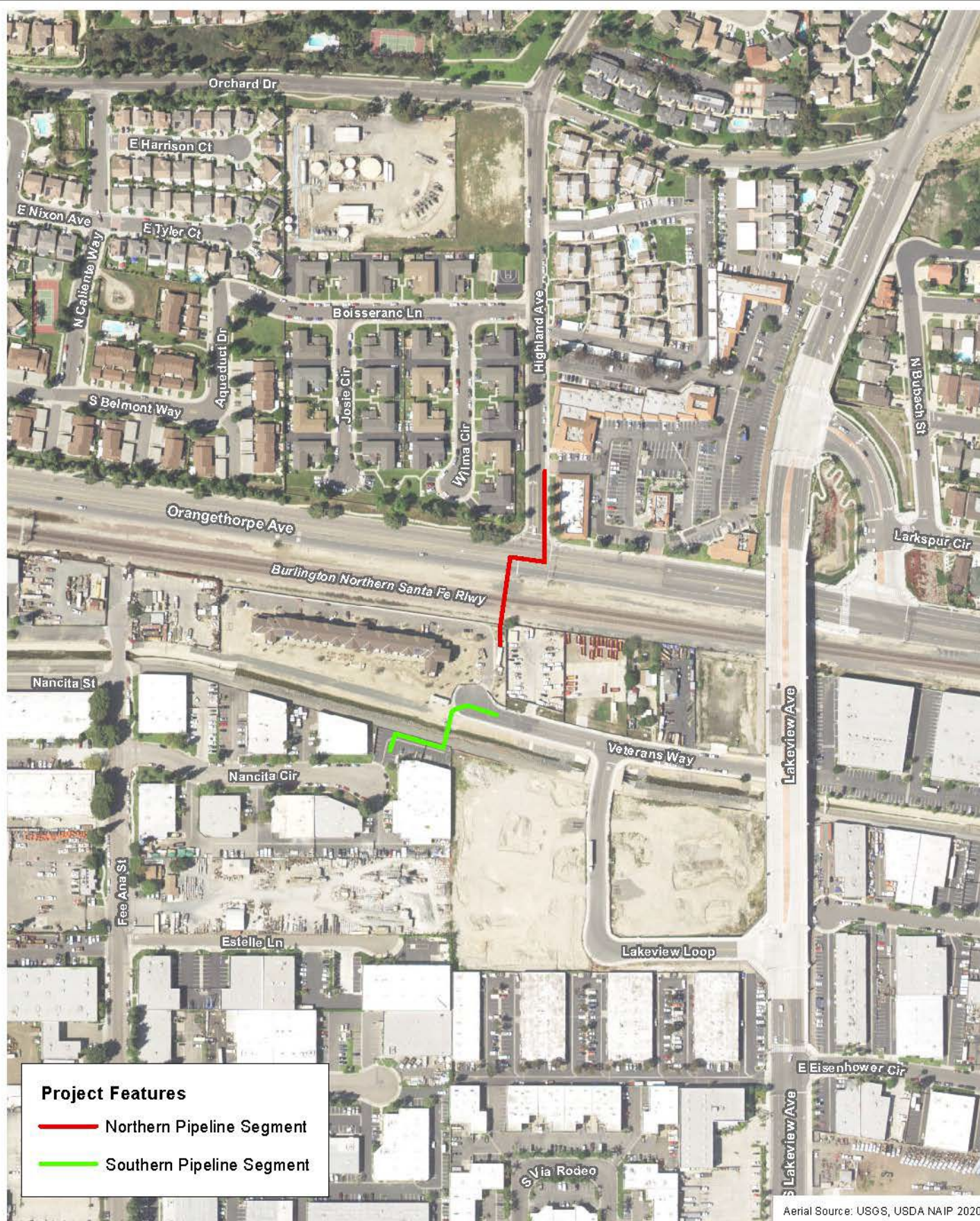
2.1 PROJECT LOCATION AND SURROUNDING USES

The proposed BNSF Waterline Crossing at Veterans Village and Highland Avenue Project (hereinafter referred to as the “proposed Project” or the “Project”) is located in City of Placentia, California. The Project consists of two separate segments of pipeline to be constructed: the northern stretch of pipeline is proposed to cross the BNSF railway right-of-way, and the southern segment that is proposed to cross Atwood Channel. The northern pipeline segment alignment is bound by Highland Avenue and residential uses to the north, commercial/restaurant uses to the east, Placentia Veteran’s Village apartments to the south, and residential uses to the west. The southern pipeline segment alignment is bound by the BNSF rail line and Orangethorpe Avenue to the north, Lakeview Avenue and commercial/industrial uses to the east, commercial/industrial to the south, and the Placentia Veterans Village apartments to the west. The regional and local vicinity of the Project site is depicted on Exhibits 1, Regional Location, and Exhibit 2, Aerial Photograph, respectively.

2.2 PROJECT BACKGROUND

YLWD currently has two pipelines that cross the BNSF right-of-way on the west end of the service area, one at Richfield Road and one at Lakeview Avenue. In this portion of the service area, the primary source of water is Lakeview Avenue. The Richfield Road pipeline is primarily used as a transmission pipeline to Highland Reservoir during emergencies only. YLWD constructed a water treatment plant at its headquarters and the new pipeline configuration eliminates the distribution option of the Richfield Road waterline. This Project includes construction of a third crossing to loop the system at Placentia Veterans Village apartments and Highland Avenue. In addition, YLWD intends to replace an existing water main crossing at the Orange County Flood Control District (OCFCD) Atwood Channel to the south of Veterans Way to provide additional water system redundancy in this area.

D:\Projects\2\YOR\030203\MXD\Windex_Aerial_PhotoGraph_20220531.mxd



Aerial Photograph

BNSF Waterline Crossing at Veterans Village and Highland Avenue



300 150 0 300
Feet

Exhibit 2



(Rev: 06/28/2022,JVR) R:\Project\2\YOR\030203\Graphics\Windex_Aerial_PhotoGraph.pdf

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SECTION 3.0 PROJECT DESCRIPTION

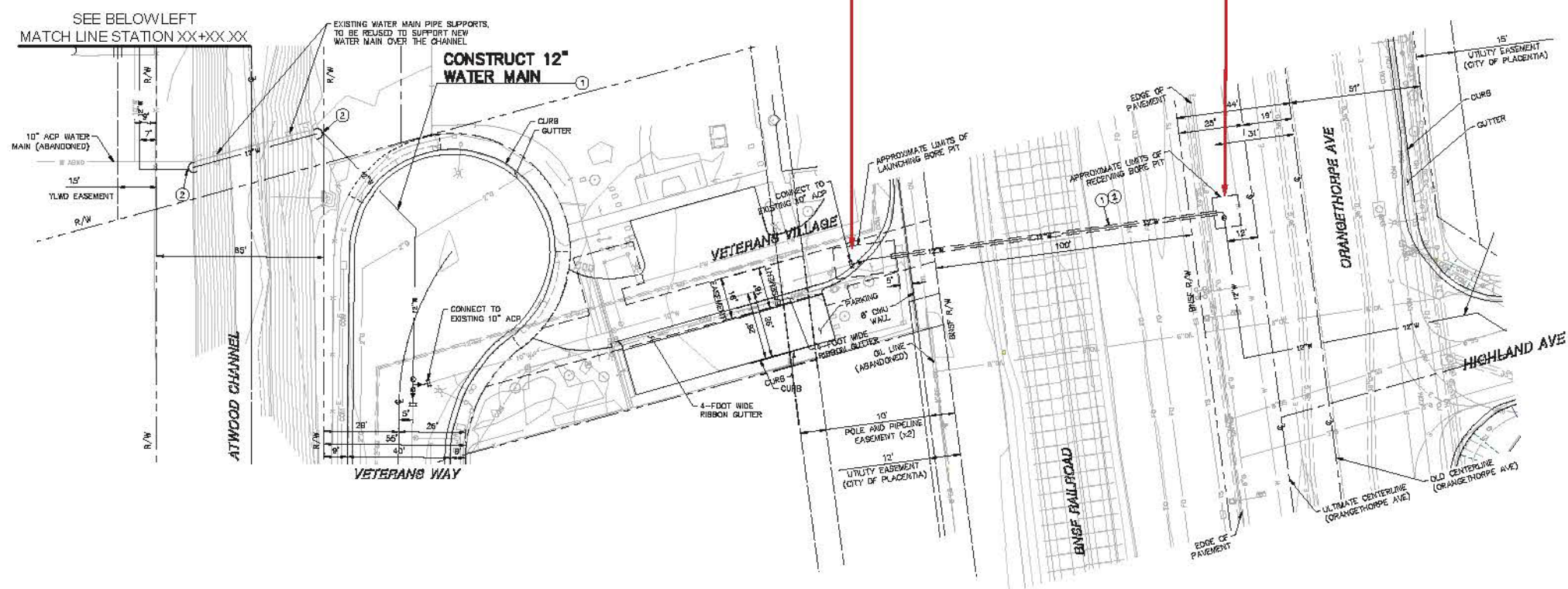
3.1 PHYSICAL CHARACTERISTICS

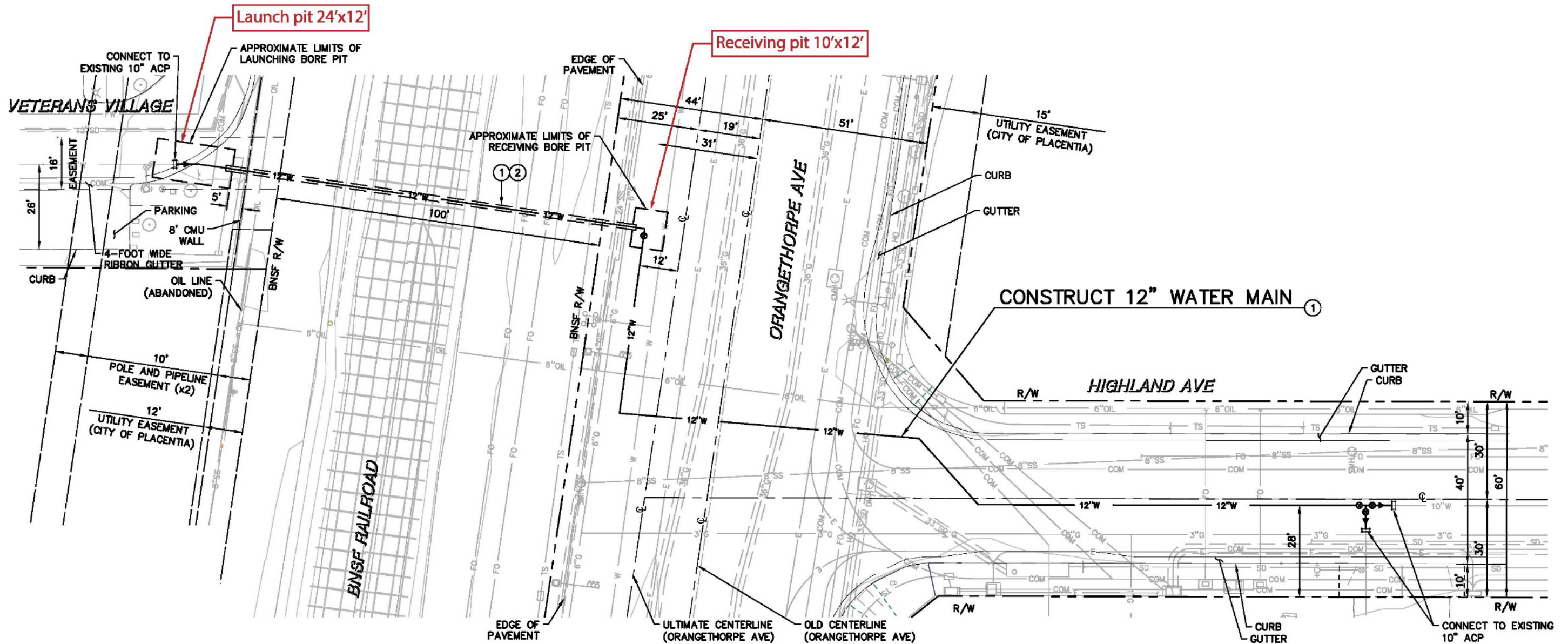
YLWD constructed a new, large water treatment plant known as Plant 1 or PFAS (Per- and Polyfluoroalkyl Substances) Water Treatment Plant at its headquarters, which is currently in service. Due to the high volume of water feeding into and exiting the plant, YLWD can no longer use its existing pipeline in Richfield Road to transport water both to and from the area of the plant. Therefore, YLWD proposes to construct a new water pipeline (new waterline) to transmit water to loop the water system and provide water system redundancy. The proposed pipeline would deliver water to the consumers south of Orangethorpe Avenue, leaving the Richfield Road pipeline to transport water to Highland Reservoir only in the other direction. A new 12-inch pipeline would be constructed to connect from the terminus of Nancita Circle in the south to a point in Highland Avenue to the north. As discussed above, the new pipeline would be constructed in two segments that would connect via an existing 10-inch pipeline.

The southern pipeline segment would be constructed from a connection point with an existing 10-inch pipeline that currently terminates in Nancita Circle as shown on Exhibit 3a, Southern Pipeline Segment. The pipeline would extend northeasterly from Nancita Circle into the parking lot at 1919 Nancita Circle, where it would then jog southeasterly for approximately 94 feet parallel to Atwood Channel. From this point, the pipeline would then extend northeasterly across Atwood Channel to Veterans Way, where it would turn south easterly and connect to an existing 10-inch pipeline. The 10-inch existing pipeline continues north from Veterans Way to the current terminus just south of the BNSF right-of-way line through Placentia Veterans Village apartments. Construction of the southern segment of the pipeline would consist primarily of open trench construction within roadway right-of-way. The proposed pipeline crossing of Atwood Channel would be constructed to extend above and outside of the channel, utilizing existing water main pipe supports.

The northern pipeline segment would be constructed from a connection point with the 10-inch pipeline as shown on Exhibit 3b, Northern Pipeline Segment. The new pipeline would be constructed in a northerly direction across BNSF right-of-way to Orangethorpe Avenue. From here, the pipeline would jog southeasterly along Orangethorpe Avenue for approximately 63 feet before turning northward into Highland Avenue. The pipeline would extend northerly along Highland Avenue and connect to an existing 10-inch pipeline located in Highland Avenue near 2007 East Orangethorpe Avenue. Construction of the northern segment of the pipeline would consist primarily of open trench construction, except for the proposed crossing of the BNSF rail line which would be constructed using a jack-and-bore method and access pits on either side of the rail line right-of-way. The southern, or launching bore pit would be 24-feet by 10-feet and would be located within an existing YLWD easement. Because the driveway functions as the only vehicle access point for the apartment complex, YLWD would require that the contractor constructing the bore pit maintain access for residents at all times YLWD would restore all existing hardscape and landscape improvements. The northern, or receiving, bore pit would be 12-feet by 10-feet in size and be constructed within the public right-of-way on the north side of the BNSF railroad.

Work within Nancita Circle, Orangethorpe Avenue, and Highland Avenue would be entirely within public right-of-way. Neither the Atwood Channel area nor the BNSF rail line are within the public right-of-way, however impacts would be limited to above Atwood Channel, or beneath the ground surface at the BNSF crossing. All construction activity would be coordinated with the Orange County Flood Control District (OCFCD) and BNSF, respectively. The total length of all new pipeline would be less than 1,000 feet.





Source: Yorba Linda Water District

Northern Pipeline Segment

BNSF Waterline Crossing at Veterans Village and Highland Avenue

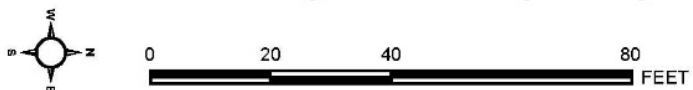


Exhibit 3b



The launching bore pit involves more noise and activities because it is where equipment would be staged. YLWD would place the launching bore pit at Placentia Veterans Village apartments.

3.2 CONSTRUCTION ACTIVITIES

Construction at the Project site is anticipated to begin in December 2022 and the Project is anticipated to be operational in December 2023. Construction activity would be phased to include construction of two segments of a new waterline, including crossing of Atwood Channel and the BNSF rail line. YLWD would require that the contractor constructing the bore pits maintain access for Veterans Village residents at all times and restore all existing hardscape and landscape improvements.

Total excavation for pipeline installation and bore pits would result in approximately 7,025 cubic yards (cy) of soil export. Pavement demolition would result in approximately 2,400 square feet (sf) of pavement disturbance. And approximately 836 linear feet (lf) of pipeline would be installed comprised of 650 linear feet of open trench, 130 lf of jack and bore, and 56 lf of above grade channel crossing.

3.3 PURPOSE

The purpose of this document is to evaluate the construction and operation of two segments of a new waterline.

3.4 PROJECT APPROVALS

As part of the Project, the following Project approvals and actions would be required:

- **Project Approval and Approval of the Mitigated Negative Declaration.** The proposed Project and its associated MND shall be reviewed and approved by the Board of Directors.
- **City of Placentia Encroachment Permit.**
- **Orange County Flood Control District (OCFCD) Permit and No-Rise Certification .**
- **BNSF Permit.**
- **Occupational Safety and Health (OSHA) Approval.**

SECTION 4.0 ENVIRONMENTAL CHECKLIST

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

- Biological Resources
- Cultural Resources
- Geology/Soils
- Hydrology/Water Quality
- Tribal Cultural Resources

DETERMINATION: (To be completed by the Lead Agency.)

On the basis of this initial evaluation:

- 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 be the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

Signature

Reza Afshar
Printed Name

Date

Yorba Linda Water District
For

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including 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, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analysis,” as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated”, describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify the following:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

This section includes the completed Environmental Checklist Form. The checklist form is used to assist in evaluating the potential environmental impacts of the proposed Project. The Environmental Checklist Form identifies potential Project effects as follows: (1) Potentially Significant Impact; (2) Less Than Significant With Mitigation Incorporated; (3) Less Than Significant Impact; and (4) No Impact. Substantiation and clarification for each checklist response is provided in Section 5, Environmental Evaluation. Included in each discussion are mitigation measures, as appropriate, that are recommended for implementation as part of the proposed Project.

ENVIRONMENTAL ISSUES

(See attachments for information sources)

I. AESTHETICS.

Would the project:	Level of Significance
a) Have a substantial adverse effect on a scenic vista?	No Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Less Than Significant Impact
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?	Less Than Significant Impact
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less Than Significant Impact

- II. **AGRICULTURE AND FOREST RESOURCES.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project

and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:	Level of Significance
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g])?	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forest land to non-forest use?	No Impact

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

Would the project:	Level of Significance
a) Conflict with or obstruct implementation of the applicable air quality plan?	No Impact
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?	Less Than Significant Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	Less Than Significant Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less Than Significant Impact

IV. BIOLOGICAL RESOURCES.

Would the project:	Level of Significance
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Less Than Significant With Mitigation Incorporated
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	No Impact
c) Have a substantial adverse effect 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?	No Impact
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?	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Less Than Significant With Mitigation Incorporated
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact

V. CULTURAL RESOURCES.

Would the project:	Level of Significance
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Less Than Significant With Mitigation Incorporated
c) Disturb any human remains, including those interred outside of formal cemeteries?	Less Than Significant With Mitigation Incorporated

VI. ENERGY.

Would the project:	Level of Significance
a) 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
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

VII. GEOLOGY AND SOILS.

Would the project:	Level of Significance
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.	Less Than Significant Impact
ii) Strong seismic ground shaking?	Less Than Significant Impact
iii) Seismic-related ground failure, including liquefaction?	Less Than Significant Impact
iv) Landslides?	Less Than Significant Impact
b) Result in substantial soil erosion or the loss of topsoil?	Less Than Significant Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Less Than Significant Impact
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?	Less Than Significant Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Less Than Significant With Mitigation Incorporated

VIII. GREENHOUSE GAS EMISSIONS.

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

IX. HAZARDS AND HAZARDOUS MATERIALS.

Would the project:	Level of Significance
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less Than Significant Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less Than Significant Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Less Than Significant Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	No Impact

X. HYDROLOGY AND WATER QUALITY.

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

XI. LAND USE AND PLANNING.

Would the project:	Level of Significance
a) Physically divide an established community?	No Impact
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?	No Impact

XII. MINERAL RESOURCES.

Would the project:	Level of Significance
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	No Impact
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	No Impact

XIII. NOISE.

Would the project result in:	Level of Significance
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 the local general plan or noise ordinance, or applicable standards of other agencies?	Less Than Significant Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?	Less Than Significant Impact
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?	No Impact

XIV. POPULATION AND HOUSING

Would the project:	Level of Significance
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	No Impact
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	No Impact

XV. PUBLIC SERVICES.

Would the project result in:	Level of Significance
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	-
Fire Protection?	No Impact
Police Protection?	No Impact
Schools?	No Impact
Parks?	No Impact
Other Public Facilities?	No Impact

XVI. RECREATION.

Would the project:	Level of Significance
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
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	No Impact

XVII. TRANSPORTATION/CIRCULATION.

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

XVIII. TRIBAL CULTURAL RESOURCES.

Would the project:	Level of Significance
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	No Impact
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. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Less Than Significant With Mitigation Incorporated

XIX. UTILITIES AND SERVICE SYSTEMS.

Would the project:	Level of Significance
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?	Less Than Significant Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	No Impact
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	No Impact
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?	Less Than Significant Impact
e) Comply with federal, state, and local statutes and regulations related to solid waste?	No Impact

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

Would the project:	Level of Significance
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	No Impact
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?	No Impact
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?	No Impact
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?	No Impact

XXI. MANDATORY FINDINGS OF SIGNIFICANCE.

Does the project:	Level of Significance
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plants or animals, or eliminate important examples of the major periods of California history or prehistory?	Less Than Significant With Mitigation Incorporated
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
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	Less Than Significant With Mitigation Incorporated

Fish and Wildlife Determination

(Per Section 21089(b) of the Public Resources Code, all project applicants and public agencies subject to the California Environmental Quality Act shall pay a Fish and Game filing fee for each proposed project that would adversely affect wildlife resources.)*

Based on the responses contained in this Environmental Checklist, there is no evidence that the project has a potential for a change that would adversely affect wildlife resources or the habitat upon which the wildlife depends. Has the presumption of adverse effect set forth in 14 CCR 753.5 (d) been rebutted by substantial evidence?

☐ Yes (Certificate of Fee Exemption and County Administrative fee required)

☒ No (Pay fee)

***Note:** Fish and Game Code Section 711.4(c)(2)(A) states that projects that are Categorically Exempt from CEQA are also exempt from filing fee.

SECTION 5.0 DISCUSSION OF ENVIRONMENTAL CHECKLIST QUESTIONS

I. AESTHETICS

Existing Views and Visual Character

The Project site is surrounded by an urbanized environment with the existing water pipelines extending generally in a north-south direction. As discussed previously, a new pipeline would be constructed to connect from the terminus of Nancita Circle in the south to a point in Highland Avenue to the north. The new pipeline would be constructed in two segments that would connect via an existing pipeline. The southern pipeline segment would be constructed from a point located in Veterans Way, would cross above the OCFCD Atwood Channel, and terminate in Nancita Circle. Commercial/industrial uses exist to the east, south, and west of the Placentia Veterans Village apartments and the Atwood channel.

The northern pipeline segment would be constructed in a northerly direction across BNSF right-of-way to Orangethorpe Avenue. From here, the pipeline would jog southeasterly along Orangethorpe Avenue before turning northward into Highland Avenue. The pipeline would extend northerly along Highland Avenue and connect to an existing pipeline located in Highland Avenue. Adjacent to the northern pipeline segment is high-density residential (Placentia Veterans Village apartments); single-family residential to the north of East Orangethorpe Avenue and west of South Highland Avenue; and commercial and high-density residential uses to the east of South Highland Avenue. Please refer to Exhibits 4a through 4d, Site Photographs, which provide photographs from several vantage points and depicts the overall existing character of the site and surrounding areas from public views.

Southern Segment

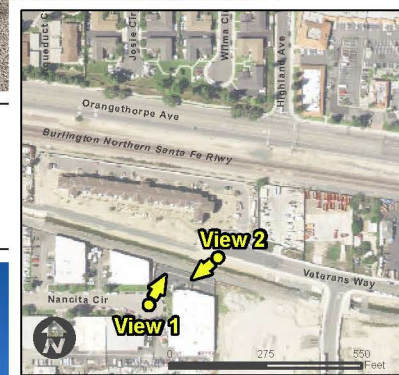
View 1 – View from Nancita Circle, Looking North. As shown on Exhibit 4a, View 1 shows the cul-de-sac on Nancita Circle at the proposed terminus of the southern pipeline segment. Commercial/industrial buildings are visible to the east and west of a private driveway along with a single mature tree and ornamental landscaping. On the north end of the driveway, a green fence is visible which divides the properties from the Atwood Channel. The Placentia Veterans Village apartments, mature trees south and north of the apartments, light posts, and various electrical lines are visible to the northeast. Distant views include several rolling hills that are visible to the northeast from this location.

View 2 – View from Veterans Way, Looking Southeast. As shown on Exhibit 4a, View 2 depicts the OCFCD Atwood Channel looking south from the sidewalk along the south side of Veterans Way. In the foreground, is a chain link fence located along the northern side of the channel. An existing YLWD water main and pipe supports is visible in the center of the view, crossing above the channel. Atwood Channel extends to the east and west and visible features of the channel include standing water, limited ornamental landscaping, and rock- and dirt-lined embankments. South of the Atwood Channel is a green fence surrounding the Channel. Two commercial/industrial buildings and mature trees are visible in the distance to the southeast.

View 3 – View from Veterans Way, Looking North. As shown on Exhibit 4b, View 2 depicts the Placentia Veterans Village apartments from the cul-de-sac on Veterans Way. The foreground view is dominated by the Veterans Way cul-de-sac, sidewalks, wrought iron fence surrounding the apartment complex, an entrance/exit gate, light poles, and signage. Additionally, there is partial view of a brick wall separating the apartment parking lot and a commercial property to the east. Ornamental landscaping and bushes are interspersed on and in front of the apartments. A



View 1 - View from Nancita Circle, Looking North



View 2 - View from Veterans Way, Looking Southeast

Site Photographs – Southern Segment

BNSF Waterline Crossing at Veterans Village and Highland Avenue

Exhibit 4a





View 3 - View from Veterans Way, Looking North

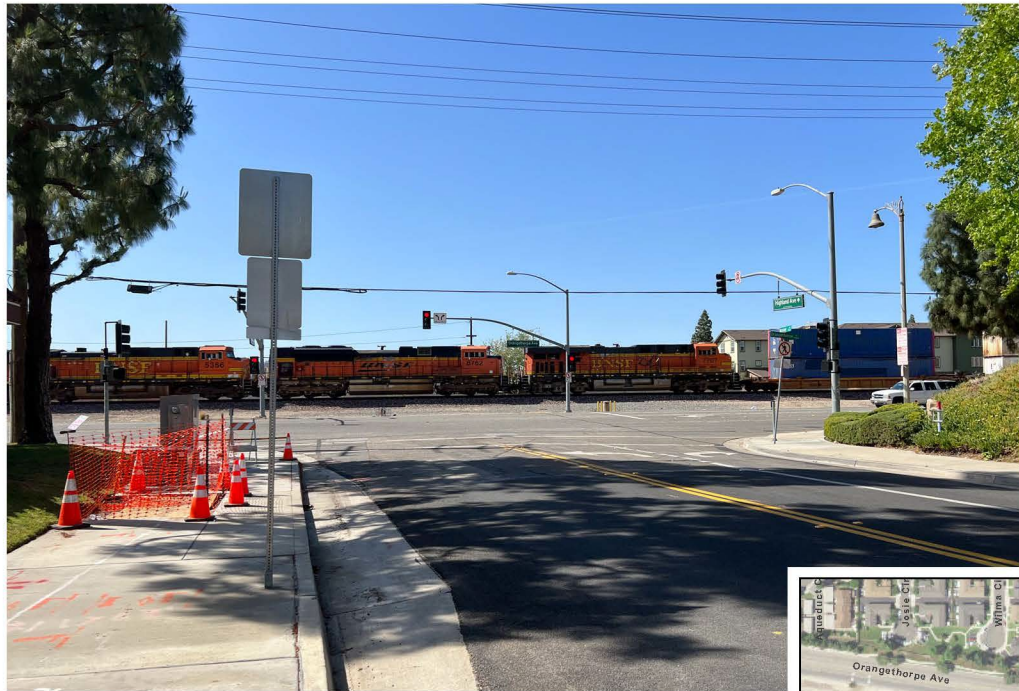


Site Photographs – Southern Segment

BNSF Waterline Crossing at Veterans Village and Highland Avenue

Exhibit 4b





View 4 - View from South Highland Avenue, Looking South



View 5 - View from South Highland Avenue, Looking South

Site Photographs – Northern Segment

BNSF Waterline Crossing at Veterans Village and Highland Avenue

Exhibit 4c





View 6 - View from South Highland Avenue and East Orangethorpe Avenue, Looking North



Site Photographs – Northern Segment

BNSF Waterline Crossing at Veterans Village and Highland Avenue

Exhibit 4d



train is visible heading east on the rail line. In the distance are mature trees, electrical lines, and partial views of hills to the east.

Northern Segment

View 4 – View from South Highland Avenue, Looking South. As shown on Exhibit 4c, View 4 depicts the intersection of South Highland Avenue and East Orangethorpe Avenue from South Highland Avenue looking south. As shown in the photograph, a train is traveling parallel to East Orangethorpe Avenue in a westward direction. Sidewalks are visible along the east and west sides of South Highland Avenue, as well as mature trees, ornamental landscaping, light poles, electrical lines, and signage. Beyond the rail line is a partial view of the Placentia Veterans Village apartments between two train cars.

View 5 – View from South Highland Avenue, Looking South. As shown on Exhibit 4c, View 5 shows South Highland Avenue, existing single-family residential uses to the east and commercial/retail one-story buildings to the west. Sidewalks on either side of South Highland Avenue, mature trees, and grass are also visible. Distant views show industrial buildings, light poles, and electrical poles at the corner of South Highland Avenue and East Orangethorpe Avenue.

View 6 – View from South Highland Avenue and East Orangethorpe Avenue, Looking North. As shown on Exhibit 4d, View 6 shows single-story commercial buildings, a driveway, sidewalk, mature trees and ornamental landscaping on the eastern side of South Highland Avenue. Additionally, along the west side of the street, a sidewalk, light pole, and a landscaped slope with mature trees leading to a block wall are visible. Distant views to the north along South Highland Avenue include high-density apartments on the eastern side of South Highland Avenue and additional residential uses in the distance.

IMPACT ANALYSIS

Would the Project:

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

No Impact. The City of Placentia's General Plan Land Use Element includes policies directed at the preservation of aesthetic character in the City; however, there are no scenic vistas identified in the City or the vicinity of the Project site (Placentia 2019b). Due to the nature of the proposed Project, which includes the construction of a new waterline and associated channel crossing, and because no scenic vistas are identified in the City or Project vicinity, no impacts would occur, and no mitigation is required.

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

No Impact. The City's General Plan Mobility Element identifies State Route (SR) 90 and SR-57 as intersecting the City of Placentia (Placentia 2019d). According to the California Department of Transportation's (Caltrans') California Scenic Highway Mapping System, SR-91 is a scenic highway with segments classified as Officially Designated and Eligible in the Counties of Orange and Riverside. Additionally, SR-57 is an Eligible scenic highway in the County of Orange (Caltrans 2022). However, the Officially Designated and Eligible scenic highway segments of SR-91 and SR-57 do not extend into the City and are not visible from the Project site. SR-91 (Officially Designated) is approximately 1.0 mile south; SR-91 (designated Eligible) is approximately

3.25 miles to the east; and SR-57 (designated Eligible) is approximately 4.75 miles northwest from the Project site.

As discussed in the response to CEQA Checklist Question I.(a), the proposed Project proposes to construct a new waterline and associated channel crossing. Except for the crossing of Atwood Channel, the proposed pipeline would be constructed beneath the ground surface and, following construction, would not be visible. The proposed pipeline would extend above the Atwood Channel; however, the pipeline would be constructed adjacent to an existing water main crossing and utilize the same pipeline supports. Therefore, the Project would not substantially alter the visual character of the area. Further, the Project would not obstruct views during operation. Views of the proposed pipeline alignment from the scenic highway segments of SR-91 and SR-57 would be obstructed by intervening topography, the existing urban environment, and the physical distance. Therefore, motorists traveling along SR-91 or SR-57 would be unaffected by the Project. No impacts would occur, and no mitigation is required.

- 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?**

No Impact. The Project is located in an urbanized area surrounded by commercial, industrial, high and low density residential uses, as well as infrastructure including the BSNF rail line and the OCFCD Atwood Channel. Exhibit 4a through 4c, Site Photographs, depict the existing visual character and urban setting of the proposed pipeline alignment.

As discussed in the response to CEQA Checklist Question I.(a), the proposed Project would include the construction of two segments of a new waterline. Some ornamental trees and landscaping within the Project site may require removal during construction activities; however, the visual appearance of the Project from surrounding areas would remain largely unchanged. Upon completion of the Project, all landscaping and hardscape, including roads and driveways, would be restored to current conditions. No impact would occur related to the visual character or quality of the site or surrounding areas, and no mitigation is required.

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

No Impact. As discussed in the response to CEQA Checklist Question I.(a), the proposed Project includes the construction of a new waterline and associated channel crossing. Project construction would occur during daytime hours in accordance with local ordinances; therefore, no temporary construction lighting would be used. No permanent lighting would be associated with operation of the proposed waterline and channel crossing. Further, the majority of the pipeline would be located underground and the portion that would be visible (i.e., the pipeline segment proposed to cross above Atwood Channel) would consist of non-reflective materials and coatings to reduce the potential for glare. Therefore, no impact would occur related to the light or glare that would adversely affect day or nighttime views in the area, and no mitigation is required.

II. AGRICULTURE AND FOREST RESOURCES

IMPACT ANALYSIS

Would the Project:

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

No Impact. Based on a review of the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP 2016), the Project site is designated as Urban and Built-Up Land. A small parcel of land located northeast of the Project site along Lakewood Avenue, south of Via Madera Avenue, is designated as Unique Farmland, but has since been developed with residential uses. The nearest land not designated as Urban and Built-Up Land is Yorba Linda Lake (designated as Other Land), located approximately 0.25 miles northeast of the Project. Further, as described in Section 2.1, Project Location and Surrounding Uses, the Project site is surrounded by an urbanized environment. Therefore, there is no land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on or near the Project site. No impact would occur, and no mitigation is required.

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

No Impact. According to the City's General Plan Conservation Element, the existence of row crops (predominantly strawberries and oranges) exists in the City, but not in significant quantities (Placentia 2019a). These crops are not currently in production on the Project site. Further, the Project is surrounded by a mixture of urban land uses, as shown on the City's General Plan Land Use Map and described in Section 2.1, Project Location and Surrounding Uses. Along South Highland Avenue, medium density residential exists to the west and commercial uses are to the east. High density residential uses are located directly south of East Orangethorpe Avenue and the BSNF rail line; and industrial uses are located south of the OCFCD Atwood Channel (Placentia 2019c). Therefore, the site is not within a Williamson Act contract and would not conflict with existing zoning for agricultural use or a Williamson Act contract. No impact would occur, and no mitigation is required.

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

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

No Impact. According to Section 12220(g) of the *California Public Resources Code*, "forest land is land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits". The Project site is located in an urbanized area, does not support timber or forest uses, and does not meet the definition of forest land; therefore, no impacts would occur, and no mitigation is required.

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

No Impact. As discussed previously in the response to CEQA Checklist Question II.(b), the proposed Project site is not designated as farmland of significance and is not being used for agricultural production. There are areas in the City that are currently used for minor agricultural purposes; however, proposed Project actions would not convert these areas to non-agricultural use. Further, there are no forest lands in the vicinity of the Project site; therefore, the Project would not convert forest land to non-forest use. No impacts would occur, and no mitigation is required.

III. AIR QUALITY

Existing Conditions

The Project site is located within the South Coast Air Basin (SoCAB) and is under the jurisdiction of the South Coast Air Quality Management District (AQMD). Both the State of California and the United States Environmental Protection Agency (USEPA) have established health-based Ambient Air Quality Standards (AAQS) for air pollutants, which are known as “criteria pollutants”. The AAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. The AAQS for ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), respirable particulate matter with a diameter of 10 microns or less (PM₁₀), fine particulate matter with a diameter of 2.5 microns or less (PM_{2.5}), and lead are shown in Table 1.

TABLE 1
CALIFORNIA AND FEDERAL AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards	Federal Standards Primary ^a	Federal Standards Secondary ^b
O ₃	1 Hour	0.09 ppm (180 µg/m ³)	–	–
O ₃	8 Hour	0.070 ppm (137 µg/m ³)	0.070 ppm (137 µg/m ³)	Same as Primary
PM ₁₀	24 Hour	50 µg/m ³	150 µg/m ³	Same as Primary
PM ₁₀	AAM	20 µg/m ³	–	Same as Primary
PM _{2.5}	24 Hour	–	35 µg/m ³	Same as Primary
PM _{2.5}	AAM	12 µg/m ³	12.0 µg/m ³	15.0 µg/m ³
CO	1 Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	–
CO	8 Hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	–
CO	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)	–	–
NO ₂	AAM	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	Same as Primary
NO ₂	1 Hour	0.18 ppm (339 µg/m ³)	0.100 ppm (188 µg/m ³)	–
SO ₂	24 Hour	0.04 ppm (105 µg/m ³)	0.14 ppm	–
SO ₂	3 Hour	–	–	0.5 ppm (1,300 µg/m ³)
SO ₂	1 Hour	0.25 ppm (655 µg/m ³)	0.075 ppm (196 µg/m ³)	–
Lead	30-day Avg.	1.5 µg/m ³	–	–
Lead	Calendar Quarter	–	1.5 µg/m ³	Same as Primary
Lead	Rolling 3-month Avg.	–	0.15 µg/m ³	Same as Primary
Visibility Reducing Particles	8 hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)	No Federal Standards	No Federal Standards
Sulfates	24 Hour	25 µg/m ³	No Federal Standards	No Federal Standards
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	No Federal Standards	No Federal Standards
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m ³)	No Federal Standards	No Federal Standards

O₃: ozone; ppm: parts per million; µg/m³: micrograms per cubic meter; PM₁₀: respirable particulate matter; AAM: Annual Arithmetic Mean; –: No Standard; PM_{2.5}: fine particulate matter; CO: carbon monoxide; mg/m³: milligrams per cubic meter; NO₂: nitrogen dioxide; SO₂: sulfur dioxide; km: kilometer.

^a *National Primary Standards*: The levels of air quality necessary, within an adequate margin of safety, to protect the public health.

^b *National Secondary Standards*: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

Note: More detailed information in the data presented in this table can be found at the CARB website (www.arb.ca.gov).

Source: CARB 2016.

Regional air quality is defined by whether the area has attained or not attained State and federal air quality standards, as determined by air quality data from various monitoring stations. Areas that are considered in “nonattainment” are required to prepare plans and implement measures that will bring the region into “attainment”. When an area has been reclassified from nonattainment to attainment for a federal standard, the status is identified as “maintenance”, and there must be a plan and measures established that will keep the region in attainment for the following 10 years.

For California Air Resources Board (CARB), an “Unclassified” designation indicates that the air quality data for the area are incomplete and do not support a designation of attainment or nonattainment. Table 2 summarizes the attainment status of the SoCAB for the criteria pollutants.

TABLE 2
CRITERIA POLLUTANT DESIGNATIONS
IN THE SOUTH COAST AIR BASIN

Pollutant	State	Federal
O ₃ (1-hour)	Nonattainment	Extreme Nonattainment
O ₃ (8-hour)	Nonattainment	Extreme Nonattainment
PM ₁₀	Nonattainment	Attainment/Maintenance
PM _{2.5}	Nonattainment	Serious Nonattainment
CO	Attainment	Attainment/Maintenance
NO ₂	Attainment	Attainment/Maintenance
SO ₂	Attainment	Attainment
Lead	Attainment	Nonattainment/Attainment ^a
Visibility-Reducing Particles	Unclassified ^b	No Standards
Sulfates	Attainment	No Standards
Hydrogen Sulfide	Unclassified	No Standards

O₃: ozone; PM₁₀: respirable particulate matter with a diameter of 10 microns or less; PM_{2.5}: fine particulate matter with a diameter of 2.5 microns or less; CO: carbon monoxide; NO₂: nitrogen dioxide; SO₂: sulfur dioxide; CARB: California Air Resources Board; SoCAB: South Coast Air Basin.

^a Los Angeles County is classified as nonattainment for lead; the remainder of the SoCAB is in attainment of State and federal standards.

^b “Unclassified” designation indicates that the air quality data for the area are incomplete and do not support a designation of attainment or nonattainment.

Source: CARB 2017, USEPA 2019.

O₃ is formed by photochemical reactions between Nitrogen Oxides (NO_x) and volatile organic compounds (VOCs) rather than being directly emitted. O₃ is the principal component of smog. Elevated O₃ concentrations cause eye and respiratory irritation; reduce resistance to lung infection; and may aggravate pulmonary conditions in persons with lung disease. O₃ is also damaging to vegetation and untreated rubber. The entire SoCAB is designated as a nonattainment area for the State one-hour O₃ standard.

CO is formed by the incomplete combustion of fossil fuels, almost entirely from automobiles. It is a colorless, odorless gas that can cause dizziness, headaches, and fatigue. The SoCAB is designated as an attainment area for federal CO standards.

NO₂ (a “whiskey brown”-colored gas) and nitric oxide (NO) (a colorless, odorless gas) are formed from combustion devices. These compounds are referred to as NO_x. NO_x is a primary component of the photochemical smog reaction. The severity of health effects of NO_x depends primarily on the concentration inhaled. Acute symptoms can include coughing, difficulty breathing, vomiting, headache, and eye irritation. Respiratory symptoms may also increase in severity after prolonged exposure.

SO₂ is a corrosive gas that is primarily formed from the combustion of fuels containing sulfur (e.g., from power plants) and heavy industry that use coal or oil as fuel. SO₂ irritates the respiratory tract and can result in lung disease and breathing problems for asthmatics. Atmospheric SO₂ also contributes to acid rain.

Lead is found in old paints and coatings, plumbing, and a variety of other materials including gasoline anti-knock additives. Once in the blood stream, lead can cause damage to the brain, nervous system, and other body systems. Children are highly susceptible to the effects of lead. However, lead emissions have significantly decreased due to the near elimination of the use of leaded gasoline.

Particulate matter is the term used for a mixture of solid particles and liquid droplets found in the air. Respirable particulate matter (i.e., PM₁₀) derives from a variety of sources including road dust from paved and unpaved roads; diesel soot; combustion products; tire and brake abrasion; construction operations; and fires. Fuel combustion and certain industrial processes are primarily responsible for fine particle (i.e., PM_{2.5}) levels. Coarse particles (PM₁₀) can accumulate in the respiratory system and aggravate health problems such as asthma. PM_{2.5} can deposit itself deep in the lungs and may contain substances that are harmful to human health.

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or in serious illness or that may pose a present or potential hazard to human health. TACs may be emitted from a variety of common sources, including motor vehicles, gasoline stations, dry cleaners, industrial operations, painting operations, and research and teaching facilities. TACs are different than the “criteria” pollutants previously discussed in that AAQS have not been established for them. TACs occurring at extremely low levels may still affect health, and it is typically difficult to identify levels of exposure that do not produce adverse health effects. TAC impacts on human health are described by having carcinogenic risk and being chronic (i.e., of long duration) or acute (i.e., severe but of short duration). Diesel particulate matter (diesel PM) is a TAC and is responsible for the majority of California’s known cancer risk from outdoor air pollutants.

The effects from air pollution can be significant, both in the short-term during smog alerts, but also from long-term exposure to pollutants. While most of the populace can overcome short-term air quality health concerns, selected segments of the population are more vulnerable to its effects. Specifically, young children, the elderly, and persons with existing health problems are most susceptible to respirator complications.

Air quality data for the Project site is represented by the La Habra Monitoring Station. Pollutants measured at the La Habra Monitoring Station include CO, O₃, and NO₂. PM₁₀, and PM_{2.5} were not measured at this location. The monitoring data presented in Table 3, Air Quality Levels Measured at the La Habra Monitoring Station, were obtained from CARB (CARB 2022). Federal and State air quality standards are presented with the frequency that may be exceeded.

TABLE 3
AIR QUALITY LEVELS MEASURED AT THE
LA HABRA MONITORING STATION

Pollutant	California Standard	National Standard	Year	Max. Level^a	Days State Standard Exceeded	Days National Standard Exceeded
O ₃ (1 hour)	0.09 ppm	None	2018	0.111	3	–
O ₃ (1 hour)	0.09 ppm	None	2019	0.107	2	–
O ₃ (1 hour)	0.09 ppm	None	2020	0.171	15	–
O ₃ (8 hour)	0.070 ppm	0.070 ppm	2018	0.077	4	4
O ₃ (8 hour)	0.070 ppm	0.070 ppm	2019	0.094	6	6
O ₃ (8 hour)	0.070 ppm	0.070 ppm	2020	0.113	23	23
NO ₂ (1 Hour)	0.18 ppm	0.100 ppm	2018	0.067	0	0
NO ₂ (1 Hour)	0.18 ppm	0.100 ppm	2019	0.059	0	0
NO ₂ (1 Hour)	0.18 ppm	0.100 ppm	2020	0.057	0	0
CO (1 hour)	20 ppm	35 ppm	2018	3.0	0	0
CO (1 hour)	20 ppm	35 ppm	2019	2.6	0	0
CO (1 hour)	20 ppm	35 ppm	2020	2.1	0	0
CO (8 hour)	9 ppm	9 ppm	2018	1.4	0	0
CO (8 hour)	9 ppm	9 ppm	2019	1.2	0	0
CO (8 hour)	9 ppm	9 ppm	2020	1.2	0	0

–: Data Not Reported or insufficient data available to determine the value; O₃: ozone; ppm: parts per million; NO₂: nitrogen dioxide; CO: carbon monoxide.

^a California maximum levels were used.

Source: USEPA 2019.

The data from the La Habra Monitoring Station shows that O₃ is the air pollutant of primary concern in the Project area. At the monitoring station, the State 1-hour O₃ standard was exceeded 3 days in 2018, 2 days in 2019, and 15 days in 2020. The State and federal 8-hour O₃ standards were exceeded 4 days in 2018, 6 days in 2016, and 23 days in 2020. O₃ is a secondary pollutant and is not directly emitted from a source; it occurs as the result of photochemical reactions from ozone precursors, which include VOCs, NO₂ and sunlight.

Sensitive receptors near the Project site (i.e., proposed pipeline alignment) include single-family residences.

Significance Criteria

Appendix G of the State CEQA Guidelines states that the significance criteria established by the applicable air quality management district may be relied upon to make significance determinations. The South Coast AQMD has established significance thresholds to assess the regional and localized impacts of Project-related air pollutant emissions; Table 4 presents the current significance thresholds.

TABLE 4
SOUTH COAST AQMD AIR QUALITY SIGNIFICANCE THRESHOLDS

Mass Daily Thresholds	-	-
Pollutants	Construction	Operation
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
TACs, Odor, and GHG Thresholds	-	-
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	-
Odor	Project creates an odor nuisance pursuant to South Coast AQMD Rule 402	-
GHG	10,000 MT/yr CO ₂ e for industrial facilities	-
Ambient Air Quality Standards for Criteria Pollutants^{b, c}	-	-
NO ₂	- Maximum Incremental Cancer Risk ≥ 10 in 1 million - Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) - Chronic & Acute Hazard Index ≥ 1.0 (project increment)	-
-	1-hour average	Project creates an odor nuisance pursuant to South Coast AQMD Rule 402
-	annual arithmetic mean	10,000 MT/yr CO ₂ e for industrial facilities
PM10	24-hour average	10.4 $\mu\text{g}/\text{m}^3$ (construction) ^c & 2.5 $\mu\text{g}/\text{m}^3$ (operation)
-	annual average	1.0 $\mu\text{g}/\text{m}^3$
PM2.5	24-hour average	10.4 $\mu\text{g}/\text{m}^3$ (construction) ^c & 2.5 $\mu\text{g}/\text{m}^3$ (operation)
SO ₂	1-hour average	0.25 ppm (State) & 0.075 ppm (federal – 99 th percentile)
-	24-hour average	0.04 ppm (State)
Sulfate	24-hour average	25 $\mu\text{g}/\text{m}^3$ (State)
CO	South Coast AQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards:	-
-	1-hour average	20.0 ppm (State) and 35 ppm (federal)
-	8-hour average	9.0 ppm (State/federal)
Lead	30-day average	1.5 $\mu\text{g}/\text{m}^3$ (State)
-	Rolling 3-month average	0.15 $\mu\text{g}/\text{m}^3$ (federal)

NOx: nitrogen oxides; lbs/day: pounds per day; VOC: volatile organic compound; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; SOx: sulfur oxides; CO: carbon monoxide; TACs: toxic air contaminants; GHG: greenhouse gases; South Coast AQMD: South Coast Air Quality Management District; MT/yr CO₂e: metric tons per year of carbon dioxide equivalents; NO₂: nitrogen dioxide; ppm: parts per million; µg/m³: micrograms per cubic meter; SO₂: sulfur dioxide.

^a Source: South Coast AQMD CEQA Handbook (South Coast AQMD 1993)

^b Ambient air quality thresholds for criteria pollutants based on South Coast AQMD Rule 1303, Table A-2 unless otherwise stated

^c Ambient air quality threshold is based on South Coast AQMD Rule 403

Source: South Coast AQMD 2019.

IMPACT ANALYSIS

Would the Project:

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

No Impact. Air quality in Orange County is regulated by the South Coast Air Quality Management District (South Coast AQMD), which is the agency principally responsible for comprehensive air pollution control in the SoCAB. The South Coast AQMD develops rules and regulations; establishes permitting requirements for stationary sources; inspects emissions sources; and enforces such measures through educational programs or fines, when necessary. The South Coast AQMD is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources. It has responded to this requirement by preparing a sequence of Air Quality Management Plans (AQMPs).

On March 3, 2017, the South Coast AQMD adopted the 2016 AQMP, which is a regional and multi-agency effort (South Coast AQMD, CARB, Southern California Association of Governments [SCAG], and USEPA). The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy; updated emission inventory methodologies for various source categories; and SCAG's latest growth forecasts. The main purpose of an AQMP is to bring an area into compliance with the requirements of federal and State air quality standards.

The two principal criteria for conformance to an AQMP are the following:

1. Whether the project would result in an increase in the frequency or severity of existing air quality violations; cause or contribute to new violations; or delay timely attainment of air quality standards and
2. Whether the project would exceed the assumptions in the AQMP.

As noted previously in Table 2, the Orange County portion of the SoCAB is a nonattainment area for O₃, PM10, and PM2.5. With respect to the first criterion, the following analyses demonstrate that the Project would not (1) generate short-term or long-term emissions of VOCs, oxides of nitrogen (NOx, which are O₃ precursors), or PM2.5 that could potentially cause an increase in the frequency or severity of existing air quality violations; (2) cause or contribute to new violations; or (3) delay timely attainment of air quality standards.

The South Coast AQMD has developed significance thresholds to determine whether State and federal air quality standards would be violated or whether a substantial contribution to a violation would occur. These significance thresholds have been developed for the construction and operations phases of the Project and examine the potential impacts of the Project's emissions on both a regional and local context. As discussed in the response to CEQA Checklist Question III.B, both short- and long-term emissions associated with the Project would be below the regional and localized air quality significance adopted by the South Coast AQMD for CEQA evaluations. These South Coast AQMD significance thresholds were developed to assess whether an individual

project would individually or cumulatively contribute to exceedances of the ambient air quality standards. Therefore, regarding the first criterion for conformance to an AQMP, the Project would not (1) generate short-term or long-term emissions of VOCs, NO_x, or PM_{2.5} that could potentially cause an increase in the frequency or severity of existing air quality violations; (2) cause or contribute to new violations; or (3) delay timely attainment of air quality standards.

With respect to the second criterion, the Project would not increase or modify SCAG's population, housing, or employment projections. The proposed Project is designed to develop redundant water pipeline infrastructure. Therefore, the Project would not directly affect population, housing, or employment projections and would be consistent with the region's AQMP. There would be a less than significant impact, and no mitigation is required.

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?

Less than Significant Impact. The Project is evaluated for construction and operations phase emissions against significance thresholds adopted by the South Coast AQMD in the following evaluations of potential air quality impacts for CEQA.

Construction Emissions – Regional

Criteria pollutant emissions would occur during construction from operation of construction equipment; grading and earth-moving activities, which would generate fugitive dust; export of excavated soil; import of construction materials; and operation of vehicles driven to and from the site by construction workers. Emissions would vary from day to day, depending on the level of activity; the specific type of construction activity occurring; and, for fugitive dust, prevailing weather conditions.

A construction-period mass emissions inventory was compiled based on an estimate of construction equipment as well as scheduling and Project phasing assumptions. More specifically, the mass emissions analysis considers the following:

- Combustion emissions from operating on-site stationary and mobile construction equipment;
- Fugitive dust emissions from demolition, site preparation, and grading phases; and
- Mobile-source combustion emissions and fugitive dust from worker commute and truck travel.

Project emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2020.4.0 computer program (CAPCOA 2022). CalEEMod is designed to model construction and operational emissions for land development projects and allows for the input of project- and County-specific information. CalEEMod has separate databases for specific counties and air districts, and the Orange County database was used for the proposed Project.

The mass emissions thresholds (see Table 4) are based on the rate of emissions (i.e., pounds of pollutants emitted per day). Therefore, the quantity, duration, and intensity of construction activity are important in ensuring the analysis of worst case (i.e., maximum daily emissions) scenarios. The Project activities (e.g., excavation, building) are identified by start date and duration. Each activity has associated off-road equipment (e.g., excavators, cranes) and on-road vehicles (e.g., haul trucks, concrete trucks, worker commute vehicles).

For the purposes of estimating emissions associated with construction activities, a 12-month timeframe was applied to the analysis. Construction hauling truck trips were estimated based on the phase length and amount of demolition debris and soil exported from the Project site. Project-specific inputs can be found in the CalEEMod output data, located in Appendix A of this IS/MND.

Dust control by watering was assumed, consistent with the requirements of South Coast AQMD Rule 403.

Maximum daily emissions for the peak workday are shown in Table 5, Estimated Maximum Daily Construction Emissions. If construction is delayed or occurs over a longer time period, emissions could be reduced because of (1) a more modern and cleaner-burning construction equipment fleet mix and/or (2) a less intensive buildout schedule (i.e., fewer daily emissions occurring over a longer time interval). As shown, all criteria pollutant emissions would be less than their respective thresholds. Thus, regional construction-related impacts would be less than significant.

TABLE 5
ESTIMATED MAXIMUM DAILY CONSTRUCTION EMISSIONS
(LBS/DAY)

Maximum Daily Emissions	VOC	NOx	CO	SOx	PM10	PM2.5
2022	1	6	7	<1	<1	<1
2023	1	9	9	<1	1	<1
Maximum	1	9	9	<1	1	<1
South Coast AQMD Daily Thresholds (Table 4)	75	100	550	150	150	55
Exceeds South Coast AQMD Thresholds?	No	No	No	No	No	No

lbs/day: pounds per day; VOC: volatile organic compound(s); NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: inhalable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; South Coast AQMD: South Coast Air Quality Management District.

Source: CalEEMod data in Appendix A.

Construction Emissions – Local/Ambient Air Quality

The localized effects from the on-site portion of daily emissions were evaluated at receptor locations potentially impacted by the Project according to the South Coast AQMD's localized significance threshold (LST) method, which utilizes on-site emissions rate look up tables and Project-specific modeling, where appropriate. LSTs are applicable to the following criteria pollutants: NO₂, CO, PM10, and PM2.5. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest receptor. For the LST CO and NO₂ exposure analysis, receptors who could be exposed for one hour or more are considered. For PM10 and PM2.5 exposure analysis, receptors who could be exposed for 24 hours are considered. The mass rate look-up tables were developed for each source receptor area and can be used to determine whether a project may generate significant adverse localized air quality impacts. The South Coast AQMD provides LST mass rate look-up tables for projects that are less than or equal to five acres, which means this is the appropriate method for the Project. When quantifying mass emissions for localized analysis, only emissions that occur on site are considered. Consistent with the South Coast AQMD's LST method guidelines, emissions related to off-site delivery/haul truck activity and employee trips are not considered in the evaluation of localized impacts.

As shown in Table 6, localized emissions for all criteria pollutants would be less than their respective South Coast AQMD LSTs for all pollutants. Thus, localized construction-related impacts would be less than significant, and no mitigation is required.

TABLE 6
LOCALIZED CONSTRUCTION POLLUTANT EMISSIONS
(LBS/DAY)

-	NOx	CO	PM10	PM2.5
Maximum Daily Emissions	8	8	<1	<1
South Coast AQMD LSTs*	103	522	4	3
Exceeds South Coast AQMD Thresholds?	No	No	No	No

lbs/day: pounds per day; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; South Coast AQMD: South Coast Air Quality Management District; LST: Localized Significance Threshold.

* Thresholds for Source Receptor Area 20, Central Orange County Coastal, 1-acre site, 54-meter receptor distance

Source: South Coast AQMD 2009.

Long-Term Operational Emissions

The Project would develop redundant water pipeline infrastructure. The Project does not involve the generation of additional day-to-day vehicle trips, except for infrequent inspection and maintenance related trips, nor would it require additional energy demands. Because the Project would not involve recurring air pollutant emissions during the operations phase, the impact related to long-term operational emissions would be less than significant, and no mitigation is required.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Exposure of sensitive receptors is addressed for the following situations: CO hotspots; criteria pollutants from on-site construction; and TACs from on-site construction.

Carbon Monoxide Hotspot

A CO hotspot is an area of localized CO pollution caused by severe vehicle congestion on major roadways, typically near intersections. If a project increases average delay at signalized intersections operating at level of service (LOS) E or F or causes an intersection that would operate at LOS D or better without the project to operate at LOS E or F with the project, a quantitative screening is required. As discussed in the response to CEQA Checklist Question III.b, operational traffic would be negligible. Thus, it may be inferred that the Project would neither cause new severe congestion nor significantly worsen existing congestion. There would be no potential for a CO hotspot or exposure of sensitive receptors to substantial, Project-generated local CO emissions. The impact would be less than significant, and no mitigation is required.

Criteria Pollutants from On-Site Construction

Exposure of persons to NO₂, CO, PM10, and PM2.5 emissions is discussed in the LST analysis under CEQA Checklist Question III.b above. As discussed, there would be a less than significant impact, and no mitigation is required.

Toxic Air Contaminant (Diesel PM) Emissions from On-Site Construction

Construction activities would result in short-term, Project-generated emissions of diesel PM from the exhaust of off-road, heavy-duty diesel equipment used for site preparation (e.g., demolition, excavation, and grading); paving; and building construction. CARB identified diesel PM as a TAC in 1998. The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Thus, the risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer time period. According to the Office of Environmental Health Hazard Assessment, health risk assessments—which determine the exposure of sensitive receptors to TAC emissions—should be based on a 30- to 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with a project.

For the Project, there would be few pieces of off-road, heavy-duty diesel equipment in operation, and the construction period would be short when compared to a 30- to 70-year exposure period. When considering these facts combined with the highly dispersive properties of diesel PM and additional reductions in particulate emissions from newer construction equipment, as required by USEPA and CARB regulations, it can be concluded that TAC emissions during construction of the Project would not expose sensitive receptors to substantial emissions of TACs. There would be a less than significant impact, and no mitigation is required.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant Impact. The Project would not result in other emissions that would affect a substantial number of people. Objectionable odors are generally associated with agricultural activities; landfills and transfer stations; the generation or treatment of sewage; the use or generation of chemicals; food processing; or other activities that generate unpleasant odors (South Coast AQMD 1993). The proposed Project would involve the development of redundant water pipeline infrastructure. None of the proposed Project elements would generate emissions that would lead to objectionable odors. Objectionable odors associated with operations would not change from the existing conditions. There would be a less than significant impact, and no mitigation is required.

During construction, the proposed Project would operate equipment that may generate odors resulting from on-site construction equipment's diesel exhaust emissions or paving operations. However, these odors would be temporary and would dissipate rapidly from the source with an increase in distance such that it would not be considered a public nuisance. The Project would also be regulated from nuisance odors and other objectionable emissions by South Coast AQMD Rule 402. Rule 402 prohibits discharge from any source of air contaminants or other material which would cause injury, detriment, nuisance, or annoyance to people or the public. Therefore, Project odors would be considered less than significant, and no mitigation is required.

IV. BIOLOGICAL RESOURCES

The California Native Plant Society's (CNPS's) Inventory of Rare and Endangered Vascular Plants of California (CNPS 2022) and the California Department of Fish and Wildlife's (CDFW's) California Natural Diversity Database (CDFW 2022) were reviewed prior to conducting a survey of the Project site to identify special status plants, wildlife, and habitats known to occur within the Project vicinity. Database searches included the U.S. Geological Survey's Orange and Yorba Linda 7.5-minute quadrangles.

Psomas Senior Biologist Allison Rudalevige conducted a field survey on April 7, 2022, to document biological and jurisdictional water resources on the Project site. The area surveyed consists of a 100-foot buffer on either side of the northern and southern pipeline segments.

Ornamental landscaping is associated with developed areas and includes species such as pine (*Pinus* sp.), coast live oak (*Quercus agrifolia*), India hawthorn (*Raphiolepis indica*), pride of Madeira (*Echium candicans*), freeway iceplant (*Carpobrotus edulis*), rosemary (*Salvia rosmarinus*), bougainvillea (*Bougainvillea* sp.), and turf grass. A small patch (i.e., approximately 900 sf) of ruderal/non-native grass intermixed with native species occurs on the north side of Veterans Way just east of its terminus. Non-native species include wall barley (*Hordeum murinum*), ripgut grass (*Bromus diandrus*), red brome (*Bromus rubens*), Bermuda grass (*Cynodon dactylon*), shortpod mustard (*Hirschfeldia incana*), Russian thistle (*Salsola tragus*), totalote (*Centaurea melitensis*), cheeseweed (*Malva parviflora*), and redstem filaree (*Erodium cicutarium*); native species include scattered California poppy (*Eschscholzia californica*), miniature lupine (*Lupinus bicolor*), and jimson weed (*Datura wrightii*).

In general, the Project site provides limited habitat value for wildlife as it is comprised almost entirely of developed areas and ornamental vegetation. Only wildlife species acclimated to an urban environment are expected to occur on the Project site. Bird species observed in the vicinity during the survey include mallard (*Anas platyrhynchos*), mourning dove (*Zenaida macroura*), and American crow (*Corvus brachyrhynchos*). Common amphibian species that may occur in Atwood Channel include California toad (*Anaxyrus boreas halophilus*). Common reptile species that may occur in the vicinity include western fence lizard (*Sceloporus occidentalis*), side-blotched lizard (*Uta stansburiana*), and alligator lizard (*Elgaria multicarinata*). Small mammal species that may occur in the vicinity include the California ground squirrel (*Spermophilus beecheyi*) and deer mouse (*Peromyscus* sp.). Medium- to large-sized mammals that may occur in the vicinity include coyote (*Canis latrans*), northern raccoon (*Procyon lotor*), and striped skunk (*Mephitis mephitis*).

IMPACT ANALYSIS

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?**

Less than Significant Impact. The Project site is comprised almost entirely of developed areas with only ornamental vegetation. The approximate 900-sf area containing a mix of native and non-native species is too small and disconnected from larger areas of native vegetation to provide suitable habitat for special status species. Additionally, this area was developed prior to construction of Veterans Way between 2014 and 2015.

Chaparral sand verbena (*Abronia villosa* var. *aurita*; California Rare Plant Rank 1B.1) has been historically reported approximately one mile from the Project site (CDFW 2022). No current observations have been made from this portion of Orange County; records are from 1935 or prior. Suitable habitat for this species is not present on the Project site. No other special status plant species have been reported in the immediate Project vicinity; most special status plant species occurrences reported from the literature review occur in the Santa Ana Mountains and foothills, east of the Project site. Due to the highly disturbed nature of the Project site and lack of natural habitat, special status plant species are not expected to occur on the Project site. Therefore, there would be no significant impact on special status plant species, and no mitigation would be required.

Santa Ana sucker (*Catostomus santaanae*; federally Threatened species) has been reported approximately 1.3 mile from the Project site in the Santa Ana River (CDFW 2022). However, the Atwood Channel does not provide suitable habitat for this species and the connection between the Santa Ana River and Atwood Channel does not provide suitable habitat; therefore, Santa Ana sucker is not expected to occur on the Project site. Therefore, there would be no significant impact on this species, and no mitigation would be required.

California least tern (*Sternula antillarum browni*; federally and State Endangered species; Fully Protected species) has been reported nesting on islands at large groundwater recharge basins within two miles of the Project site (CDFW 2022). While there is potential for the species to forage along the Atwood Channel, there is no suitable nesting habitat on the Project site. Active construction may temporarily make a small amount of foraging habitat unavailable, but there is comparable and higher quality habitat in the Project vicinity and Project impacts would not result in the permanent loss of foraging habitat for this species. Therefore, there would be no significant impact on this species, and no mitigation would be required.

Suitable habitat is not present on the Project site for other special status wildlife species reported in the literature review. Therefore, there would be no significant impact on special status wildlife species, and no mitigation would be required.

- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Services? and**
- c) Have a substantial adverse effect 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?**

Less Than Significant With Mitigation. The Project proposes to construct a portion of the new pipeline across and above Atwood Channel. A jurisdictional delineation was performed on April 7, 2022; see Appendix B for the full report. Based on the results of the jurisdictional delineation, the Atwood Channel contains wetland and non-wetland waters of the United States under the regulatory authority of the U.S. Army Corps of Engineers (USACE), wetland and non-wetland waters of the State under the regulatory authority of the Regional Water Quality Control Board (RWQCB), and waters under the regulatory authority of the CDFW. Based on current Project plans, the new pipeline would span Atwood Channel. Therefore, there are no anticipated direct impacts on areas under the jurisdiction of the USACE, the RWQCB, or the CDFW, and no permits/certifications/agreements from these agencies would be required. If Project design changes require modifications to the Atwood Channel, then permit authorization from the regulatory authorities would be required.

Any change to water quality could affect biological resources (e.g., wetlands) that occur in the Atwood Channel. During construction, runoff carrying excessive silt or petroleum residues from construction equipment have the potential to impact water quality. Impacts on water quality or increases in dust would be considered potentially significant. As discussed in Section X, Hydrology and Water Quality, YLWD would require the Construction Contractor to include Best Management Practices (BMPs) in the Stormwater Pollution Prevention Plan (SWPPP) for the Project to minimize soil erosion and sedimentation from the Project site. Implementation of **MM HYDRO-1**, detailed in Section X, Hydrology and Water Quality, which requires preparation of a SWPPP and BMPs, would be required to reduce this impact to a less than significant level.

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

Less than Significant Impact. The Project site is currently developed and is surrounded by other developed areas. Common, urban-acclimated wildlife species may move through the area, particularly along the Atwood Channel and rail line. Construction noise may deter wildlife from using these areas. However, most wildlife movement would occur at night when construction activities would not occur. Therefore, there may be a temporary adverse impact on wildlife movement, but impacts would be less than significant, and no mitigation would be required.

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

Less Than Significant With Mitigation. On July 20, 2020, the City Council adopted the Urban Forest Protection Ordinance via Ordinance No. O-2020-04 amending Title 14 of the Placentia Municipal Code. This ordinance regulates the planting, removal, and maintenance of City trees by anyone other than the City. A “City tree” is defined as any tree which is located in a place or area under ownership or control of the City including, but without limitation, to streets, parkways, open space, and City-owned property. Under this ordinance, the removal of any City tree requires City review and approval. Based on current Project plans, one tree would be removed and replaced. However, this tree is located on private property and so would not fall under the provisions of the City Ordinance and an impact would not occur.

Raptor species (i.e., birds of prey) have potential to nest in ornamental trees within and adjacent to the Project site. If construction occurs during the raptor nesting season (i.e., February 1 to June 30), the loss of an active nest of any raptor species, including common raptor species, would be considered a violation of Sections 3503, 3503.5, and 3513 of the *California Fish and Game Code* and would be a significant impact. Implementation of **MM BIO-1** which requires vegetation removal outside of the breeding season or establishing a protective buffer until the nest is no longer active would be required to reduce this impact to a less than significant level.

Other common bird species also have potential to nest in ornamental trees and shrubs within and adjacent to the Project site; ground-nesting birds such as killdeer (*Charadrius vociferus*) may also occur. The Migratory Bird Treaty Act (MBTA) protects the taking of migratory birds and their nests and eggs. Bird species protected under the provisions of the MBTA are identified by the List of Migratory Birds (*Code of Federal Regulations*, Title 50, §10.13). Any impact on an active bird nest would be considered a violation of the MBTA and would be considered significant. Implementation of **MM BIO-1** would be required to reduce this impact to a less than significant level.

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

No Impact. The Project site is not located within the boundary of a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved conservation plan. Therefore, there would be no impact.

MITIGATION PROGRAM

Mitigation Measures

MM BIO-1 To the extent possible, vegetation removal will be conducted during the non-breeding season (September 1 to January 31) in order to minimize direct impacts on nesting birds and raptors. If construction activities would be initiated during the breeding season for nesting birds/raptors (i.e., February 1–August 31), a pre-construction survey will be conducted by a qualified Biologist within five days prior to the initiation of construction (including demolition of structures). The nesting bird/raptor survey area will include a buffer of 300 feet around the work area for nesting birds and a buffer of 500 feet around the work area for nesting raptors (including burrowing owl). If no active nests are found, no further mitigation will be required.

If the Biologist finds an active nest within or immediately adjacent to the construction area, and determines that the nest may be impacted or breeding activities substantially disrupted by increased activity around the nest, the Biologist will determine an appropriate protective buffer around the nest depending on the sensitivity of the species and the nature of the construction activity. The protective buffer shall be between 25 to 300 feet for nesting birds; 300 to 500 feet for nesting raptors. The active nest will be protected within the designated buffer until nesting activity has ended. Any protective buffers will be mapped on construction plans and designated as “Environmentally Sensitive Areas”. Construction can proceed within the protective buffer when the qualified Biologist has determined that the nest is no longer active (i.e., fledglings have left the nest or the nest has failed).

V. CULTURAL RESOURCES

Information in the section is based upon the records searches and literature reviews of information available from the South-Central Coastal Information Center (SCCIC) and the Native American Heritage Commission (NAHC), compiled as Appendix C to this IS/MND.

South-Central Coastal Information Center Cultural Resources Records and Literature Review

A literature review of documents on file at the SCCIC at California State University, Fullerton was completed on May 24, 2022. The results of the record search yielded 13 studies (Table 7) within a half mile from the Project site. In general, these studies consisted of archaeological reconnaissance or cultural resource assessments conducted between 1967–2014. Two studies (OR-02558 and OR-04104) reviewed the Project site as part of an overview study of the geographic area.

TABLE 7
CULTURAL RESOURCES STUDIES WITHIN ½-MILE
OF THE PROJECT SITE

Report Number	Year and Author	Report Title	Proximity to Project Site
OR-00168	Scientific Resource Surveys, Inc. (1977)	Archaeological Survey Report on Parcels 1, 2, and 3 (4.8 Acres) of Lot 14 in Block 36 of the Yorba Linda Tract in the County of Orange	Outside
OR-00203	Archaeological Associates, Ltd. (1978)	Ultrasystems Project #: Archaeological Report	Outside
OR-00557	N/A (1967)	Report on an Archaeological Survey in the Orchard Drive Watershed	Outside
OR-01596	University of California, Los Angeles (1974)	Preliminary Report of the Potential Impact on Archaeological Resources of the Proposed Gas Transmission Pipeline From Los Angeles Harbor to Yorba Linda - Southern California Gas Co.: Environmental Analysis	Outside
OR-02256	Archaeological Resource Management Corp. (1999)	Cultural Resources Assessments for Orange County Sanitation Districts	Outside
OR-02501	LSA Associates, Inc. (1994)	Cultural Resources Assessment for Five Vacant Lots and 42 Potential Historic Buildings Within the Northeast Anaheim Redevelopment Area, Orange County, California	Outside
OR-02558	LSA Associates, Inc. (2002)	Cultural Resource Assessment: Orange County Water District Lakeview Water Transfer Pipeline Project, Cities of Placentia and Anaheim, County of Orange, Ca	Within
OR-02788	EarthTouch, LLC. (2002)	Cultural Resource Assessment for the Orangethorpe (cinsna-58) Cellular Facility in Placentia, California	Outside
OR-03104	W.H. Bonner Associates (2002)	Records Search Results for Cingular Wireless Site Sc-105-03 (the OC Rebuilding Site), Located at 4616 E. La Palma, Anaheim, Orange County, California	Outside
OR-03533	Cellular Archaeological Resource Evaluations (2008)	A Records Search and Field Reconnaissance for the Proposed Bechtel Wireless Telecommunications Site OC0192 (Silver State Trailways), Located at 701 South Fee Ana Street, Placentia, California 92870.	Outside
OR-03612	SWCA Environmental Consultants, Inc. (2003)	A Cultural Resources Literature Review and Field Reconnaissance for the Proposed Mariposa Senior Citizen Apartment Complex, Located in Yorba Linda, California	Outside
OR-04043	IBI Group (1993)	Northeast Area Specific Plan No. 93-1 and Draft Program Environmental Impact Report No. 317	Outside
OR-04079	Marsh and Associates (1988)	Placentia Historic Resources Survey	Outside
OR-04104	City of Placentia and Placentia Historical Committee (2002)	Historic Resource Inventory for the City of Placentia: Update 2002	Within
OR-04326	BonTerra Psomas (2014)	Highland Reservoir Cultural Resources Report	Outside

Source: SCCIC 2022.

One historical resource was identified within the Project site. This historic structure was identified as a house located at 1924 East Orangeview Avenue in the City of Placentia. Additionally, the literature review and record search at the SCCIC identified one other resource (P-30-000593) within a half-mile of the Project site (refer to Table 8) and outside of the proposed area of work.

This cultural resource is a prehistoric site described as a lithic scatter (remnants of stone tool production) with habitation debris. The archaeological artifacts documented on the surface of the site were collected by California State University in 1975.

TABLE 8
CULTURAL RESOURCES WITHIN ½-MILE OF THE PROJECT SITE

Primary/Trinomial Number	Recorder/Year	Resource Description	Age	Proximity to Project Site
P-30-000593/CA-ORA-000593	1975, California State University, Fullerton	Lithic scatter and habitation debris	Prehistoric	Outside
P-30-176738	2003, LSA Associates, Inc.	1924 East Orangeview Avenue Placentia, CA 92870	Historic	Within

Source: SCCIC 2022.

Native American Heritage Commission Sacred Lands File Search

Psomas submitted a request to the NAHC on February 22, 2022, to review the Sacred Lands File database regarding the possibility of Native American cultural resources and/or sacred places in the project vicinity that are not documented on other databases. The results from the NAHC were received on April 4, 2022. Based on revisions to the project location, updated results from the NAHC were received on May 19, 2022. The results of the Sacred Lands File (SLF) search conducted through the NAHC were positive. The NAHC recommends that the lead agency contact the Juaneño Band of Mission Indians Acjachemen Nation – Belardes, in addition to any tribes that are traditionally and culturally affiliated with the geographic area. YLWD contacted the tribes listed on their consultation list on April 19, 2022. The consultation results are discussed in Section XVIII, Tribal Cultural Resources.

IMPACT ANALYSIS

Would the Project:

- a) **Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?**

No Impact. A significant impact could occur if the Project were to disturb historic resources that presently exist within the Project site. Section 15064.5 of the CEQA Guidelines generally defines a historic resource as a resource that is (1) listed in or determined to be eligible for listing in the California Register of Historical Resources (California Register); (2) included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code); or (3) identified as significant in an historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code). Additionally, any object, building, structure, site, area, place, record, or manuscript that 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 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 California Register. The California Register automatically includes all properties listed in the National Register of Historic Places and those formally determined to be eligible for listing in the National Register.

The SCCIC record search and literature review identified one built structure that may be considered a historic resource near the Project site. This historic structure was identified as a

house located at 1924 East Orangeview Avenue in the City of Placentia. However, this property has since been demolished and rebuilt with apartments. Therefore, the Project will not cause an adverse change in the significance of a historical resource.

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

Less than Significant With Mitigation. A significant impact could occur if grading or excavation activities associated with the Project were to disturb archaeological resources that presently exist within the Project site. There are no known archaeological sites on the Project site. The SCCIC record search and literature review identified one prehistoric archaeological resource located within a half-mile of the Project site. As such, there is the possibility that undiscovered intact archaeological resources may be present below the surface in native sediments. These potential effects would be mitigated to a less than significant level with the implementation of **MM CULT-1** requiring evaluation of a resources by a qualified professional archaeologist.

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

Less than Significant With Mitigation. A significant impact could occur if grading or excavation activities associated with the Project were to disturb previously interred human remains. The Project site is located within a developed area that has been subject to earth-moving activities in the past, and no known burial sites are located on or adjacent to the Project site. In the unlikely event of an unanticipated encounter with human remains in Project site, the *California Health and Safety Code* and the *California Public Resources Code* require that any activity in the area of a potential find be halted and the Orange County Coroner be notified, as described in **MM CULT-2**. Implementation of **MM CULT-2** would reduce this impact to a less than significant level.

MITIGATION PROGRAM

Mitigation Measures

MM CULT-1 In the event that cultural (archaeological) resources are inadvertently unearthed during excavation activities, the contractor shall immediately cease all earth-disturbing activities within a 100-foot radius of the area of discovery and the contractor shall contact YLWD immediately. YLWD shall (a) retain a qualified professional archaeologist, and (b) contact the Tribal Monitor, for both to evaluate the significance of the find, and in consultation with YLWD, determine an appropriate course of action. If the archaeological resources are found to be significant, the archeologist, in consultation with YLWD, shall determine appropriate actions for exploration and salvage. If the resources are found to be significant Tribal Cultural Resources (as defined by Pub. Res. Code §21074(a)) ("TCR"), as determined by the Tribal Monitor, MM TCR-1 and MM TCR-2 will apply. After the find has been appropriately avoided or mitigated, work in the area may resume.

MM CULT-2 In accordance with Section 7050.5 of the *California Health and Safety Code*, if human remains are found during ground-disturbing activities, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur. The County Coroner shall be notified of the discovery immediately. If the County Coroner determines that the remains are or believed to be Native American, s/he shall notify the NAHC in Sacramento within 24 hours of the discovery, and MM TCR-1 will apply. In accordance with Section 5097.98 of the *California Public Resources Code*, the NAHC must immediately notify those

persons it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the site by YLWD. YLWD would meet and confer with the most likely descendant regarding their recommendations prior to disturbing the site by further construction activity.

VI. ENERGY

IMPACT ANALYSIS

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?**

Less than Significant Impact. Energy consumption attributable to the Project's construction and operations phases is evaluated in the following:

Construction

Project construction would require the use of construction equipment for excavation and building activities; all off-road construction equipment is assumed to use diesel fuel. Fuel energy consumed during construction would be temporary in nature and would not occur after completion of construction activities. Due to the limited number of vehicles and equipment and the limited duration of construction activities, construction-related fuel energy consumption would also not represent a significant demand on energy resources. Furthermore, there are no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the State. Therefore, the proposed construction activities would not result in inefficient, wasteful, or unnecessary fuel consumption.

Operations

The proposed Project is designed to develop redundant water pipeline infrastructure. Because the Project would provide more secure water infrastructure to the YLWD service area, the proposed Project would not result in an inefficient, wasteful, or unnecessary consumption of energy. There would be a less than significant impact, and no mitigation is required.

- b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

No Impact.

The Project would not result in additional energy consumption because the Project does not involve the generation of additional day-to-day vehicle trips, except for infrequent inspection and maintenance related trips, nor would it require additional energy demands from the electrical grid. Because there is no additional energy demand from the Project, it would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

VII. GEOLOGY AND SOILS

IMPACT ANALYSIS

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

Less than Significant Impact. According to the City of Placentia's General Plan Seismic Safety Element, the City is located in seismically active Southern California. Active and potentially active faults (defined by the California Geologic Survey [CGS] as faults that have been active in the past 1.5 million years) are located adjacent to Placentia; however, there are no Alquist-Priolo Earthquake Fault Zones within the city limits. Maps of Earthquake Fault Zones have been published by the CGS in accordance with the Alquist-Priolo Special Studies Zone Act, 1994, which regulates development near active faults. Although Placentia does not lie within an Alquist-Priolo Earthquake Fault Zone, seismic risk is still considered high because of the proximity to other active Alquist-Priolo faulting in the region (Placentia 2019e). Major faults that have potential to impact the City are shown in Exhibit 7-1, Regional Faults of the General Plan Safety Element. The faults shown on this map are summarized below:

1. Yorba Linda seismic source zone is a group of faults located approximately 0.3 miles northeast of the City of Placentia.
2. The Puente Hills (Coyote Hills) is a northwest trending blind Thrust Fault system that extends approximately 26 miles between downtown Los Angeles and northern Orange County. Locally the approximate location of the fault is between Whittier fault and the City of Placentia.
3. The Peralta Hills thrust fault is located approximately 3 miles southeast of the City of Placentia.
4. The Whittier Fault is approximately 3.8 mile north of the center of the City of Placentia.
5. The Newport-Inglewood Structural Zone is located approximately 14.6 miles southwest of the City of Placentia.
6. The Sierra Madre Fault is located approximately 17 miles north of the City of Placentia.
7. The San Jacinto Fault is located approximately 34 miles northeast of the City of Placentia.
8. The San Andreas Fault is located approximately 36 miles north of the City of Placentia.
9. The Norwalk Fault is located approximately 4.5 miles west-northwest of the City of Placentia.

Although surface rupture is not considered to be a major concern for the City of Placentia, it is still likely that the City will be subject to some moderate to severe seismic ground shaking (Placentia 2019e). Adherence to standard engineering practices and design criteria as contained in the *California Building Code* (CBC) relative to seismic and geological hazards would ensure that impacts related to seismic ground shaking would be less than significant. Therefore, impacts would be less than significant, and no mitigation is required.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Soil liquefaction is a seismically induced form of ground failure, which has been a major cause of earthquake damage in Southern California. Liquefaction takes place when granular materials that are saturated by water lose strength and transform from a solid to a liquid state. Liquefaction generally occurs during significant earthquake activity, and structures located on saturated granular soils such as silt or sand may experience significant damage during an earthquake due to the instability of structural foundations and the moving earth. Soils most susceptible to liquefaction are saturated, loose, uniformly graded, fine-grained sand deposits. However, silty sands and sandy silts have also been reported to be susceptible to liquefaction or partial liquefaction.

Potential problems associated with soil liquefaction include ground surface settlement (i.e., vertical movement of the ground), loss of foundation bearing support strength, and lateral spreading (i.e., landslides) (Placentia 2019e). According to the California Department of Conservation, Division of Mines and Geology, areas of high liquefaction potential for the City of Placentia are provided in Exhibit 7-2, Potential Liquefaction and Landslide Hazard Zones, of the General Plan Safety Element. The Project site is located within an area of high potential for seismically-induced liquefaction (Placentia 2019e). However, the City's building codes require structures in liquefaction areas to be designed to withstand the potential impacts that could be caused by liquefaction. Because the Project would be constructed in compliance with the City's building codes and standard engineering practices, impacts related to the potential for liquefaction, lateral spreading, and seismic compaction are considered less than significant, and no mitigation is required.

iv) Landslides?

Less Than Significant Impact. According to the City of Placentia's General Plan Seismic Safety Element, slope failure can occur as either rapid movement of large masses of soil ("landslide") or slow, continuous movement ("creep"). Landslides result from the downward movement of earth or rock materials that have been influenced by gravity. In general, landslides occur due to various factors including steep slope conditions, erosion, rainfall, groundwater, nature of the underlying soil or bedrock, previous landslide deposits, and grading impacts (Placentia 2019e).

The majority of City of Placentia has not been mapped as being within a zone susceptible to landslide as designated by the State of California Seismic Hazard Zones, Yorba Linda Quadrangle (Placentia 2019e). However, a few local slope instabilities appear in the northwest area of the City, just south side of Anaheim Union Reservoir in Tri City Park. Landslide potential within the City is shown in Exhibit 7-2, Potential Liquefaction and Landslide Hazard Zones, of the General Plan Safety Element. The Project site is not located within an area that is designated by the State of California as a Zone of Required Investigation for Earthquake-Induced Landslides (Placentia 2019e). Therefore, the proposed Project would not be exposed to or impacted by a landslide. Impacts would be less than significant, and no mitigation is required.

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

- c) **Less Than Significant With Mitigation.** As discussed in Section X, Hydrology and Water Quality, YLWD would require the Construction Contractor to include Best Management Practices (BMPs) in the Stormwater Pollution Prevention Plan (SWPPP) for the Project to minimize soil erosion and sedimentation from the Project site. Implementation of **MM HYDRO-1**, detailed in Section X, Hydrology and Water Quality, which requires preparation of a SWPPP and BMPs, would be required to reduce this impact to a less than significant level. **Be located on a geologic unit or soil that is**

- unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? and
- d) **Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**

Less Than Significant Impact. Seismic hazards, including liquefaction, lateral spreading, and landslides are addressed in CEQA Checklist Questions VI.a (iii–iv).

Subsidence

The major cause of ground subsidence is the excessive withdrawal of groundwater. The Project site is not in a subsidence area mapped by the US Geological Survey (USGS 2022). Project development would not cause subsidence hazards onsite, and no impact would occur.

Collapsible Soils

Collapsible soils shrink upon being wetted and/or being subject to a load. The Project would be designed and built in compliance with CBC requirements which would remediate on-site soils and reduce any potential impacts related to collapsible soils; therefore, impacts would be less than significant.

After compliance with CBC regulations, project development would not cause substantial hazards arising from collapsible soils. Impacts would be less than significant.

Expansive Soils

Expansive soils contain substantial amounts of clay that swells when wetted and shrinks when dried; the swelling or shrinking can shift, crack, or break structures built on such soils. As such, the proposed Project would be designed and constructed in accordance with the CBC seismic safety requirements which would remediate on-site soils and eliminate any potential impacts related to expansive soils; therefore, impacts would be less than significant.

- 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?**

No Impact. The proposed Project would not involve the use of septic tanks or alternative wastewater disposal systems. No impacts would occur, and no mitigation is required.

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

Less Than Significant With Mitigation. A paleontological records search was requested from the Natural History Museum of Los Angeles County (LACM), Vertebrate Paleontology Department on April 15, 2022, and results were received on April 24, 2022. The results indicate that there are no fossil localities that lie directly within the proposed Project site; however, there are fossil localities nearby from the same sedimentary deposits that occur in the proposed Project site, either at the surface or at depth. Therefore, the Project would not impact known paleontological resources; however, surface sediments within and surrounding the Project site consist of Alluvium (Pleistocene); La Habra Formation (Pleistocene; sandy silt shot through with caliche); Unknown formation (Pleistocene); La Habra Formation (lacustrine silt with caliche and plant); and Unknown

(Pleistocene). Deep excavation that involves disturbance of native soils could result in the disturbance and/or destruction of paleontological resources that may be present in deeper Pleistocene alluvial deposits that underlie the Project site. Implementation of **MM GEO-1** requiring evaluation of discovered resources would reduce this impact to a less than significant level.

MITIGATION PROGRAM

Mitigation Measure

MM GEO-1 In the event that paleontological resources are inadvertently unearthed during excavation activities, the contractor shall immediately cease all earth-disturbing activities within a 100-foot radius of the area of discovery and the contractor shall contact YLWD immediately. YLWD shall retain a qualified professional paleontologist to evaluate the significance of the find, and in consultation with YLWD, determine an appropriate course of action. If the paleontological resources are found to be significant, the paleontologist, in consultation with YLWD, shall determine appropriate actions for exploration and salvage. After the find has been appropriately avoided or mitigated, work in the area may resume.

VIII. GREENHOUSE GASES

Climate change refers to any significant change in climate, such as the average temperature, precipitation, or wind patterns, over a period of time. Climate change may result from natural factors, natural processes, and/or human activities that change the composition of the atmosphere and alter the surface and features of the land. Significant changes in global climate patterns have been associated with global warming, which is an average increase in the temperature of the atmosphere near the Earth's surface; this is attributed to an accumulation of greenhouse gas (GHG) emissions in the atmosphere. GHGs trap heat in the atmosphere, which in turn increases the Earth's surface temperature. Some GHGs occur naturally and are emitted into the atmosphere through natural processes, while others are created and emitted solely through human activities. The majority of climate scientists attribute climate change to the increase in GHG emissions generated by human activities.

GHGs, as defined under California's Assembly Bill (AB) 32, include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). General discussions on climate change often include water vapor, O₃, and aerosols in the GHG category. Water vapor and atmospheric O₃ are not gases that are formed directly in the construction or operation of development projects, nor can they be controlled in these projects. Aerosols are not gases. While these elements have a role in climate change, they are not considered by regulatory bodies, such as CARB, or climate change groups, such as The Climate Registry, as gases to be reported or analyzed for control. Therefore, no further discussion of water vapor, O₃, or aerosols is provided herein.

GHGs vary widely in the power of their climatic effects; therefore, climate scientists have established a unit called global warming potential (GWP). The GWP of a gas is a measure of both its potency and lifespan in the atmosphere as compared to CO₂. For example, since CH₄ and N₂O are approximately 21 and 310 times more powerful than CO₂, respectively, in their ability to trap heat in the atmosphere, they have GWPs of 21 and 310, respectively (CO₂ has a GWP of 1). Carbon dioxide equivalent (CO₂e) is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the emission rate of that gas to produce the CO₂e emissions.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05, which proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce snowpack in the Sierra Nevada Mountains; could further exacerbate California's air quality problems; and could potentially cause a rise in sea levels. In an effort to avoid or reduce the impacts of climate change, Executive Order S-3-05 calls for a reduction in GHG emissions to the year 2000 level by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

AB 32, the California Global Warming Solutions Act of 2006 (*California Health and Safety Code* §38501), recognizes that California is the source of substantial amounts of GHG emissions. The statute states that:

Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

In order to avert these consequences, AB 32 establishes a State goal of reducing GHG emissions to 1990 levels by the year 2020, which is a reduction of approximately 15 percent from forecasted emission levels, with further reductions to follow (CARB 2018). To help achieve this reduction, on November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, raising California's renewable energy goals to 33 percent by 2020.

California Executive Order B-30-15 (April 29, 2015) set an "interim" statewide emission target to reduce GHG emissions to 40 percent below 1990 levels by 2030 and directed State agencies with jurisdiction over GHG emissions to implement measures pursuant to statutory authority to achieve this 2030 target and the 2050 target of 80 percent below 1990 levels.

On September 8, 2016, the Governor signed Senate Bill 32 (SB 32) to codify the GHG reduction goals of EO B-30-15, requiring the State to reduce GHG emissions by 40 percent below 1990 levels by 2030 (Health and Safety Code Section 38566). This goal is expected to keep the State on track to meeting the goal set by EO S-3-05 of reducing GHG emissions by 80 percent below 1990 levels by 2050 (California Legislative Information 2017a). SB 32's findings state that CARB will "achieve the state's more stringent greenhouse gas emission reductions in a manner that benefits the state's most disadvantaged communities and is transparent and accountable to the public and the Legislature".

Orange County has not formally adopted a quantitative GHG emissions significance criterion to date. Beginning in April 2008, the South Coast AQMD convened a Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. On December 5, 2008, the South Coast AQMD Governing Board adopted its staff proposal for an interim CEQA GHG significance threshold of 10,000 metric tons of CO₂ equivalent per year (MTCO₂e/yr) for projects where the South Coast AQMD is the lead agency (South Coast AQMD 2008). In September 2010, the Working Group proposed that the 10,000 MTCO₂e/yr threshold be expanded to apply to industrial projects where South Coast AQMD is not the lead agency (South Coast AQMD 2010). The Working Group has not convened since the fall of 2010. As of July 2017, the proposal has not been considered or approved for use by the South Coast AQMD Board. However, this threshold is selected by YLWD as appropriate for the proposed Project.

IMPACT ANALYSIS

Would the Project:

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

Less Than Significant Impact.

Construction GHG emissions are generated by vehicle engine exhaust from construction equipment, on-road hauling trucks, vendor trips, and worker commuting trips. Construction GHG emissions were calculated concurrently with air quality criteria pollutant emissions by using CalEEMod Version 2020.4.0 and the Project information as described in Section III, Air Quality.

The results are output in MTCO₂e for each year of construction. The estimated construction GHG emissions for the Project are shown in Table 9.

TABLE 9
ESTIMATED ANNUAL GREENHOUSE GAS EMISSIONS FROM CONSTRUCTION

Year	Emissions (MTCO ₂ e)
2022	7
2023	223
Total	230
Annual Emissions*	8

MTCO₂e: metric tons of carbon dioxide equivalent

* Combined total amortized over 30 years

Source: CalEEMod data in Appendix A.

GHG emissions generated from construction activities are finite and occur for a relatively short-term period. Unlike the numerous opportunities available to reduce a project's long-term GHG emissions through design features, operational restrictions, use of green-building materials, and other methods, GHG emissions-reduction measures for construction equipment are relatively limited. Therefore, South Coast AQMD staff members recommended that construction emissions be amortized over a 30-year project lifetime, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies (South Coast AQMD 2008). As shown in Table 9, Estimated Annual Greenhouse Gas Emissions from Construction, the 30-year amortized construction emissions would be 8 MTCO₂e/yr.

The proposed Project is designed to develop redundant water pipeline infrastructure. The Project would not require additional YLWD employees or generate regular vehicle trips. Because the Project does not involve recurring vehicular trips or electricity or natural gas consumption, there would not be GHG emissions associated with the operations phase. As such, the Project construction related GHG emissions of 8 MTCO₂e shown in Table 9 would be substantially less than the 10,000 MTCO₂e/yr threshold for industrial projects. There would be a less than significant impact, and no mitigation measures are required.

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

No Impact. As discussed above, the principal State plan and policy adopted for the purpose of reducing GHG emissions is the AB 32 Scoping Plan. The quantitative goal of AB 32 is to reduce

GHG emissions to 1990 levels by 2020 and adapt to climate change. Providing redundant water pipeline delivery infrastructure does not result in additional GHG emissions during the operations phase of the Project and consequently does not conflict with these plans and regulations. There would be no impact.

IX. HAZARDS AND HAZARDOUS MATERIALS

IMPACT ANALYSIS

Would the Project:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

Less than Significant Impact. Project construction activities would require the transport and use of standard construction equipment and materials, some of which may include a hazardous component such as transport and storage of fuels. These activities would be conducted in compliance with existing federal, State, and local regulations.

Daily Project operations would not involve the use or transport of hazardous materials. The Project site is located near several major transportation facilities and arterials, including Lakeview Avenue, Orangethorpe Avenue, and SR-91. These roadways may be used to transport hazardous materials; however, the proposed Project would neither increase the frequency of transport, nor would it introduce hazards that would increase the likelihood for accidental release of hazardous materials into the environment. Additionally, the Project would not require any new or additional chemical storage or transport beyond existing operational activities. As such, a less than significant impact related to the transport, use, or disposal of hazardous materials or the release of hazardous materials into the environment would occur.

- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

Less Than Significant Impact. The nearest school to the proposed Project site is El Camino Real High School, located at 1351 East Orangethorpe Avenue, approximately 1.0 mile west of the Project site. Temporary construction activities may require the use of materials listed as hazardous; however, these materials would be routine construction materials and would not be required in large quantities. Therefore, the potential impacts associated with the transport and use of hazardous materials during construction would be less than significant, and no mitigation is required.

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

No Impact. An EDR Radius Map™ with Geotcheck® Report was prepared for the Project by Environmental Data Resources, Inc. (EDR 2022). Search parameters were based on a one-mile radius of the Project site and consisted of a search of federal, State, local, tribal, and other

databases. The complete list of databases and additional information regarding the identified sites can be found in Appendix D. The following sites are listed within ¼-mile of the Project site:

- **Kramer Oil Field (Esperanza Road, Yorba Linda).** This site is listed in the Cleanup Program Sites (formerly known as Spills, Leaks, Investigations, and Cleanups sites) and California Environmental Reporting System (CERS) databases. According to the EDR Report, the facility status is “Completed – Case Closed”.
- **Cliff Lester (8187 East Woodsboro, Anaheim).** This site is listed in the Resource Conservation and Recovery Act (RCRA) non generators (NonGen/NLR) database. According to the EDR Report, no violations were found.
- **Weir Canyon Honda (8323 East La Palma, Anaheim).** This is a cluster of four sites listed in the RCRA small quantity generator (RCRA-SQG), CERS, HAZ WASTE, Statewide Environmental Evaluation and Planning System (SWEEPS) underground storage tank (UST), CERS TANKS, Facility Index System (FINDS), Enforcement and Compliance History Online (ECHO), UST, and California Facility Inventory Database underground storage tanks (CA FID UST) databases. According to the EDR Report, the facility status is “Completed – Case Closed”.
- **Weir Canyon Acura (8323 East La Palma, Anaheim).** This is a cluster of three sites listed in the leaking underground storage tank (LUST), Hazardous Waste and Substances Sites (CORTESE), RCRA-SQG, FINDS, ECHO AST, CERS HAZ WASTE, CERS TANKS, HAZNET, CERS, and Hazardous Waste Tracking System (HWTS). According to the EDR Report, no violations were found.
- **YL One LLC and YL Two LLC (21580 Yorba Linda Boulevard, Yorba Linda).** This site is listed in the RCRA NONGEN/NLR database. According to the EDR Report, no violations were found.
- **Medical Management Intl Inc, DBA Banfield Pet Hospital (21540 Yorba Linda Boulevard, Unit C2, Yorba Linda).** This is a cluster of two sites listed in the CERS HAZ WASTE, HWTS, and RCRA NONGEN/NLR databases. According to the EDR Report, no violations were found.
- **Mobil Oil/Circle K (21440 Yorba Linda, Yorba Linda).** This is a cluster of nine sites listed in the EDR HIST AUTO, UST, SWEEPS UST, CHMIRS, LUST, CORTESE, CERS, RCRA NONGEN/NLR, UST, CERS HAZ WASTE, CA FID UST, CERS TANKS, HIST CORTESE, and UST databases. According to the EDR Report, the latest evaluation found no violations.
- **Smart & Final (21500 Yorba Linda Boulevard, Yorba Linda).** This is a cluster of two sites listed in the RCRA NONGEN/NLR, CERS HAZ WASTE, and CERS databases. According to the EDR Report, no violations were found.
- **Canyon Cleaners (2150 Yorba Linda Boulevard, Yorba Linda).** This is a cluster of four sites listed in the CERS HAZ WASTE, DRYCLEANERS, CERS, HWTS, and HAZNET databases. According to the EDR Report, the permit status was identified as inactive.
- **Coldwell Bank (21580 New River Road, Yorba Linda).** This site is located in the RCRA NONGEN/NLR database. According to the EDR Report, no violations were found.
- **Michael Porsche (21640 Calle Delgado, Yorba Linda).** This site is located in the RCRA NONGEN/NLR database. According to the EDR Report, no violations were found.
- **Sal Lozano (5685 Avenida Barcelona, Yorba Linda).** This site is located in the RCRA NONGEN/NLR database. According to the EDR Report, no violations were found.

- **Christina Villamil (5695 Whitewater Street, Yorba Linda).** According to the EDR Report, no violations were found.

Of the hazardous materials sites identified, none pose a hazard to the proposed Project. Based on a search of hazardous materials sites compiled pursuant to Section 65962.5 of the *California Government Code*, no sites qualifying for the Cortese List, or subject to corrective action, are identified on the Project site. No impacts related to known hazardous materials sites would occur, and no mitigation is required.

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

No Impact. The Project site is not located within an adopted Airport Land Use Plan or in the vicinity of a private airstrip, heliport, or helistop. The nearest airport is the Fullerton Municipal Airport, located approximately nine miles west of the Project site. The Project would be located outside the Fullerton Airport influence area and would not expose additional people to safety hazards related to airport operations. Implementation of the proposed Project would not impact the airport facilities or their operation; no mitigation would be required.

- f) **Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

No Impact. Construction of the proposed project is not anticipated to physically interfere with an adopted emergency response plan or evacuation plan because all construction activities and staging areas would be within the Project boundaries. Implementation of the Project would involve construction and operation of two segments of a new waterline, and would not alter traffic conditions or modify the local or regional circulation system. Additionally, should an emergency occur at the proposed Project site, the internal street systems would provide access to the outlying arterial roadway system. Therefore, no impacts related to the adopted emergency response or evacuation plans would occur, and no mitigation is required.

- g) **Expose people or structure, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?**

No Impact. According to the Fire and Resource Assessment Program *Very High Fire Hazard Severity Zones in LRA As Recommended by CAL FIRE* map for Orange County, the Project site is not located within or near a Very High Fire Hazard Severity Zone (VHFHSZ). Therefore, the Project site is not susceptible to wildfires, therefore, further analysis of the hazards related to wildfire is warranted (CAL FIRE 2022a, CAL FIRE 2022b).

X. HYDROLOGY AND WATER QUALITY

IMPACT ANALYSIS

Would the Project:

- a) **Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? and**
- e) **Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

Short-Term Construction-Related Water Quality Impacts

Potentially Significant Unless Mitigation Incorporated. Potential impacts of construction activities on water quality focus on sediments, turbidity, and pollutants associated with sediments. Construction-related activities primarily responsible for sediment releases are related to exposing soils to potential mobilization by rainfall, runoff, and wind. These activities include grading and other earth-disturbing activities. Non-sediment-related pollutants that are also of concern during construction include waste construction materials and chemicals, liquid products, and petroleum products used in building construction or the maintenance of heavy equipment, which have the potential to create a significant impact related to water quality. Implementation of **MM HYDRO-1**, stated below, would reduce construction-related impacts from implementation of the proposed Project through compliance with the Construction General Permit. This permit requires the development and implementation of an SWPPP for the proposed Project site, which must include erosion- and sediment-control BMPs that meet or exceed measures required by the National Pollutant Discharge Elimination System (NPDES) Construction General Permit, as well as BMPs that control the other potential construction-related pollutants. A SWPPP would be developed, as required by and in compliance with, the NPDES Construction General Permit. Erosion-control BMPs are designed to prevent erosion, whereas sediment controls are designed to trap sediment once it has been mobilized. The NPDES Construction General Permit requires the SWPPP to include BMPs to be selected and implemented based on the phase of construction and weather conditions.

The SWPPP would be designed and implemented to address site-specific conditions related to Project construction. The SWPPP would identify and describe the sources of sediment and other pollutants that may affect the quality of storm water discharges; it would also ensure the implementation and maintenance of BMPs to reduce or eliminate sediment, pollutants adhering to sediment, and other non-sediment pollutants in storm water and non-storm water discharges.

Compliance with the NPDES Construction General Permit and the preparation of an SWPPP would ensure that any impacts to downstream waters resulting from construction activities on the Project site would be less than significant. Erosion-control and treatment-control BMPs would be implemented per NPDES requirements.

Therefore, full compliance with applicable local, State, and federal regulations, and implementation of **MM HYDRO-1**, would ensure that water quality impacts associated with construction would be less than significant.

Long-Term Operational Water Quality Impacts

As shown in Exhibits 4a–c, Site Photographs, the Project site is comprised entirely of developed areas with limited areas of vegetation. Implementation of the proposed Project would expand existing water infrastructure uses and would not introduce new uses to the site; as such, development of the Project would not introduce substantial amounts of urban pollutants to the storm water runoff beyond existing conditions. Therefore, impacts related to long-term operational water quality impacts would not represent a significant impact.

- 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. The proposed Project would not deplete groundwater supplies or substantially interfere with groundwater recharge. A substantial portion of the site is covered with impervious surface including Atwood Channel, which is partially concrete lined in the Project

vicinity. This limits its current ability to contribute to groundwater recharge. Therefore, impacts related to groundwater recharge would be less than significant, and 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 which would:**
- i) **result in substantial erosion or siltation on- or off-site?**
 - ii) **substantially increase the rate or amount of surface runoff in a manner in which would result in flooding on- or off-site?**
 - iii) **create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or?**
 - iv) **Impede or redirect flood flows?**

Less Than Significant Impact. As discussed in Section 3.0, Project Description, the Project involves construction of two segments of a new waterline; no changes would be made to the YLWD easement as part of this Project. Therefore, Project implementation would not alter the existing drainage pattern by substantially increasing the rate or amount of surface runoff or altering the course of a stream or river. Impacts would be less than significant, and no mitigation is required.

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

Less Than Significant Impact.

Flood Hazard

The proposed Project site is outside of 100-year flood hazard zones; however, the northeast corner of the disturbance area boundary is next to a 100-year flood hazard zone (FEMA Flood Hazard Zone A) (FEMA 2022).

Tsunami

A tsunami is a series of ocean waves caused by a sudden displacement of the ocean floor, most often due to earthquakes. The proposed Project site is approximately 20 miles inland from the Pacific Ocean and thus is not at risk of flooding due to tsunami.

Seiche

The Project site is not located near any large bodies of water; therefore, there is no potential for inundation of the Project site by seiche.

Conclusion

Development of the proposed Project would not risk release of pollutants due to Project inundation due to a flood within a 100-year flood zone, tsunami, or seiche. Impacts would be less than significant, and no mitigation is required.

MITIGATION PROGRAM

Mitigation Measures

- HYDRO-1** Prior to initiation of construction, YLWD shall ensure that a Notice of Intent with the State Water Resources Control Board (SWRCB) has been filed in order to obtain coverage under the Construction General Permit. Pursuant to the permit requirements, the Construction Contractor shall develop a Storm Water Pollution Prevention Plan (SWPPP) that incorporates Best Management Practices for reducing or eliminating construction-related pollutants in the site runoff.

XI. LAND USE AND PLANNING

IMPACT ANALYSIS

Would the Project:

a) Physically divide an established community?

No Impact. As described in Section 2.0 Project Location and Environmental Setting, the proposed pipeline alignments are located in an urban environment, with land uses and development including residential uses to the northwest and east, commercial (retail and restaurants) to the northeast, and industrial uses to the east and south. Additionally, the site is bound by infrastructure such as the BSNF rail line to the north and the OCFCD's Atwood Channel to the south. However, due to the nature of the proposed Project, which includes the construction of two segments of a new waterline, implementation of the proposed Project would not divide an established community. No impact would occur, and no mitigation is required.

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?

No Impact. As stated previously, the pipeline alignments are located in a urban environment. The proposed Project would be constructed within the right-of-way along South Highland Avenue and East Orangethorpe Avenue, cross beneath the BSNF rail line and span OCFCD Atwood Channel. The Project does not propose to change the existing land use designation of the site, and, pursuant to Government Code Section 53091(e), the proposed Project would be exempt from City zoning ordinances because it involves the construction of facilities for the production, generation, storage, treatment, or transmission of water. Implementation of the proposed Project would not conflict with applicable plans, policies, and regulations. Therefore, no impacts would occur, and no mitigation is required.

XII. MINERAL RESOURCES

IMPACT ANALYSIS

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

No Impact. The CGS designates Mineral Resources Zones according to the presence of or potential for underlying mineral resources. According to the County of Orange's General Plan Resources Element, most mineral reserves in Orange County are located in five resource areas including the Santa Ana River, Lower Santiago Creek, Upper Santiago Creek, San Juan Creek, and Arroyo Trabuco; none of which intersects the City of Placentia (County of Orange 2022). Additionally, according to the City of Placentia's General Plan Conservation Element, the City does not contain any mineral resources as defined by the geologic map of Orange County. The only mineral extraction within the City at the present time is petroleum (Placentia 2019a). However, petroleum is not extracted presently on the Project site. Thus, the Project would not result in the loss or availability of known mineral resources or locally important mineral resources. No impact would occur, and no mitigation is required.

XIII. NOISE

Several rating scales (or noise "metrics") exist to analyze the effects of noise on a community. These scales include the equivalent noise level (L_{eq}) and the community noise equivalent level (CNEL). Average noise levels over a period of minutes or hours are usually expressed as A-weighted decibels (dBA) L_{eq} , which is the equivalent noise level for that period of time. The period of time averaging may be specified; $L_{eq(3)}$ would be a 3-hour average. When no period is specified, a one-hour average is assumed. Noise of short duration (i.e., substantially less than the averaging period) is averaged into ambient noise during the period of interest. Thus, a loud noise lasting many seconds or a few minutes may have minimal effect on the measured sound level averaged over a one-hour period.

To evaluate community noise impacts, CNEL was developed to account for human sensitivity to evening and night-time noise. CNEL separates a 24-hour day into three periods: daytime (7:00 AM to 7:00 PM), evening (7:00 PM to 10:00 PM), and nighttime (10:00 PM to 7:00 AM). The evening sound levels are assigned a 5 dBA penalty, and the night-time sound levels are assigned a 10 dBA penalty prior to averaging them with daytime hourly sound levels.

Several statistical descriptors are also often used to describe noise, including L_{max} and L_{min} . L_{max} and L_{min} are the highest and lowest A-weighted sound levels that occur during a noise event, respectively.

Existing Noise Levels

The existing noise environment in the Project area is primarily influenced by traffic noise on nearby roads as well as the BNSF rail line. The roadways contributing the most noise to the Project site is Orangethorpe Avenue which bisects the Project site. To characterize the existing noise environment, Psomas conducted an ambient noise survey at the site on June 21, 2022. Short-term (approximately 20 minutes each) noise level measurements were taken using a

Larson Davis Laboratories SoundTrack LxT® sound level meter. This sound level meter was placed proximate to the Project areas, approximately five feet above the ground and equipped with a windscreen. The existing noise levels are shown in Table 10, Existing Ambient Noise Levels.

TABLE 10
EXISTING AMBIENT NOISE LEVELS

-	L _{min} dBA (Minimum)	L _{eq} dBA (Average)	L _{max} dBA (Maximum)
Highland Avenue north of Orangethorpe Avenue	43	66	83
Veterans Way Cul-de-Sac	43	51	68
Nancita Circle Cul-de-Sac	47	55	65

dBA: A-weight decibels

Source: Psomas 2022 (Appendix E).

Noise measurements taken at the proposed pipeline alignment on South Highland Avenue north of Orangethorpe Avenue included a passing train on the BNSF rail line which generated substantially higher noise levels than other noise sources within the area which include traffic noise along South Highland Avenue and Orangethorpe Avenue. Minor sources of noise at this location include birds, aircraft overflights, and parking lot noise.

Noise measurements were also taken at the Veterans Way cul-de-sac. Noise levels were relatively quiet and characteristic of suburban environments. The primary source of noise is distant traffic noise from Orangethorpe Avenue and Lakeview Avenue. Secondary sources of noise include birds, as well as industrial activities and truck movements at industrial uses located along Lakeview Loop.

Lastly, noise measurements were taken at the Nancita Circle cul-de-sac. Noise levels were also relatively quiet and consisted of minor sources of which include a radio playing music, distant traffic noise, birds, and industrial activities.

As shown, existing noise levels at the Project site are considered low and typical of urban development. Noise monitoring data and calculations are provided in Appendix E of this IS/MND.

Regulatory Background

For the evaluation of potential noise impacts, YLWD complies with the City of Placentia Noise Ordinances.

City of Placentia Municipal Code

The City of Placentia Municipal Code (CPMC) (Title 23, Chapter 23.76 Noise Control) contains the City of Placentia Noise Ordinance. The Noise Ordinance is designed to control unnecessary, excessive, and annoying sounds from sources on private property by setting limits that cannot be exceeded at adjacent properties. Noise Ordinance requirements cannot be applied to mobile noise sources (e.g., heavy trucks traveling on public roadways, trains, or aircraft). Control of noise generated by these transportation sources is preempted by federal and State laws, and is therefore not subject to the provisions of the Noise Ordinance. All activities within the City are subject to the Noise Ordinance unless specifically exempted. All new development must implement measures to ensure that activities at the new development do not violate the Noise Ordinance.

The Noise Ordinance specifies that noise generated on a site cannot exceed defined noise levels at adjacent properties for a specified period of time as shown in Table 11, City of Placentia Noise Ordinance Standards for Noise Zones 1 Through 3. Both interior and exterior noise level limits are specified by noise zones. The applicable noise zone is based on the land use being exposed to the noise. The residential units west of Highland Avenue and west of Veterans Way are in Noise Zone 1. Retail uses located to the east of Highland Avenue are in Noise Zone 2 and industrial uses along Nancita Circle are in Noise Zone 3.

**TABLE 11
CITY OF PLACENTIA NOISE ORDINANCE STANDARDS FOR
ZONES 1 THROUGH 3**

Noise Levels for a Period Not Exceeding (minutes/hour)	-	-	-
Noise Zone ^a		Noise Level (dBA)	Time Period
1	Exterior	55	7:00 AM–10:00 PM
1	Exterior	50	10:00 PM–7:00 AM
1	Interior	55	7:00 AM–10:00 PM
1	Interior	45	10:00 PM–7:00 AM
2	Exterior	65	Any time
2	Interior	NA	N/A
3	Exterior	70	Any time
3	Interior	NA	N/A

dBA: A-weighted decibel(s)

N/A: Not Applicable

^a Noise zone 1: All hospitals, libraries, churches, schools, and residential properties.
Noise zone 2: All commercial properties excluding professional office properties.

Noise zone 3: All industrial properties.

Source: City of Placentia 1975.

CPMC Section 23.81.170 Grading, construction, and maintenance of real property, limits construction activities to between the hours of 7:00 AM and 7:00 PM, Mondays through Fridays, and 9:00 AM and 6:00 PM on Saturdays, with no construction activities permitted outside of the hours listed above or on Sundays or federal holidays unless a temporary waiver is granted by the Chief Building Official or the City Engineer upon receipt of evidence that an emergency exists which would constitute a hazard to persons or property.

Noise-Sensitive Receptors and Existing Conditions near the Project Site

Noise-sensitive land uses typically include residences, hospitals, convalescent and day care facilities, schools, and libraries, which could all be adversely affected by an increase in noise levels. The Project site is generally located within portions of the right-of-way of South Highland Avenue, Orangethorpe Avenue, Veterans Way, and Nancita Circle. The nearest noise sensitive receptors (residential uses) are located to the west of South Highland Avenue and Veterans Way.

IMPACT ANALYSIS

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 the local general plan or noise ordinance, or applicable standards of other agencies?**

Less than Significant Impact. Construction and operational noise associated with the Project would result in impacts that are less than significant, as described below.

Construction Noise

Project construction activities would not occur between 7:00 PM and 7:00 AM on weekdays or before 9:00 AM or after 6:00 PM Saturdays, or at any time on Sundays or federal holidays, consistent with the CPMC Section 23.81.170, as discussed above. Noise would be generated by construction equipment at the Project site. Construction activities may require use of a variety of equipment including, but not limited to excavators, dump trucks, and cranes. No pile driving or blasting is anticipated.

Local residents located to the west of South Highland Avenue and Veterans Way would be subject to temporary elevated noise levels due to Project-related construction equipment. Construction activities are carried out in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise levels surrounding the construction site as work progresses. Construction noise levels reported in the USEPA's *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances* were used to estimate future construction noise levels for the Project (USEPA 1971). Typically, the estimated construction noise levels are governed primarily by equipment that produces the highest noise levels. Construction noise levels for each generalized construction phase (ground clearing/demolition, excavation, foundation construction, building construction, paving, and site cleanup) are based on a typical construction equipment mix for an industrial Project and do not include use of atypical, very loud, and vibration-intensive equipment (e.g., pile drivers).

Project construction activities would occur for approximately 12 months. However, the Project would develop its components at different locations and consequently would not result in noise exposure at the same locations for the full duration of the construction period. The degree to which noise-sensitive receptors are affected by construction activities depends heavily on their proximity. Worst-case estimated noise levels attributable to the development of the proposed Project are shown in Table 12, and calculations are included in Appendix E, Noise Calculations. Table 12 shows both noise levels from construction equipment at the nearest land use in each cardinal direction from the Project site. Noise levels from general Project-related construction activities would range from 75 to 94 dBA L_{eq} at the closest distances for the nearest land uses. Noise level reductions from existing intervening buildings or sound walls were not included. Construction noise levels would be less at locations located further than identified in Table 12.

TABLE 12
CONSTRUCTION NOISE LEVELS AT NOISE-SENSITIVE USES

Construction Phase	Noise Levels (L _{eq} dBA) - North – Retail along Highland Avenue at 30 feet	Noise Levels (L _{eq} dBA) - West – Wilma Circle Residences at 50 feet	Noise Levels (L _{eq} dBA) - South – Industrial Uses at 15 feet	Noise Levels (L _{eq} dBA) - East – Retail along Highland Avenue at 30 feet
Ground Clearing/Demolition	88	84	94	88
Excavation	83	79	89	83
Foundation Construction	82	78	88	82
Building Construction	79	75	85	79
Paving and Site Cleanup	79	75	85	79

L_{eq} dBA: Average noise energy level

Note: Noise levels from construction activities do not take into account attenuation provided by intervening structures.

Source: USEPA 1971.

Demolition debris from pavement cutting and excavated soils from the Project site would be removed by truck. During the demolition and grading phase, it is estimated that 878 one-way truck trips would occur over 264 workdays. Noise impacts related to Project related truck trips would be less than significant due to the relatively small number of average daily truck trips occurring during the construction period and because construction traffic would be limited to the least noise sensitive hours of the day.

Noise from construction activities on-site would be audible above the existing ambient noise environment. However, because construction noise would occur during the least noise-sensitive portions of the day, as per CPMC Section 23.81.170, would involve relatively minimal construction equipment, and would occur for a relatively short duration at each location, noise associated with Project-related construction would result in less than significant impacts, and no mitigation is required.

Operational Noise

The proposed Project is designed to develop redundant water pipeline infrastructure. The Project would not have elements that may have the potential to generate stationary sources of noise from the operations phase of the Project. The Project would also not require additional YLWD employees, nor would it generate regular vehicle trips. YLWD staff members may periodically visit the for routine inspection and maintenance activities. As such, there would be no recurring increase in traffic related noise associated with the Project. Because the Project does not have substantial sources of noise during the operations phase, noise associated with the Project would result in less than significant noise impacts, and no mitigation is required.

b) Generation of excessive ground borne vibration or ground borne noise levels?

Less than Significant Impact. The proposed Project would not generate or expose persons or structures to excessive groundborne vibration from the construction. There are no applicable City standards for vibration-induced annoyance or structural damage from vibration. Caltrans vibration damage potential guideline thresholds are shown in Table 13. These thresholds represent the vibration limits for structural damage to uses proximate to the Project site from continuous sources of vibration.

TABLE 13
VIBRATION RELATED BUILDING DAMAGE THRESHOLDS

Building Class	Continuous Source PPV (in/sec)	Single-Event Source PPV (in/sec)
Class I: buildings in steel or reinforced concrete, such as factories, retaining walls, bridges, steel towers, open channels, underground chambers, and tunnels with and without concrete alignment	0.5	1.2
Class II: buildings with foundation walls and floors in concrete, walls in concrete or masonry, stone masonry retaining walls, underground chambers and tunnels with masonry alignments, and conduits in loose material	0.3	0.7
Class III: buildings as mentioned above but with wooden ceilings and walls in masonry	0.2	0.5
Class IV: construction very sensitive to vibrations; objects of historic interest	0.12	0.3

ppv: peak particle velocity

Source: Caltrans 2020.

The Caltrans vibration annoyance potential guideline thresholds are shown in Table 14. Based on the guidance in Table 14, the “strongly perceptible” vibration level of 0.9 peak particle velocity (ppv) inches per second (in/sec) is considered as a threshold for a potentially significant vibration impact for human annoyance.

TABLE 14
VIBRATION ANNOYANCE CRITERIA

Average Human Response	ppv (in/sec)
Severe	2.0
Strongly perceptible	0.9
Distinctly perceptible	0.24
Barely perceptible	0.035

ppv: peak particle velocity; in/sec: inch(es) per second

Source: Caltrans 2020.

Pile driving and blasting are generally the sources of the most severe vibration during construction. Neither pile driving nor blasting would be used during Project construction. Conventional construction equipment would be used for demolition and grading activities. Table 15 summarizes typical vibration levels measured during construction activities for various vibration-inducing pieces of equipment.

TABLE 15
VIBRATION LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	-	ppv at 25 ft (in/sec)
Pile driver (impact)	upper range	1.518
Pile driver (impact)	typical	0.644
Pile driver (sonic)	upper range	0.734
Pile driver (sonic)	typical	0.170
Vibratory roller	-	0.210
Large bulldozer	-	0.089
Caisson drilling	-	0.089
Loaded trucks	-	0.076
Jackhammer	-	0.035
Small bulldozer	-	0.003

ppv: peak particle velocity; ft: feet; in/sec: inches per second
Source: Caltrans 2020; FTA 2018.

Table 16, Vibration Annoyance Assessment, shows the vibration annoyance criteria from construction-generated vibration activities proposed at the Project site. Table 16 shows the ppv generated by Project-related construction activities at the nearest uses proximate to the Project site. As shown in Table 16, ppv would not exceed the criteria threshold when construction activities occur under maximum (i.e., closest to the receptor) exposure conditions. Because vibration levels would be below the significance thresholds, vibration generated by the Project's construction equipment would not be expected to generate strongly perceptible levels of vibration at the nearest uses and would result in less than significant vibration impacts related to vibration annoyance.

TABLE 16
VIBRATION ANNOYANCE ASSESSMENT

- Equipment	Vibration Levels (ppv) North – Retail along Highland Avenue at 65 feet	Vibration Levels (ppv) West – Wilma Circle Residences at 55 feet	Vibration Levels (ppv) South – Industrial Uses at 20 feet	Vibration Levels (ppv) East – Retail along Highland Avenue at 40 feet
Vibratory roller	0.050	0.064	0.293	0.104
Large bulldozer	0.021	0.027	0.124	0.044
Small bulldozer	0.001	0.001	0.004	0.001
Jackhammer	0.008	0.011	0.049	0.017
Loaded trucks	0.018	0.023	0.106	0.038
Criteria*	0.900	0.900	0.900	0.900
Exceeds Criteria?	No	No	No	No

ppv: peak particle velocity

*Criteria derived from "Strongly Perceptible" vibration annoyance criteria, as shown in Table 14.

Source: FTA 2018 (Calculations can be found in Appendix E).

Table 17, Building Damage Assessment, shows the ppv relative to building damage to nearby uses from the Project's construction activities.

**TABLE 17
BUILDING DAMAGE ASSESSMENT**

Equipment	Vibration Levels (ppv) North – Retail along Highland Avenue at 65 feet	Vibration Levels (ppv) West – Wilma Circle Residences at 55 feet	Vibration Levels (ppv) South – Industrial Uses at 20 feet	Vibration Levels (ppv) East – Retail along Highland Avenue at 40 feet
Vibratory roller	0.050	0.064	0.293	0.104
Large bulldozer	0.021	0.027	0.124	0.044
Small bulldozer	0.001	0.001	0.004	0.001
Jackhammer	0.008	0.011	0.049	0.017
Loaded trucks	0.018	0.023	0.106	0.038
Criteria*	0.200	0.200	0.500	0.200
Exceeds Criteria?	No		No	No

ppv: peak particle velocity

*Criteria derived from Table 13 "VIBRATION RELATED BUILDING DAMAGE THRESHOLDS"

Source: FTA 2018 (Calculations can be found in Appendix B).

As shown in Table 17, all ppv levels would be below the building damage threshold at adjacent offsite structures. As such, impacts related to the potential for cosmetic building damage would be less than significant, and 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 plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

No Impact. The Project is not located within an Airport Land Use Plan area or in the vicinity of a private airstrip or heliport, and it would not expose people to excessive noise levels associated with airport operations or aircraft travel. The closest airport to the Project site is Fullerton Municipal Airport, located approximately nine miles west of the Project site. No impacts would result, and no mitigation is required.

XIV. POPULATION AND HOUSING

IMPACT ANALYSIS

Would the Project:

- a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? and**
- b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

No Impact. As described in Section 2.0, Project Description and Environmental Setting, the proposed Project involves construction and operation of two segments of a new waterline, which are improvements to the existing infrastructure intended to continue water service to existing

YLWD customers or new customers within established or planned areas of the YLWD's service area. Services areas include portions of the Cities of Yorba Linda, Placentia, Anaheim, and Brea along with portions of unincorporated Orange County (YLWD 2021). Implementation of the proposed Project would not extend water service into an area that is not currently developed or approved for future development. Therefore, the proposed Project would not increase employment and population resulting in direct population growth or increase infrastructure resulting in indirect population growth. Additionally, as described in Section XI, Land Use and Planning, the Project would not displace existing housing or population, resulting in construction of replacement housing elsewhere. No impacts would occur, and no mitigation is required.

XV. PUBLIC SERVICES

IMPACT ANALYSIS

Would the Project:

- a) **Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection, police protection, schools, parks, and other public facilities?**

No Impact. As described in Section 2.0, Project Description and Environmental Setting, the proposed Project is the construction and operation of two segments of a new waterline, which are improvements to the existing infrastructure; therefore, no new demand for public services such as fire protection, police protection, schools, parks, libraries, or other public facilities would occur. Any increase in maintenance of the proposed infrastructure improvements would be the responsibility of YLWD. No impact would occur, and no mitigation is required.

XVI. RECREATION

IMPACT ANALYSIS

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? and**
- b) **Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

No Impact. As described in Section 2.0 Project Description and Environmental Setting, the proposed Project is construction and operation of two segments of a new waterline, which are improvements to the existing infrastructure. As discussed in Section XI. Land Use, the proposed Project is not anticipated to induce population growth; therefore, it would not directly or indirectly impact any local recreational facilities through increase of use. Additionally, the nearest public park is Los Niños Park approximately 0.30 miles west of the Project site (Placentia 2018). Therefore, no physical impacts to a nearby park or recreational area would occur. No impacts related to demand or use of recreational facilities would occur, and no mitigation is required.

XVII. TRANSPORTATION

IMPACT ANALYSIS

Would the Project:

- a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?**

Less Than Significant Impact. Implementation of the proposed Project is expected to generate short-term traffic impacts generated during the construction period. Vehicle trips would be generated by trucks hauling materials and supplies to the site and workers commuting to and from the Project site. As discussed previously in Section XIII, Noise, it is anticipated that on average 878 one-way truck trips would occur over 264 construction days. It is anticipated that these trips would occur throughout the day and would not be concentrated during traffic peak hours. It should be noted that there is potential for lane closure along Orangethorpe Avenue. However, this would be a temporary and short-term construction-related impact.

Under existing conditions, a small number of vehicle trips are associated with routine inspection and maintenance at the existing Project site. It is anticipated that routine inspection and maintenance trips would continue, and no new operational trips would occur with implementation of the proposed Project. Therefore, because there would be no increase in daily trips associated with daily operation of the Project components, no Project-related traffic impacts are anticipated.

The proposed Project would not result in any long-term trip generation or associated traffic impacts and would not involve any activities that would conflict with non-vehicular modes of transportation. Impacts would be less than significant, and no mitigation is required.

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

No Impact. Section 15064.3(b)(1) of the State CEQA Guidelines refers to evaluating transportation impacts using vehicle miles traveled (VMT) as a method of determining the significance of transportation impacts for land use projects. The proposed Project is not a land use project and would not generate any long-term change in traffic. As discussed in the response to CEQA Checklist Question XVII. (a), the Project's construction-related traffic would be temporary and operational traffic would be nominal. Because the Project would generate or attract fewer than 110 trips per day, the Project is assumed to cause a less than significant transportation impact according to the *Technical Advisory on Evaluating Transportation Impacts in CEQA*, prepared by the Governor's Office of Planning and Research in April 2018 (OPR 2018). Therefore, the Project would not conflict or be inconsistent with CEQA Guidelines and no impact would occur.

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

No Impact. The Project does not propose any modifications to the existing circulation system in the Project's vicinity. Further, traffic patterns and the types of vehicles traveling along the roads near the Project site would not be affected. Therefore, no impact would occur related to hazards due to a design feature or incompatible uses. No impact would occur, and no mitigation is required.

d) Result in inadequate emergency access?

Less Than Significant Impact. The proposed Project would involve construction and operation of two segments of a new waterline. During construction, existing access routes would be maintained at the Project site. As noted above, there is potential for lane closure along Orangethorpe Avenue. However, this would be a temporary and short-term construction-related impact. Furthermore, emergency access routes are already in place at the Project site, and proposed Project actions would not alter access. Therefore, no impact to local or regional emergency access routes would occur, and no mitigation is required.

XVIII. TRIBAL CULTURAL RESOURCES

Section V of this IS/MND provides an evaluation of cultural resources and human remains. As noted in that section, a cultural resource record search and literature review was conducted at the California Historical Resources Information System (CHRIS), which maintains records and literature regarding cultural resources within California. The South Central Coastal Informational Center (SCCIC) is a designated branch of the CHRIS and houses records recorded in San Bernardino, Los Angeles, Orange, and Ventura Counties. The CHRIS office for Orange County is located at the SCCIC at California State University, Fullerton. The literature review at the SCCIC revealed that 13 cultural resources studies have been undertaken within ½-mile of Project site, two of these studies included a portion of the Project area. One historical resource was identified within the Project site. This historic structure was identified as a house located at 1924 East Orange View Avenue in the City of Placentia. One other resource (P-30-000593) was identified within a half-mile of the Project site and outside of the proposed work area. This resource is a prehistoric archaeological site described as a lithic scatter (remnants of stone tool production) with habitation debris. Additionally, the NAHC conducted a SLF search for the Project. The search results for the SLF were positive. Furthermore, and consistent with requirements of AB 52, YLWD has sent letters to tribes that have expressed an interest in being consulted regarding Native American resources for the projects being undertaken by YLWD.

Letters were sent to interested tribal organizations on April 19, 2022. On April 22, 2022, the Gabrieleño Band of Mission Indians – Kizh Nation requested consultation with YLWD regarding the Project. On April 27, 2022, YLWD scheduled consultation for July 7, 2022; however, YLWD was notified by the tribe on June 27, 2022, that the meeting would need to be rescheduled. YLWD subsequently rescheduled consultation for August 11, 2022. On August 3, 2022, YLWD was notified that consultation would again need to be rescheduled. Consultation took place on August 23, 2022.

IMPACT ANALYSIS

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).**

No Impact. The Project does not propose any modifications to the existing circulation system in the Project's for purposes of impact analysis, a tribal cultural resource is considered a site, feature, place, cultural landscape, sacred place, or object which is of cultural value to a California Native

American Tribe and is either eligible for the California Register of Historic Resources (CRHR) or a local register. As indicated in Section V of this IS/MND, based on a SCCIC record search, the results indicate there are no resources on the Project site that are currently listed on the CRHR. Therefore, the proposed Project would not have an impact on tribal cultural resources associated with an impact to a resource that is listed or eligible for listing on the CRHR or a local register.

- 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. In applying the 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. The second component of this threshold is if the proposed Project would impact a tribal cultural 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 Native American tribe. Subdivision (c) states the following:

A resource may be listed as an historical resource in the California Register if it meets any of the following CRHR criteria:

- (1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- (2) Is associated with the lives of persons important in our past.
- (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- (4) Has yielded, or may be likely to yield, information important in prehistory or history.

Based on information available through the record searches at the SCCIC, and the long-term past use of the Project site, there is no information available that indicates there are significant tribal resources within the Project site that would be significant pursuant to criteria set forth in subdivision (c) of Public Resource Code Section 5024.1. However, as noted in Section above, YLWD requested consultation with tribes that notified YLWD of a desire to be consulted with regarding the Project.

YLWD received one response. Mr. Salas (the Tribal Chair), for the Gabrieliño Band of Mission Indians – Kizh Nation, responded on April 22, 2022. Consultation between the Gabrieliño Band of Mission Indians – Kizh Nation and YLWD was initially scheduled on July 7, 2022. On June 27, 2022, YLWD was notified by the tribe that the July 7, 2022 meeting would be cancelled due to lack of availability. On June 29, 2022, consultation was rescheduled for August 11, 2022. On August 3, 2022, YLWD received email notice that the meeting would again need to be cancelled and rescheduled. Formal consultation took place on August 23, 2022, via teleconference. At that confidential meeting, YLWD and the Tribal representatives discussed the proposed Project and the IS/MND analytical approach. The tribal representatives discussed the importance of the Project site to the Gabrieliño Band of Mission Indians – Kizh Nation. However, the Project site and surrounding area has been developed through significant landscaping and hardscaping. As such, potential archaeological resources buried beneath the site's surface are likely to be heavily disturbed. While unlikely, buried resources, such as prehistoric artifacts relating to Gabrieliño village sites, historic artifacts relating to Spanish ranching, and human remains could exist on the Project site and be damaged by drilling activities for project construction, which would represent

a significant impact. Based on available information from the records search results, no information was provided that identifies a specific potential for a significant impact. However, because the tribe has identified a potential for a significant impact related to tribal cultural resources, MM TCR-1 and MM TCR-2 below are recommended to reduce the potential for discovery or impacts to unknown resources by setting up a process for tribal monitoring, and unanticipated discovery of human remains.

MITIGATION PROGRAM

Mitigation Measure

MM TCR-1 Prior to the commencement of earthwork activities, YLWD shall retain a monitor ("Tribal Monitor") approved by the Gabrieleño Band of Mission Indians - Kizh Nation ("Kizh Nation"). "Earthwork activities" include pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling and trenching. YLWD shall provide written notification to the lead Tribal representatives from the Gabrieleno Band of Mission Indians - Kizh Nation and office indicating the date and time of the commencement of earthwork activities and will provide the Tribal Monitor reasonable access to the Project site to monitor the earthwork activities. During earthwork activities, the Tribal Monitor shall complete monitoring logs that describe the earthwork activities, including the type of earthwork activities, locations of the earthwork activities, soil types, and any other facts related to TCRs. The Tribal Monitor shall provide copies of the monitoring logs to YLWD upon request. If any TCRs are identified during the monitoring and evidence is presented that the discovery proves to be potentially significant under CEQA, as determined by the Tribal Monitor, all earthwork activities shall cease within 50 feet of the discovery, until the Tribal Monitor, in consultation with YLWD, determines the appropriate actions for explorations and/or recovery.

MM TCR-2 In accordance with Section 7050.5 of the California Health and Safety Code, if Native American human remains (as defined in Pub. Res. Code §5097.98(d)(1)) are found during earthwork activities, no further excavation or disturbance of the site or any nearby area reasonably suspected, by the Tribal Monitor, to overlie the adjacent remains shall occur. The County Coroner shall be notified of the discovery immediately. If the County Coroner determines that the remains are or believed to be Native American, s/he shall notify the NAHC in Sacramento within 24 hours of the discovery. In accordance with Section 5097.98 of the California Public Resources Code, the NAHC must immediately notify those persons it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the site by YLWD. YLWD would meet and confer with the most likely descendant regarding their recommendations prior to disturbing the site by further earthwork activity. Human remains and grave goods shall be treated as required by Public Resources Code section 5097.98, and their discovery shall remain confidential.

XIX. UTILITIES AND SERVICE SYSTEMS

IMPACT ANALYSIS

Would the Project:

- a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm 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 is a utility project that involves improvements to the existing infrastructure. As detailed in Section 3.0, Project Description, the Project would include construction and operation of two segments of a new waterline. The Project would not require any further relocation or construction of new or expanded facilities beyond what is currently proposed and analyzed as part of this IS/MND.

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

No Impact. The proposed Project involves construction and operation of two segments of a new waterline, and would not result in additional demand for water supply. Instead, the Project would improve the existing infrastructure. No additional impacts related to water-related facilities are anticipated, and no mitigation is required.

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

No Impact. As noted previously in the responses to Questions XIX.a and XIX.e, the Project would include construction and operation of two segments of a new waterline, and would not generate significant quantities of wastewater. No impacts would occur related to capacity of wastewater infrastructure or wastewater treatment facilities.

- 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?**

Less Than Significant Impact. Solid waste generated from the Project site would most likely be disposed of at the Olinda Alpha Landfill, which is part of the Orange County landfill system operated by OC Waste & Recycling. The landfill is permitted to receive a maximum of 8,000 tons per day (tpd) maximum with a 7,000 tpd annual average. The Olinda Alpha Landfill is approximately 565 acres with 453 acres allocated for waste disposal. The landfill opened in 1960 and has enough projected capacity to serve residents and businesses until approximately 2036 (OC Waste & Recycling 2022; Halligan 2022). The increase in solid waste disposal resulting from implementation of the Project would be nominal and could be accommodated within the permitted capacity of the County's overall landfill system, which includes the Olinda Alpha Landfill (Halligan 2022). A less than significant impact related to landfill capacity would occur from implementation of the proposed Project, and no mitigation is required.

e) Comply with federal, State, and local statutes and regulations related to solid waste?

No Impact. Solid waste practices in California are governed by multiple federal, State, and local agencies that enforce legislation and regulations to ensure landfill operations minimize impacts to public health and safety and the environment. OC Waste & Recycling is obligated to obtain a Solid Waste Facilities Permit, a Storm Water Discharge Permit, and a permit to construct and operate gas management systems and to meet Waste Discharge Requirements. The Local Enforcement Agency (South Coast AQMD) and the SWRCB enforce landfill regulations related to health, air quality, and water quality, respectively. The proposed Project would not inhibit OC Waste & Recycling's compliance with the requirements of each of these governing bodies. No impact would occur, and no mitigation is required.

XX. WILDFIRE

IMPACT ANALYSIS

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? and**
- 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? and**
- 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? and**
- 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?**

No Impact. According to the Fire and Resource Assessment Program *Very High Fire Hazard Severity Zones in LRA As Recommended by CAL FIRE* map for Orange County, the Project site located in the City of Placentia is not within or near a VHFHSZ. Therefore, the Project site is not susceptible to wildfires, therefore, further analysis of the hazards related to wildfire is warranted (CAL FIRE 2022a, CAL FIRE 2022b).

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

IMPACT ANALYSIS

Does the Project:

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

Less Than Significant With Mitigation. As described throughout the analysis in Section 5.0, with the incorporation of the identified mitigation measures, implementation of the proposed Project would not degrade the quality of the environment; would not substantially reduce the habitats of fish or wildlife species; would not cause a fish or wildlife population to drop below self-sustaining levels; would not threaten to eliminate a plant or animal; and would not eliminate important examples of major periods of California history or prehistory. With respect to the quality of the environment, the Project would not preclude the ability to achieve long-term environmental goals.

- b) **Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental efforts 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 probably future projects)?**

Less Than Significant Impact. While the Project may have the potential to impact the environment on a project-specific basis, these impacts would be limited in nature, as detailed throughout Section 5.0 of this IS/MND and would not contribute to a cumulative impact.

- c) **Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

Less Than Significant With Mitigation. Based on the analysis of the above-listed topics, the proposed Project could have the potential to impact human beings, either directly or indirectly; however, the implementation of the mitigation measures described throughout this document would reduce all potential impacts to less than significant levels.

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SECTION 8.0 INTRODUCTION TO RESPONSES TO COMMENTS

The IS/MND was released for public review and comment by YLWD on August 12, 2022. The public review period ended on September 12, 2022.

YLWD, as the lead agency, has evaluated all substantive comments received on the IS/MND, and has prepared written responses to these comments. In accordance with the CEQA Guidelines (14 *California Code of Regulations* [CCR] §15074[b]), the decision-making body of the lead agency must consider the IS/MND and comments received before approving the project. This document, which will be provided to the YLWD Board of Directors, as the decision-making body, has been prepared in accordance with CEQA and represents the independent judgment of the lead agency.

This Response to Comments document is organized as follows:

Section 8 provides a brief introduction to this document.

Section 9 identifies the IS/MND respondents.

Section 10 provides responses to comments received on the IS/MND. Responses are provided in the form of individual responses to comment letters received. Comment letters are followed immediately by the responses to each letter.

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SECTION 9.0 LIST OF RESPONDENTS

The following is a list of local agencies that submitted comments on the IS/MND that were received by September 12, 2022 (the end of the public review period). Comments have been numbered and responses have been developed with corresponding numbers.

Letter No.	Respondent	Date of Correspondence	Page No.
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Local Agencies

4	Orange County Transportation Authority	September 1, 2022	10-32
5	Orange County Sanitation District	September 13, 2022	10-34

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SECTION 10.0 RESPONSES TO ENVIRONMENTAL COMMENTS

This section includes responses to all substantive environmental issues raised in comments received on the IS/MND. When comments did not address the completeness or adequacy of the environmental documentation or when they did not raise environmental issues, the receipt of the comment is noted; no further response is provided as CEQA does not require a response in these instances.

This section is formatted so that each comment letter is followed immediately by the corresponding responses.

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Letter 1 Orange County Transportation Authority
Dan Phu, Manager, Environmental Programs
September 1, 2022

Comments Received

- Please note, OCTA Bus Route 30 runs along Orangethorpe Avenue in the vicinity of the Project area, with bus stops located westbound, farside Lakeview Avenue in front of Duke's Café, as well as eastbound, farside Lakeview Avenue at the crosswalk traversing Orangethorpe Avenue.
- We are requesting that the Yorba Linda Water District coordinate with OCTA on any detours or potential impacts to OCTA's bus service and/or bus stops.

Response to Letter 1

The comment acknowledges receipt of the NOI and provided the following comments regarding existing OCTA Bus Route 30 in the vicinity of the Project site and requests that YLWD coordinate with OCTA on the need for any detours or potential impacts to the bus service or bus stops. As part of the construction process, YLWD will maintain contact with OCTA as needed to ensure that proper notice is given regarding impacts to bus service or the bus stops.

Letter 2 Orange County Sanitation District
Justin Fenton, Engineering Manager, Planning Division
September 13, 2022

Comment Received

Please be advised Yorba Linda Water District proposed water improvement will be in the vicinity of and cross OC San sewers. Please ensure proper vertical and horizontal separation.

Response to Letter 2

1. The comment acknowledges receipt of the NOI and advises YLWD that the proposed improvements will be located in the vicinity of and cross OC San sewers, and to ensure proper vertical and horizontal separation. As part of final design, YLWD will review required separation and ensure that minimum requirements are met.

**APPENDICES A THROUGH E
(PROVIDED SEPARATELY)**

APPENDIX F
MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MONITORING AND REPORTING PROGRAM

INTRODUCTION

In accordance with the requirements of Public Resources Code Section 21081.6, and as part of its certification of the adequacy of the Mitigated Negative Declaration (MND) for the BNSF Waterline Crossing at Veterans Village and Highland Avenue Initial Study/Mitigated Negative Declaration, the following “Mitigation Monitoring and Reporting Plan” (“MMRP” or “Plan”) is hereby adopted for this Project. The principal purpose of the MMRP is to ensure that the mitigation measures for the adopted Project are reported and monitored so as to ensure compliance with the measures’ requirements.

MITIGATION MONITORING AND REPORTING PLAN

The MMRP is provided in tabular format to facilitate effective tracking and documentation of the status of mitigation measures. The attached MMRP Table provides the following monitoring information:

- **Mitigation Program.** The text of all adopted mitigation program for the Project from the MND.
- **Implementation Action.** This summarizes the action that must be taken to implement the required measure.
- **Timing of Verification.** This identifies when in the process the measure needs to be implemented.
- **Responsible Party.** The party responsible for overseeing the implementation and completion of each measure.

Mitigation Program	Implementing Action(s)	Time of Verification	Responsible Party
BIOLOGICAL RESOURCES		-	-
BIO-1. To the extent possible, vegetation removal will be conducted during the non-breeding season (September 1 to January 31) in order to minimize direct impacts on nesting birds and raptors. If construction activities would be initiated during the breeding season for nesting birds/raptors (i.e., February 1–August 31), a pre-construction survey will be conducted by a qualified Biologist within five days prior to the initiation of construction (including demolition of structures). The nesting bird/raptor survey area will include a buffer of 300 feet around the work area for nesting birds and a buffer of 500 feet around the work area for nesting raptors (including burrowing owl). If no active nests are found, no further mitigation will be required. If the Biologist finds an active nest within or immediately adjacent to the construction area, and determines that the nest may be impacted or breeding activities substantially disrupted by increased activity around the nest, the Biologist will determine an appropriate protective buffer around the nest depending on the sensitivity of the species and the nature of the construction activity. The protective buffer shall be between 25 to 300 feet for nesting birds; 300 to 500 feet for nesting raptors. The active nest will be protected within the designated buffer until nesting activity has ended. Any protective buffers will be mapped on construction plans and designated as “Environmentally Sensitive Areas”. Construction can proceed within the protective buffer when the qualified Biologist has determined that the nest is no longer active (i.e., fledglings have left the nest or the nest has failed).	Limit vegetation removal between September 1 and January 31/Conduct a pre-construction nesting bird survey	Prior to initiation of construction/ verify implementation during construction	YLWD Construction Contractor
CULTURAL RESOURCES	-	-	-
CULT-1. In the event that cultural (archaeological) resources are inadvertently unearthed during excavation activities, the contractor shall immediately cease all earth-disturbing activities within a 100-foot radius of the area of discovery and the contractor shall contact YLWD immediately. YLWD shall (a) retain a qualified professional archaeologist, and (b) contact the Tribal Monitor, for both to evaluate the significance of the find, and in consultation with YLWD, determine an appropriate course of action. If the archaeological resources are found to be significant, the archeologist, in consultation with YLWD, shall determine appropriate actions for exploration and salvage. If the resources are found to be significant Tribal Cultural Resources (as defined by Pub. Res. Code §21074(a)) (“TCR”), as determined by the Tribal Monitor, MM TCR-1 and MM TCR-2 will apply. After the find has been appropriately avoided or mitigated, work in the area may resume.	Conduct archaeological observation and salvage during excavation activities	Verify implementation during construction	YLWD Construction Contractor

Mitigation Program	Implementing Action(s)	Time of Verification	Responsible Party
CULT-2. In accordance with Section 7050.5 of the <i>California Health and Safety Code</i> , if human remains are found during ground-disturbing activities, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur. The County Coroner shall be notified of the discovery immediately. If the County Coroner determines that the remains are or believed to be Native American, s/he shall notify the NAHC in Sacramento within 24 hours of the discovery, and MM TCR-1 will apply. In accordance with Section 5097.98 of the <i>California Public Resources Code</i> , the NAHC must immediately notify those persons it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the site by YLWD. YLWD would meet and confer with the most likely descendant regarding their recommendations prior to disturbing the site by further construction activity.	Notify County coroner if human remains are encountered	Implementation during ground-disturbing activities	YLWD Construction Contractor
GEOLOGY AND SOILS	-	-	-
GEO-1. In the event that paleontological resources are inadvertently unearthed during excavation activities, the contractor shall immediately cease all earth-disturbing activities within a 100-foot radius of the area of discovery and the contractor shall contact YLWD immediately. YLWD shall retain a qualified professional paleontologist to evaluate the significance of the find, and in consultation with YLWD, determine an appropriate course of action. If the paleontological resources are found to be significant, the paleontologist, in consultation with YLWD, shall determine appropriate actions for exploration and salvage. After the find has been appropriately avoided or mitigated, work in the area may resume.	Retain a qualified professional paleontologist	Implementation during earth-disturbing activities	YLWD Construction Contractor
HYDROLOGY AND WATER QUALITY	-	-	-
HYDRO-1. Prior to initiation of construction, YLWD shall ensure that a Notice of Intent with the State Water Resources Control Board (SWRCB) has been filed in order to obtain coverage under the Construction General Permit. Pursuant to the permit requirements, the Construction Contractor shall develop a Storm Water Pollution Prevention Plan (SWPPP) that incorporates Best Management Practices for reducing or eliminating construction-related pollutants in the site runoff.	File Notice of Intent with State Water Resources Control Board/ Develop a SWPPP	Prior to initiation of construction/ verify implementation during construction	YLWD Construction Contractor
TRIBAL CULTURAL RESOURCES	-	-	-
TCR-1. Prior to the commencement of earthwork activities, YLWD shall retain a monitor ("Tribal Monitor") approved by the Gabrieleno Band of Mission Indians - Kizh Nation ("Kizh Nation"). "Earthwork activities" include pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling and trenching. YLWD shall provide written notification to the lead Tribal representatives from the Gabrieleno Band of Mission Indians - Kizh Nation and office indicating the date and time of the commencement of earthwork activities and will provide the Tribal Monitor reasonable access to the Project site to monitor the earthwork activities. During earthwork activities, the Tribal Monitor shall complete monitoring logs that describe the earthwork activities, including the type of earthwork activities, locations of the earthwork activities, soil types, and any other facts related to TCRs. The Tribal Monitor	Retain a Tribal Monitor	Prior to the commencement of earthwork activities	YLWD Construction Contractor

Mitigation Program	Implementing Action(s)	Time of Verification	Responsible Party
shall provide copies of the monitoring logs to YLWD upon request. If any TCRs are identified during the monitoring and evidence is presented that the discovery proves to be potentially significant under CEQA, as determined by the Tribal Monitor, all earthwork activities shall cease within 50 feet of the discovery, until the Tribal Monitor, in consultation with YLWD, determines the appropriate actions for explorations and/or recovery.			
TCR-2. In accordance with Section 7050.5 of the California Health and Safety Code, if Native American human remains (as defined in Pub. Res. Code §5097.98(d)(1)) are found during earthwork activities, no further excavation or disturbance of the site or any nearby area reasonably suspected, by the Tribal Monitor, to overlie the adjacent remains shall occur. The County Coroner shall be notified of the discovery immediately. If the County Coroner determines that the remains are or believed to be Native American, s/he shall notify the NAHC in Sacramento within 24 hours of the discovery. In accordance with Section 5097.98 of the California Public Resources Code, the NAHC must immediately notify those persons it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the site by YLWD. YLWD would meet and confer with the most likely descendant regarding their recommendations prior to disturbing the site by further earthwork activity. Human remains and grave goods shall be treated as required by Public Resources Code section 5097.98, and their discovery shall remain confidential.	Notify County coroner if Native American human remains are encountered	During earthwork activities	YLWD Construction Contractor