INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION

WASHINGTON STREET TRANSMISSION MAIN PROJECT

RIVERSIDE COUNTY, CALIFORNIA

EASTERN MUNICIPAL WATER DISTRICT

November 2023

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WASHINGTON STREET TRANSMISSION MAIN PROJECT

RIVERSIDE COUNTY, CALIFORNIA

Prepared for:

Eastern Municipal Water District
2270 Trumble Road
P.O. Box 8300
Perris, CA 92572-8300

Prepared by:

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Project No. EWD2101.03

November 2023

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LIST OF ABBREVIATIONS AND ACRONYMS

AAQS	ambient air quality standards
AB	Assembly Bill
ADT	average daily traffic
AQMP	Air Quality Management Plan
Basin	South Coast Air Basin
Basin Plan	Water Quality Control Plan
BMPs	Best Management Practices
BTU	British thermal units
BUOW	burrowing owl
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model Version 2022.1.1.14
California Register	California Register of Historical Resources
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CASSA	Criteria Area Species Survey Area
CATTCH	California Temporary Traffic Control Handbook
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEHC Project	California Essential Habitat Connectivity Project
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CH_4	methane
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
County	County of Riverside

County Guidelines	County of Riverside *Transportation Analysis Guidelines for Level of Service Vehicle Miles Traveled*
CTMP	Construction Traffic Management Plan
dB	decibels
dBA	A-weighted decibels
DPM	diesel particulate matter
Draft Guidance Document	Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EFZ	Earthquake Fault Zone
EMFAC2021	California Emissions Factor Model, Version 2021
EMWD	Eastern Municipal Water District
EO	Executive Order
EOP	Emergency Operations Plan
EPA	United States Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FTA Manual	FTA *Transit Noise and Vibration Impact Assessment Manual*
GHG	greenhouse gas
GSA	Groundwater Sustainability Agencies
GWh	gigawatt-hours
GWP	Global Warming Potential
HFCs	hydrofluorocarbons
I-10	Interstate 10
I-5	Interstate 5
in/sec	inches per second
IS/MND	Initial Study/Mitigated Negative Declaration
kWh	kilowatt-hours
LBVI	least Bell's vireo
L_{dn}	day-night average noise level

L_{eq}	equivalent continuous sound level
LOS	level of service
LST	localized significance threshold
LUST	leaking underground storage tank
MBTA	Migratory Bird Treaty Act
MJHMP	Multi-Jurisdictional Hazard Mitigation Plan
MLD	Most Likely Descendant
MMI	Modified Mercalli Intensity
MMRP	Mitigation Monitoring and Reporting Program
mph	miles per hour
MRZ	Mineral Resource Zone
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan
MT	metric tons
MUTCD	Manual on Uniform Traffic Control Devices for Streets and Highways
MWD	Metropolitan Water District of Southern California
N_2O	nitrous oxide
NAHC	Native American Heritage Commission
NEPSSA	Narrow Endemic Plant Species Survey Area
NIMS	National Incident Management Systems
NO_2	nitrogen dioxide
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
O&M	operation and maintenance
O_3	ozone
OPR	Office of Planning and Research
PFCs	perfluorocarbons
PM_{10}	particulate matter less than 10 microns in size
$PM_{2.5}$	particulate matter less than 2.5 microns in size
PPV	peak particle velocity
PRC	Public Resources Code
PRIMP	Paleontological Resources Impact Mitigation Program

project	Washington Street Transmission Main Project
PSE	Participating Special Entity
RMS	root-mean-square
RWQCB	Regional Water Quality Control Board
RWRF	regional water reclamation facility
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SEMS	Standardized Emergency Management System
SF_6	sulfur hexafluoride
SGMA	Sustainable Groundwater Management Act
SKR HCP	Stephens' Kangaroo Rat Habitat Conservation Plan
SLIC	spills, leaks, investigations, and cleanups
SMARA	Surface Mining and Reclamation Act
SO_2	sulfur dioxide
SoCalGas	Southern California Gas Company
SO_X	sulfur oxides
SR-243	State Route 243
SR-62	State Route 62
SR-79	State Route 79
SRA	Source Receptor Area
SSC	State Species of Special Concern
SVP	Society of Vertebrate Paleontology
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCP	Traffic Control Plan
TMDL	Total Maximum Daily Load
TVUSD	Temecula Valley Unified School District
USACE	United States Army Corps of Engineers
USDOT	United States Department of Transportation

USFWS	United States Fish and Wildlife Service
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOCs	volatile organic compounds
WSC	Western Science Center

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1.0 PROJECT INFORMATION

1. **Project Title:**

   Washington Street Transmission Main Project

2. **Lead Agency Name and Address:**

   Eastern Municipal Water District
   2270 Trumble Road
   P.O. Box 8300
   Perris, CA 92572-8300

3. **Contact Person and Phone Number:**

   Joseph Broadhead, Principal Water Resource Specialist
   (951) 928-3777, ext. 4545

4. **Project Location:**

   The project site consists of the Washington Street right-of-way between Fields Drive and Abelia Street in unincorporated Riverside County, California.

5. **Project Sponsor's Name and Address:**

   Eastern Municipal Water District
   2270 Trumble Road
   P.O. Box 8300
   Perris, CA 92572-8300

6. **General Plan Designation:**

   The project site is located within the Southwest Area Plan as designated in the Riverside County General Plan. The pipeline alignment would be located within existing public right-of-way, which does not have a land use or zoning designation. The area surrounding the project site is entirely designated as Medium Density Residential in the Southwest Area Plan.[1]

7. **Zoning:**

   The pipeline alignment would be located within existing public right-of-way, which does not have a land use or zoning designation. The area surrounding the project site is zoned as One-Family Dwelling (R-1), Open Area Combining Zone- Residential Development (R-5), Specific Plan (SP) and Light Agriculture A-1).[2]

8. **Description of Project:**

[1] County of Riverside. 2021. *Southwest Area Plan, Figure 3: Land Use Plan.* June 29. Website: https://rctlma.org/Portals/14/genplan/2019/ap/SWAP_41619.pdf (accessed May 16, 2023).

[2] Riverside County Information Technology. n.d. *Map My County Version 10.* Website: https://gis1.countyofriverside.us/Html5Viewer/?viewer=MMC_Public (accessed May 16, 2023).

The Washington Street Transmission Main Project would result in the installation of an approximately 6,400-foot-long potable water main in the Winchester area of Riverside County. A more detailed description of the proposed project is provided in Chapter 2.0, Project Description.

9. Surrounding Land Uses and Setting:

The project site is generally surrounded by single-family residential land uses along the west side of Washington Street and undeveloped land with some single-family residential uses along the east side. Washington Park is located at the northeast end of the project area and Eagle Crest Park is located along the southeast end of the project area. Temecula Preparatory School is located southwest of the southern project limits. One drainage channel, French Valley Channel, crosses Washington Street between Brookridge Lane and Cottonwood Road.

10. Other Public Agencies Whose Approval is Required (e.g., permits, financial approval, or participation agreements):

Please see Section 2.7, Project Approvals.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resource Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Per AB 52, EMWD initiated consultation with Native Tribes that are traditionally and culturally affiliated with the geographic area of the proposed Project to identify resources of cultural or spiritual value to the Tribe. On July 6, 2023, EMWD sent consultation notification letters to Native Tribes on the District's Master List pursuant to the requirements of AB 52 pertaining to government-to-government consultation. Two tribes requested consultation under AB52. Details regarding the tribal consultation process are provided in Section 4.18, Tribal Cultural Resources.

2.0 PROJECT DESCRIPTION

The following describes the proposed Washington Street Transmission Main Project (proposed project) that is the subject of this Initial Study/Mitigated Negative Declaration (IS/MND) prepared pursuant to the California Environmental Quality Act (CEQA). Eastern Municipal Water District (EMWD) is both the project proponent and the CEQA lead agency for the proposed project.

2.1 PROJECT OVERVIEW

The proposed project would result in the installation of approximately 6,400-linear feet (lf) of 18-inch diameter potable water main in the Winchester area of unincorporated Riverside County. The potable water pipeline would provide improved distribution capacity and improved operations for the recently approved Belle Terre Water Storage Tank. Please refer to Section 2.5, Proposed Project Description, for a detailed description of the project components.

2.2 PROJECT PURPOSE

The proposed project would enhance the hydraulic reliability of the regional water distribution system that would be connected to the newly approved Belle Terre Water Storage Tank, located north of Fields Drive and east of San Diego Canal. This endeavor would significantly enhance transmission capabilities to and from the Belle Terre Water Storage Tank.

2.3 PROJECT LOCATION

The project site is located in unincorporated Riverside County and along the Washington Street ROW between Fields Drive and Abelia Street. The proposed pipeline alignment would extend approximately 1.2 miles. The project site is approximately 3.5 acres.

Regional access to the project site is provided by State Route 79 (SR-79) via Abelia Street. SR-79 is located west of Washington Street and travels north to south. SR-79 intersects Washington Street approximately 1.3 miles north of the northern project limits. Figure 2-1 shows the regional location of the project site. Figure 2-2 provides an aerial view of the project site and surrounding land uses. Photographs of the project site are provided on Figure 2-3.

2.4 PROJECT CHARACTERISTICS

The proposed project would include the construction of an approximately 6,400-lf of 18-inch-diameter pipeline within Washington Street between Fields Drive and Abelia Avenue. The new pipeline would be installed within the existing right-of-way using open trench construction methods with trenchless tunneling (e.g., jack and bore) to be used for the drainage crossing (Figure 2-4).

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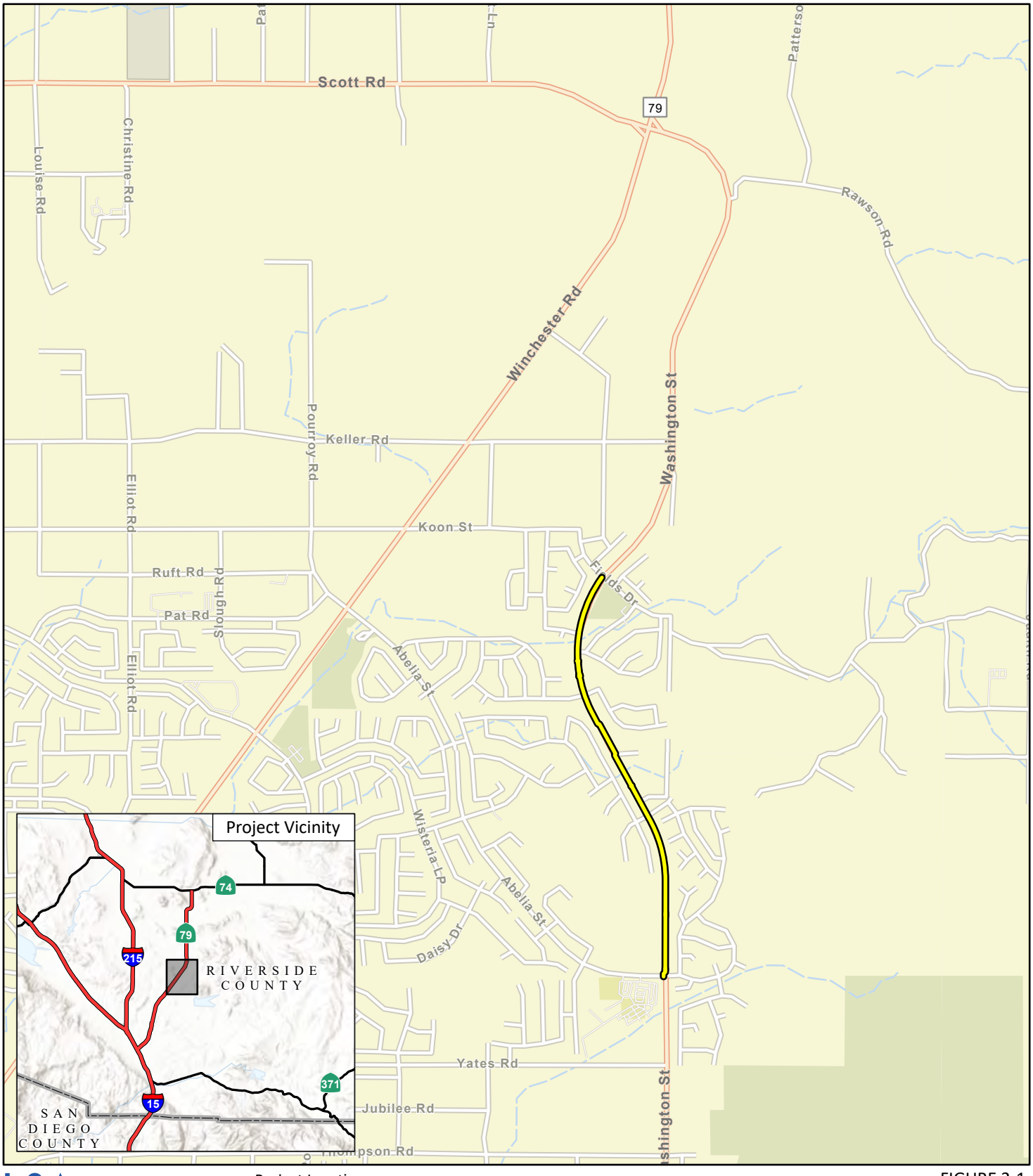

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FIGURE 2-1

N

0 1000 2000
FEET

SOURCE: Esri (2022)

Washington Street Transmission Main Project

Project Location and Vicinity

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Project Site Boundary

FIGURE 2-2

N

0 500 1000

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SOURCES: Google Earth 2023

Washington Street Pipeline Project

Aerial Photograph of Project Site and Surrounding Land Uses

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Photo 1: View of the northern project boundary looking southwest at the Fields Drive and Washington Street intersection.

Photo 2: View looking northeast at Washington Street from the edge of Drainage B.

Photo 3: View looking west at Washington Street from the edge of Drainage B.

Photo 4: View looking south at nonnative grassland located along the eastern side of Washington Street.

Photo 5: View looking northeast at Drainage C located along the eastern side of Washington Street.

Photo 6: View looking north along Washington Street and Jean Nicholas Road.

Photo 7: View looking south along Washington Street and Jean Nicholas Road.

Photo 8: View looking west at Drainage D located on the northeastern corner of Autumn Glen Circle and Washington Street.

Photo 9: View looking west at Detention Basin 6 located on the northwestern corner of Skyview Road and Washington Street.

Photo 10: View of the southern project boundary looking north at the Skyview Road and Washington Street intersection.

LSA

FIGURE 2-3

Washington Street Transmission Main Project
Site Photographs

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2.5 PROPOSED PROJECT DESCRIPTION

The following sections describe the construction and operation of the proposed project. The proposed project components are depicted on Figure 2-4.

2.5.1 Project Construction

The new pipeline would be installed within the existing paved right-of-way using open trench construction methods with trenchless technology (e.g., jack and bore) used for the drainage crossing located between Fields Drive and Cottonwood Road. Construction of the proposed pipeline would include demolition and removal of existing asphalt, trenching/trenchless work, fill/compaction activities, pavement reconstruction, landscaping, and concrete flatwork over the length of the project site.

Access to the project site would be via SR-79 to eastbound Washington Street and traveling about 1.5 miles south to the northern limit of the project on Fields Drive. Work hours would be between 7:00 a.m. and 5:00 p.m. Monday through Friday during the construction period. Project construction would require a 12-person crew, which would generate 12 daily trips: 12 inbound trips in the a.m. peak hour and 12 outbound trips in the p.m. peak hour. Construction staging areas would be located within the eastern right-of-way of Washington Street between Cottonwood Road and Autumn Glen Circle. All construction equipment and construction worker vehicles would be staged on the project site, unless determined otherwise by the contractor, for the duration of the construction period. No nighttime work would occur. Staging areas would be returned to existing conditions following construction activities.

The proposed project is planned to be constructed in one phase, with all activities occurring between September 2024 and March 2025. The proposed project would disturb up to 100 linear feet per day (approximately 0.2 acre per day). The proposed project would include 75,000 square feet of asphalt demolition and installation of 75,000 square feet of new asphalt pavement.

A majority of the pipeline would be installed using open trench construction. The new pipeline would be constructed of either ductile iron or fully welded steel and installed within the trench. Following installation, the pipe-bedding zone (bottom and 12 inches above the new pipe) would be backfilled with well-graded crushed rock or clean sands to a depth of at least 1 foot over the pipe in accordance with EMWD specifications. Native soil backfill would be placed 12 inches above the top of the pipeline to the paving subgrade and would comply with County of Riverside (County) requirements. Backfill would be compacted to minimum density of 90 percent. The upper 3 feet of material beneath the finished surface of new pavement would be compacted to a dry density of at least 95 percent. The top elevation of the trench would be graded to the original grade.

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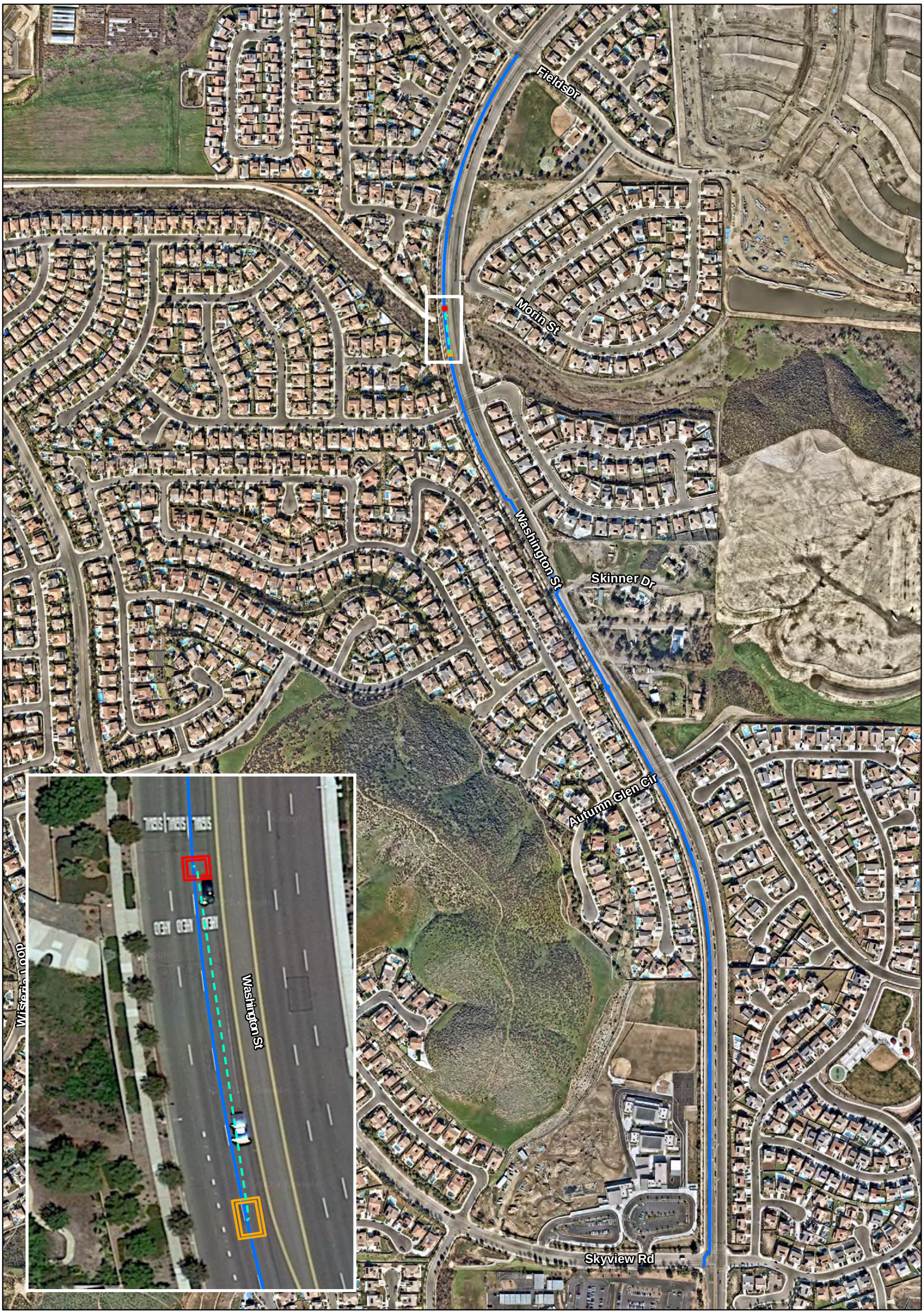

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LEGEND

Proposed Project

- Water Line
- Jack and Bore Line
- Jacking Pit Location
- Receiving Pit Location

0 220 440

FEET

SOURCE: Nearmap (1/19/2023)

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FIGURE 2-4

Washington Street Transmission Main Project

Proposed Project

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Construction of the 18-inch-diameter pipeline would require a minimum trench width of 5 feet, and a trench depth of approximately 6 feet along the majority of its length and up to approximately 20 feet at the channel crossing between Brookridge Lane and Cottonwood Road where a concrete box culvert exists.

A 230-foot segment of the proposed water pipeline at the French Valley Channel crossing would be installed via jack and bore. Jack-and-bore installation would require excavation of a "boring pit" approximately 40 feet long by 20 feet wide (800 square feet) on the south side of the drainage and a "receiving pit" measuring approximately 20 feet long by 20 feet wide (400 square feet) on the north side of the drainage. Boring depths are anticipated to extend at least 20 feet below the ground surface.

The contractor would use the following heavy construction machinery: excavator, backhoe, roller, loader, and pick-up trucks to off-haul soils. Construction of the water pipeline would require approximately 7,350 cubic yards of reused native soils fill. No soils would need to be imported or exported from the site.

Construction of the proposed pipeline would require one temporary lane closure on Washington Street. The remaining lanes would remain open to through traffic. Traffic control measures would be set up in phases as the work traverses along and across the streets. Conventional traffic control measures (e.g., cones, K-rails, signs, message boards, and flaggers, as needed) would be used to direct traffic flow during potential lane closures. When work is not being performed, trenches would be plated with steel plates to restore normal traffic flow.

Excavation would include use of a wheel-mounted/track-mounted drill rig, horizontal drilling machine, excavator, backhoe, and roller compactor, as well as a jackhammer if large boulders or similar obstacles are encountered during excavation.

Historic groundwater levels in the project vicinity range from approximately 10 to 41 feet in depth.[3] Borings performed in proximity to the channel crossing between Brookridge Lane and Cottonwood Road encountered groundwater at a depth of 16 feet.[4] Static groundwater is expected to be encountered during construction activities associated with the 20-foot-deep trenchless pits. Temporary groundwater dewatering during construction would need to be disposed of in accordance with the Regional Water Quality Control Board (RWQCB) guidelines, which would include additional sampling and running the water through a settling tank to remove any sediment prior to discharge.

Potable pipeline dewatering may be needed for pipeline connections. Any discharge from potable pipeline dewatering would go into the existing EMWD sewer system.

[3] Geocon West, Inc. 2022. *Limited Preliminary Geotechnical Investigation, Potable Water Main, Washington Street from Fields Drive to Abelia Street, French Valley Area of Riverside County, California.* November 14.

[4] Ibid.

2.5.2 Project Operation

Operation of the proposed project would not require full-time dedicated staff at the site. EMWD staff may visit the site occasionally for routine maintenance activities. It is anticipated that any daily visit by staff would last for no more than 2 hours, depending on the maintenance required.

2.6 ENVIRONMENTAL COMMITMENTS

The following measures are EMWD construction Best Management Practices (BMPs) that would be implemented as part of the proposed project:

- Groundwater encountered during construction would be discharged over land or into the storm drain system in accordance with applicable permits or discharged to EMWD's sewer for treatment and reuse. If groundwater quality does not meet permitted discharge requirements for the storm drain it would be discharged to the sanitary sewer for treatment at EMWD's wastewater treatment plant or would be temporarily stored (on site or at one of the identified staging areas) until it could be properly disposed of in the sewer system or at a permitted disposal site.

- A Traffic Control Plan (TCP) would be approved for all construction work within public roadways. The TCP would be prepared in accordance with the United States Department of Transportation (USDOT) Manual of Uniform Traffic Control Devices, the California Department of Transportation (Caltrans) Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), and permit requirements by the authority having jurisdiction. Conventional traffic control measures used for a given project could include typical traffic control devices (e.g., traffic cones, K-rails, signs, message boards, flaggers, as needed) and related devices. When work is not being performed, trenches would be covered with an appropriate cover to restore normal traffic flow.

- All construction work would require the contractor to implement fire hazard reduction measures (e.g., having fire extinguishers located on site, the use of spark arrestors on equipment, and using a spotter during welding activities). In addition, all construction work would require the contractor to implement standard fire prevention methods.

- Construction would comply with South Coast Air Quality Management District (SCAQMD) Rules 402 (Nuisance), 403 (Fugitive Dust Control), 1108 (Cutback Asphalt), and 1113 (Architectural Coatings) requirements.

- Specifications would require the contractor to prepare a Stormwater Pollution Prevention Plan (SWPPP). Construction would implement BMPs to control water quality of stormwater discharges, according to the SWPPP (e.g., site management "housekeeping", erosion control, sediment control, trash control, and wind erosion control). BMPs would also include placing drip pans under stationary equipment, using tarps to cover stockpiled soil, and avoiding the storage of equipment and materials within 50 feet of waterways as appropriate for the site and construction activities.

- The design and construction of facilities would be based on a soils report and geotechnical investigation to minimize geologic risk. Construction and operation would be required to adhere to the recommendations included in the project-specific geotechnical investigation.

2.7 REQUIRED PERMITS AND APPROVALS

This IS/MND is intended to serve as the CEQA document for all actions associated with the proposed project, including all discretionary approvals requested or required of EMWD to implement the project. In addition, this IS/MND is the reference document for the formulation and implementation of a Mitigation Monitoring and Reporting Program (MMRP) for the proposed project.

The project may require approvals, permits, or authorization from other agencies classified as "Responsible Agencies" under CEQA. According to Section 15381 of the *State CEQA Guidelines*, a Responsible Agency is defined as a public agency other than the Lead Agency that will have discretionary approval power over the proposed project or some component of the project, including mitigation. Responsible Agencies are identified in Table 2.A, Required Permits and Approvals.

Table 2.A: Required Permits and Approvals

Permit/Approval	Permitting/Approving Agency	Permit/Approval Trigger
National Polluant Discharge Elimination System (NPDES) Construction General Permit	California Regional Water Quality Control Board (RWQCB), Region 9, San Diego	Required prior to construction activity, upon completion of Notice of Intent and Storm Water Pollution Prevention Program (SWPPP).
Permit to Construct, Dust Control Permits	South Coast Air Quality Management District (SCAQMD)	Required prior to construction activity.
Encroachment Permit	Riverside County Transportation Department (RCTD)	Required prior to advertising the proposed project, upon completion of the Notice of Intent.
Safety and Health Regulations for Construction, Requirements for Protective Systems (29CFR 1926.651 and 1926.652)	California Division of Occupational Safety and Health (Cal/OSHA)	Required to be implemented during project construction.

Source: Compiled by LSA (2023).

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3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Less Than Significant with Mitigation Incorporated" as indicated by the checklist in Chapter 4.0.

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

3.1 DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "Potentially Significant Impact" or "Potentially Significant Unless Mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

November 28, 2023

Signature | Date

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4.0 CEQA ENVIRONMENTAL CHECKLIST

4.1 AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	☐	☐	☐	☒
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 a 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?	☐	☐	☐	☒
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

a. Would the project have a substantial effect on a scenic vista? ***(No Impact)***

A scenic vista is defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. Aesthetic components of a scenic vista generally include: (1) scenic quality; (2) sensitivity level; and (3) view access. The proposed project is located in an area characterized by residential development and undeveloped open space. Development in the project vicinity includes local roads, residential housing, civic sites (e.g., schools), and community parks.

The project site is located northwest of Lake Skinner and Lake Skinner Regional Park, which is characterized by rolling hills and open space designated as conservation habitat. Views of the open space are limited from the project site itself due to its elevation relative to surrounding development. Vistas at the project site consist primarily of urban land uses, including residential buildings, roadways, landscaping, and other infrastructure. Views of the project area from scenic areas generally blend in with surrounding urban development, especially when viewed from local roadways.

No scenic vistas are identified in either the County of Riverside General Plan[5] or Southwest Area Plan[6] to or from the project site. Limited scenic vistas exist due to site topography and surrounding urban development.

[5] County of Riverside. 2015. Multipurpose Open Space Element. Website: https://planning.rctlma.org/general-plan-and-zoning/riverside-county-general-plan (accessed July 27, 2023).

[6] County of Riverside. 2021b. General Plan, Southwest Area Plan. September 28. Website: https://planning.rctlma.org/sites/g/files/aldnop416/files/migrated/Portals-14-genplan-GPA-2022-Compiled-SWAP-4-2022-rev.pdf (accessed August 2023).

Upon completion, the proposed project would be underground and out of view. Because the proposed project would not result in new above-ground pipe or other facility construction that would be visible from publicly accessible roadways or adjacent uses, the project would not block, impair, or substantially affect views on a permanent basis.

During construction of the project, activities such as trucks hauling materials and machinery would be temporarily visible to some viewers along local roadways and from adjacent residential uses. Construction equipment and materials would be staged at each end of the pipeline alignment near the bore/receiving pits. The construction period would be temporary; therefore, the presence of construction equipment would result in minor short-term changes in the views from public vantage points. As such, implementation of the proposed project would not result in a substantial adverse effect on a scenic vista and **no impact** would occur.

b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? ***(No Impact)***

The California Department of Transportation (Caltrans) administers the State Scenic Highway Program, which provides guidance to local government agencies, community organizations, and citizens on the process for officially designating a California State Scenic Highway. In Riverside County, State Route 243 (SR-243, the Banning-Idyllwild Panoramic Highway) connecting Interstate 10 (I-10) and SR-74, State Route 62 (SR-62) from I-10 near White Water to the Arizona state line, and SR-74 from Interstate 5 (I-5) to the city limits of Palm Desert are officially designated California State Scenic Highways.[7] None of these California State Scenic Highways are located in proximity to the project site; therefore, the project site would not be directly visible from any of these roadways.

The County of Riverside General Plan includes goals, policies, and actions to protect scenic corridors and enhance aesthetic experiences for residents and visitors. No scenic corridors are identified in the County of Riverside General Plan or Southwest Area Plan in proximity to the project site.

No historic buildings or rock outcroppings are located on the project site or in the surrounding vicinity. Furthermore, implementation of the proposed project would not result in the removal of or damage to scenic resources. As discussed above in Section 4.1.a, the proposed project would result in the installation of an underground pipeline and would not result in any visible improvements at the project site once completed. Therefore, implementation of the proposed project would not damage scenic resources within a State or locally designated scenic roadway and **no impact** would occur.

[7] California Department of Transportation (Caltrans). 2021. California State Scenic Highway System Map. Website: https://www.arcgis.com/home/item.html?id=f0259b1ad0fe4093a5604c9b838a486a (accessed July 27, 2023).

c. In non-urbanized areas, would the project 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 a 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 existing visual character in the vicinity of the project consists primarily of residential development and undeveloped open space. Existing roadways and adjacent development visually dominate the character of the immediate project area. The project site is visible from surrounding public sites, including local roadways and public facilities (e.g., Washington Park and Temecula Valley Charter School).

The proposed project would install a new underground pipeline within the Washington Street right-of-way between Fields Drive and Abelia Street. Upon completion, the proposed project would be underground and out of view.

Construction activities associated with the pipeline installation would be visible from public roadways and adjacent residential development. However, all temporary construction-related visual impacts such as construction equipment, staging areas, stockpile locations, and construction fencing would be removed following completion of construction. Therefore, implementation of the proposed project would have **no impact** associated with degradation of the existing visual character or quality of the project site and its surroundings.

d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? ***(No Impact)***

No permanent sources of lighting would be installed as part of the project. As described in Section 2.5.1, Project Construction, no nighttime work would occur; therefore, there would not temporary construction-related sources of light associated with the proposed project. The project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, and **no impact** would occur.

4.2 AGRICULTURE AND FORESTRY RESOURCES

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

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

a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? ***(Less Than Significant Impact)***

The proposed project would be constructed within the existing previously disturbed Washington Street right-of-way between Fields Drive and Abelia Street.

Maps prepared by the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) classify the project area as "Urban and Built-Up Land" in the north and "Farmland

of Local Importance" south of where Autumn Glen Circle intersects Washington Street.[8] Urban and Built-Up Land is occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment and water control structures. Farmland of Local Importance is land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee. These lands contain soils that would be classified as Prime and Statewide farmland but lack available irrigation water.

Although the southern portion of the project site is located on land designated as Farmland of Local Importance, the proposed pipeline would be installed within the Washington Street right-of-way and would not impact undisturbed land or land available for agricultural use. Further, lands surrounding the project site are developed and not used for agricultural purposes. Upon completion, the proposed project would be underground within the existing road. Therefore, project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use. **No impact** would occur.

b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract? ***(No Impact)***

The pipeline alignment would be located within existing public right-of-way, which does not have a land use or zoning designation in the County of Riverside General Plan or Zoning map. The area surrounding the project site is entirely designated as Medium Density Residential in the Southwest Area Plan,[9] and zoned as One-Family Dwelling (R-1), Open Area Combining Zone-Residential Development (R-5), Specific Plan (SP), and Light Agriculture (A-1).[10] Although some of the surrounding lands are zoned for agricultural use, the proposed pipeline would be installed within the Washington Street right-of-way and would not impact land zoned for agriculture or under Williamson Act contract. Therefore, implementation of the project would not conflict with existing zoning for agricultural use or a Williamson Act contract. **No impact** would occur.

c. Would the project 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)***

The pipeline alignment would be located within existing public right-of-way, which does not have a land use or zoning designation. Land uses surrounding the project site are primarily residential with some undeveloped land, parks, and public facilities (e.g., schools). The proposed project is not

8 California Department of Conservation (DOC). 2018. California Department of Conservation, Division of Land Resource Protection. California Important Farmland Finder. Website: https://maps.conservation.ca.gov/dlrp/ciff/ (accessed July 10, 2023).

9 County of Riverside. 2021b. General Plan, Southwest Area Plan. June 29. Revised September 28. Website: https://planning.rctlma.org/sites/g/files/aldnop416/files/migrated/Portals-14-genplan-GPA-2022-Compiled-SWAP-4-2022-rev.pdf (accessed August 2023).

10 Riverside County Information Technology. n.d. Map My County, Version 10. Website: https://gis1.countyofriverside.us/Html5Viewer/?viewer=MMC_Public (accessed May 16, 2023).

located on forest land or timberland and would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.[11] **No impact** would occur.

d. Would the project result in the loss of forest land or conversion of forestland to non-forest use? ***(No Impact)***

Please refer to Section 4.2.c. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest uses. **No impact** would occur.

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? ***(Less Than Significant Impact)***

Refer to Sections 4.2.1.a and 4.2.1.c. The southernmost portion of the pipeline alignment is located in an area designated as Farmland of Local Importance; however, the proposed pipeline would be installed within the Washington Street right-of-way and would not impact undisturbed land or land available for agricultural use. Further, lands surrounding the project site are almost entirely developed and not used for agricultural purposes. Therefore, the proposed project would not involve any other changes to the existing environment, which due to their location or nature could result in conversion of Farmland to a non-agricultural use, or conversion of forest land to a non-forest use. **No impact** would occur.

[11] California Department of Fish and Wildlife. n.d. California Forests and Timberlands Map. Website: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109917&inline (accessed July 20, 2023).

4.3 AIR QUALITY

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

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

The project site is within the South Coast Air Basin (Basin). The South Coast Air Quality Management District (SCAQMD) is the regional government agency that monitors and regulates air pollution within the Basin. The federal Clean Air Act and the California Clean Air Act mandate the control and reduction of specific air pollutants. Under these acts, the United States Environmental Protection Agency (EPA) and the CARB have established ambient air quality standards (AAQS) for specific "criteria" pollutants that are designed to protect public health and welfare. Primary criteria pollutants include carbon monoxide (CO), volatile organic compounds (VOCs), nitrogen oxides (NO_X), particulate matter less than 10 microns in size (PM_{10}), sulfur dioxide (SO2), and lead (Pb). Secondary criteria pollutants include ozone (O3), and particulate matter less than 2.5 microns in size ($PM_{2.5}$). The AAQS for each criteria pollutant represents the level that is considered safe to the public and avoids specific adverse health effects associated with each criteria pollutant.

The Basin is in nonattainment for the federal and State standards for ozone (O_3) and $PM_{2.5}$, and nonattainment for the State PM_{10} standard. In addition, the Basin is in attainment/maintenance for the federal PM_{10}, CO, sulfur dioxide (SO_2), and nitrogen dioxide (NO_2) standards. The SCAQMD has established project-level thresholds for VOCs, NO_X, CO, SO_2, PM_{10}, and $PM_{2.5}$.

The SCAQMD considers any project in the Basin with construction- or operation-related emissions that exceed any of the emission thresholds identified in Table 4.3.A to have potentially significant impacts.

Table 4.3.A: SCAQMD Construction and Operation Thresholds of Significance

Emission Source	Pollutant Emissions Threshold (lbs/day)					
	VOCs	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Construction Thresholds	75	100	550	150	150	55
Operation Thresholds	55	55	550	150	150	55

Source: South Coast Air Quality Management District Air Quality Significance Thresholds. (SCAQMD 2023).
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_2 = sulfur dioxide
VOCs = volatile organic compounds

In addition, the SCAQMD published its Final Localized Significance Threshold Methodology in June 2003 (updated July 2008), recommending that all air quality analyses include an assessment of air quality impacts to nearby sensitive receptors.[12] This guidance was used to analyze potential localized air quality impacts associated with construction of the proposed project. Localized significance thresholds (LSTs) are developed based on the size or total area of the emission source, the ambient air quality in the source receptor area, and the distance between the project and the nearest sensitive receptor. The SCAQMD defines structures that house persons (e.g., children, the elderly, persons with pre-existing respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise) or places where they gather as sensitive receptors (i.e., residences, schools, playgrounds, child-care centers, convalescent centers, retirement homes, and athletic fields). The project site is located within Washington Street between Fields Drive and Abelia Street. The nearest sensitive receptors include single-family residential units located adjacent to the project alignment along Washington Street.

LSTs are based on the ambient concentrations of that pollutant within the project Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. For the proposed project, the appropriate SRA for the LST is Perris Valley (SRA 24). SCAQMD provides LST screening tables for 25-, 50-, 100-, 200-, and 500-meter source-receptor distances. As mentioned above, the closest sensitive receptors to the project site are residential uses, which include the single-family homes adjacent to the project site along Washington Street. In cases where receptors may be closer than 82 feet (25 meters), any distances within the 82-foot (25-meter) buffer zone can be used. As such, the minimum distance of 82 feet (25 meters) was used for purposes of the LST assessment.

The project site is approximately 3.5 acres. Therefore, based on the anticipated construction equipment and the anticipated grading and ground-disturbing activities, it is assumed that the maximum daily disturbed area for the proposed project would be 3.5 acres.[13] As such, the LSTs for a

[12] South Coast Air Quality Management District (SCAQMD). 2008a. *Final Localized Significance Threshold Methodology.* July. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf (accessed February 2023).

[13] South Coast Air Quality Management District (SCAQMD). n.d. Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf (accessed February 2023).

3.5-acre site at 82 feet (25 meters) were derived by interpolation. Table 4.3.B shows the emissions thresholds that would apply based on the project size and distance to nearby receptors during project construction and operation.

Table 4.3.B: SCAQMD Localized Significance Thresholds

Emissions Source	Pollutant Emissions Threshold (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Construction	220.0	1,230.0	10.0	6.0
Operation	220.0	1,230.0	3.0	1.5

Source: *Final Localized Significance Threshold Methodology* (SCAQMD 2008).
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
SCAQMD = South Coast Air Quality Management District

*a. Would the project conflict with or obstruct implementation of the applicable air quality plan? **(Less Than Significant Impact)***

An Air Quality Management Plan (AQMP) describes air pollution control strategies to be undertaken by a city or county in a region classified as a nonattainment area to meet the requirements of the federal Clean Air Act. The main purpose of an AQMP is to bring an area into compliance with the requirements of national and State AAQS. The Basin is in nonattainment for the federal and State AAQS standards for O_3 and $PM_{2.5}$. Therefore, the Basin is classified as a nonattainment area and an AQMP is required. The applicable AQMP is the SCAQMD-adopted 2022 AQMP.[14] The AQMP is based on regional growth projections developed by the Southern California Association of Governments (SCAG).

A consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the air quality plans. A consistency determination fulfills the CEQA goal of fully informing local agency decision-makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are addressed. Only new or amended General Plan elements, Specific Plans, and significantly unique projects need to undergo a consistency review given that the air quality plan strategy is based on projections from local General Plans.

The County's General Plan is consistent with the SCAG Regional Comprehensive Plan Guidelines and the 2022 AQMP. Pursuant to the methodology provided in the SCAQMD *CEQA Air Quality Handbook*, consistency with the 2022 AQMP is affirmed when a project: (1) would not increase the frequency or severity of an air quality standards violation or cause a new violation, and (2) is consistent with the growth assumptions in the AQMP. Consistency review is presented as follows:

1. The proposed project would result in short-term construction and long-term operational pollutant emissions that are all less than the CEQA significance emissions thresholds established by the SCAQMD, as discussed in Section 4.3.b, below. Therefore, the proposed project would not

[14] South Coast Air Quality Management District (SCAQMD). 2022. *2022 Air Quality Management Plan.* December 2.

result in an increase in the frequency or severity of an air quality standards violation or cause a new air quality standards violation.

2. The *CEQA Air Quality Handbook* indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and significant projects. Significant projects include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and offshore drilling facilities. The proposed project would include the construction of an approximately 6,400-foot-long, 18-inch-diameter pipeline within Washington Street between Fields Drive and Abelia Avenue; therefore, the proposed project is not defined as significant. In addition, the proposed project would not require a change to the General Plan land use designation or the current zoning and would be consistent with the County's General Plan and Zoning Ordinance.

Based on the consistency analysis presented above, the proposed project would not conflict with or obstruct implementation of the applicable AQMP. Impacts would be **less than significant**.

b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? ***(Less Than Significant Impact)***

As identified above, the Basin is currently designated as nonattainment for the federal and State standards for O_3 and $PM_{2.5}$. The Basin's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of AAQS. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the SCAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified SCAQMD significance thresholds identified above in Table 4.3.A, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is not necessary. The following analysis assesses the potential project-level air quality impacts associated with construction and operation of the proposed project.

Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by site preparation and grading activities. Emissions from construction equipment are also anticipated and would include CO, NO_X, VOCs, directly emitted $PM_{2.5}$ or PM_{10}, and toxic air contaminants such as diesel particulate matter (DPM).

Project construction activities would include demolition, grading, trenching, pipeline construction, and paving activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled,

these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and amount of operating equipment. Larger dust particles would settle near the source, whereas fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. SCAQMD has established Rule 403: Fugitive Dust, which would require the Eastern Municipal Water District (EMWD) to implement measures that would reduce the amount of particulate matter generated during the construction period. The following Rule 403 measures were incorporated in this analysis:

- Water active sites at least three times daily (locations where grading is to occur shall be thoroughly watered prior to earthmoving).
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 feet (0.6 meter) of freeboard (vertical space between the top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.
- Reduce traffic speeds on all unpaved roads to 15 miles per hour (mph) or less.

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, sulfur oxides (SO_X), NO_X, VOCs, and some soot particulate ($PM_{2.5}$ and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the project using California Emissions Estimator Model Version 2022.1.1.14 (CalEEMod). The proposed project is planned to be constructed in one phase, with all activities occurring between September 2024 and March 2025, which was included in CalEEMod. The proposed project would also include 75,000 square feet of asphalt demolition, which is expected to require 15 truckloads per day and was included in CalEEMod. In addition, the proposed project would require approximately 7,350 cubic yards of reused native soils fill; however, no soils would need to be imported or exported from the site, which was also included in CalEEMod. This analysis utilized the construction equipment provided by the EMWD, which assumes the use of an excavator, backhoe, roller, loader, and pick-up trucks to off-haul soils.

This analysis assumes compliance with SCAQMD Rule 403 measures and the use of Tier 2 construction equipment. In addition, it is anticipated that project construction would require a 12-person crew, which was also included in CalEEMod. All other construction details are not yet known; therefore, default assumptions (e.g., construction hauling and vendor truck trips and fleet activities)

from CalEEMod were used. Construction emissions are summarized in Table 4.3.C below. Appendix A provides CalEEMod output sheets.

Table 4.3.C: Short-Term Regional Construction Emissions

Construction Year	Peak Daily Regional Pollutant Emissions (lbs/day)							
	VOCs	NO_X	CO	SO_X	PM_{10}		$PM_{2.5}$	
					Fugitive	Exhaust	Fugitive	Exhaust
2024	1.6	49.6	38.6	0.1	5.6	1.6	0.9	1.4
2025	1.2	41.5	31.1	0.1	1.2	1.2	0.1	1.1
Peak Daily Emissions	**1.6**	**49.6**	**38.6**	**0.1**	**7.2**		**2.3**	
SCAQMD Threshold	**75.0**	**100.0**	**550.0**	**150.0**	**150.0**		**55.0**	
Significant?	**No**	**No**	**No**	**No**	**No**		**No**	

Source: Compiled by LSA Associates, Inc. (October 2023).
Note: PM_{10} and $PM_{2.5}$ fugitive emissions are from the mitigated results. The only "mitigation" measures applied in this modeling are required dust control measures per SCAQMD Rule 403.
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

As shown in Table 4.3.C, construction emissions associated with the project would not exceed the SCAQMD's thresholds for VOCs, NO_X, CO, SO_X, $PM_{2.5}$, and PM_{10}. Therefore, construction of the proposed project would not result in a cumulatively considerable increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State AAQS. Impacts would be **less than significant**.

Operational Emissions. Long-term air pollutant emission impacts are those associated with mobile sources (e.g., vehicle trips), energy sources (e.g., electricity), and area sources (e.g., landscape maintenance equipment use) related to the proposed project. The proposed project would include the construction of an approximately 6,400-foot-long, 18-inch-diameter pipeline within Washington Street between Fields Drive and Abelia Avenue. Upon completion of construction activities, operation of the proposed project would be conducted remotely and there would be no full-time dedicated staff at the site. EMWD staff may visit the site occasionally for routine maintenance activities. Based on the discussion included in Section 4.17, Transportation, no additional trips are anticipated due to implementation of the proposed project. As such, the project would not result in a significant increase in the generation of vehicle trips or vehicle miles traveled (VMT) that would increase air pollutant emissions. The project would not result in a substantial source of energy or area source emissions. Therefore, operation of the proposed project would not 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 AAQS. Impacts would be **less than significant**.

*c. Would the project expose sensitive receptors to substantial pollutant concentrations? **(Less Than Significant Impact)***

Sensitive receptors are people who have an increased sensitivity to air pollution or environmental contaminants. The SCAQMD defines structures that house persons (e.g., children, the elderly, persons with pre-existing respiratory or cardiovascular illness, and athletes and others who engage

in frequent exercise) or places where they gather (i.e., residences, schools, playgrounds, child-care centers, convalescent centers, retirement homes, and athletic fields) as sensitive receptors.

As previously discussed, LSTs are based on the ambient concentrations of that pollutant within the project SRA and the distance to the nearest sensitive receptor. The nearest sensitive receptors are single-family residential uses located adjacent to the project alignment. For the proposed project, the appropriate SRA for the LST is Perris Valley (SRA 24). Based on the anticipated construction equipment and the anticipated grading and ground-disturbing activities per day, it is assumed that the maximum daily disturbed area for the proposed project would be 3.5 acres.[15]

The results of the LST analysis for construction of the proposed project are summarized in Table 4.3.D below. As shown in Table 4.3.D, the proposed project would not result in an exceedance of a SCAQMD LST during project construction. Additionally, as discussed in Threshold 4.3.b, the proposed project operational activities would not be considered significant. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations during project construction or operation. Impacts would be **less than significant,** and mitigation is not required.

Table 4.3.D: Project Localized Construction Emissions

Source	Localized Construction Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
On-Site Project Emissions	49.5	37.5	2.8	1.6
Localized Significance Threshold	220.0	1,230.0	10.0	6.0
Exceeds Threshold?	**No**	**No**	**No**	**No**

Source: Compiled by LSA (October 2023).
Note: Source Receptor Area 19, based on a 3.5-acre construction disturbance daily area at a distance of 82 feet (25 meters).
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size

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

Construction. According to the SCAQMD, land uses generally associated with odor complaints include agricultural uses (livestock and farming), wastewater treatment plants, food processing plants, chemical plants, composting operations, refineries, landfills, dairies, and fiberglass molding facilities. The proposed project does not include any uses identified by SCAQMD as being associated with emitting objectionable odors.

Project construction would generate limited odors over the short term, primarily from equipment exhaust. The painting of buildings and structures or the installation of asphalt surfaces may also create odors. However, construction activity would be temporary and would cease after individual construction is completed. Additionally, construction activities that would generate odors are

[15] South Coast Air Quality Management District (SCAQMD). n.d. Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf (accessed February 2023).

expected to be isolated to the immediate vicinity of the construction site. Therefore, odors from construction equipment exhaust and installation of asphalt surfaces would not adversely affect a substantial number of people.

Additionally, EMWD would be required to implement standard control measures to limit fugitive dust and construction equipment emissions, which would reduce odor impacts, in accordance with SCAQMD Rules 402, 1108, and 1113. SCAQMD Rule 402 regarding nuisances states: "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property." SCAQMD Rule 1113, limits the VOC content of architectural coatings (e.g., paint), and SCAQMD Rule 1108 identifies standards regarding the application of asphalt. Adherence to the standards identified in SCAQMD Rules 1113 and 1108 is required for all construction projects to reduce emissions and objectionable odors impacts.

Adherence to the SCAQMD Rules 402, 1108, and 1113 identified above and Title 13, Section 2449(d)(D) of the California Code of Regulations would reduce odor impacts to people on or near the project site during construction. Additionally, as previously discussed, construction activities would be temporary, and odors generated from construction activities would be isolated to the immediate vicinity of the construction site. Therefore, project construction activities would not result in other emissions (e.g., those leading to odors) adversely affecting a substantial number of people. Impacts would be **less than significant**.

Operation. Land uses generally associated with long-term objectionable odors include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting operations, refineries, landfills, dairies, and fiberglass-molding facilities. The proposed project would include the construction of an approximately 6,400-foot-long, 18-inch-diameter pipeline within Washington Street between Fields Drive and Abelia Avenue. As described above, operation of the proposed project would be conducted remotely and there would be no full-time dedicated staff at the site. EMWD staff may visit the site occasionally for routine maintenance activities. Therefore, operation of the proposed project would not result in other emissions (e.g., those leading to odors) adversely affecting a substantial number of people. Impacts would be **less than significant**.

4.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
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?	☐	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☒
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?	☐	☐	☐	☒

*a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? **(Less Than Significant with Mitigation Incorporated)***

The following section is based on the Biological Resources Assessment[16] prepared for the proposed project. This report is included as Appendix B.

To address regional biological resources and habitat sustainability, the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) was developed in 2001 by the County of Riverside in cooperation with State and federal agencies. The MSHCP applies to unincorporated and incorporated Riverside County land, excluding Native American tribal land, west of the crest of the San Jacinto Mountains to the Orange County line. It applies to a total area of approximately 1.26 million acres (approximately 1,997 square miles) and is one of the largest conservation plans in

[16] LSA Associates, Inc. 2023. *Biological Resources Assessment for the Washington Street Transmission Main Project, Winchester, California* (LSA Project No. EWD2101.03). August 17.

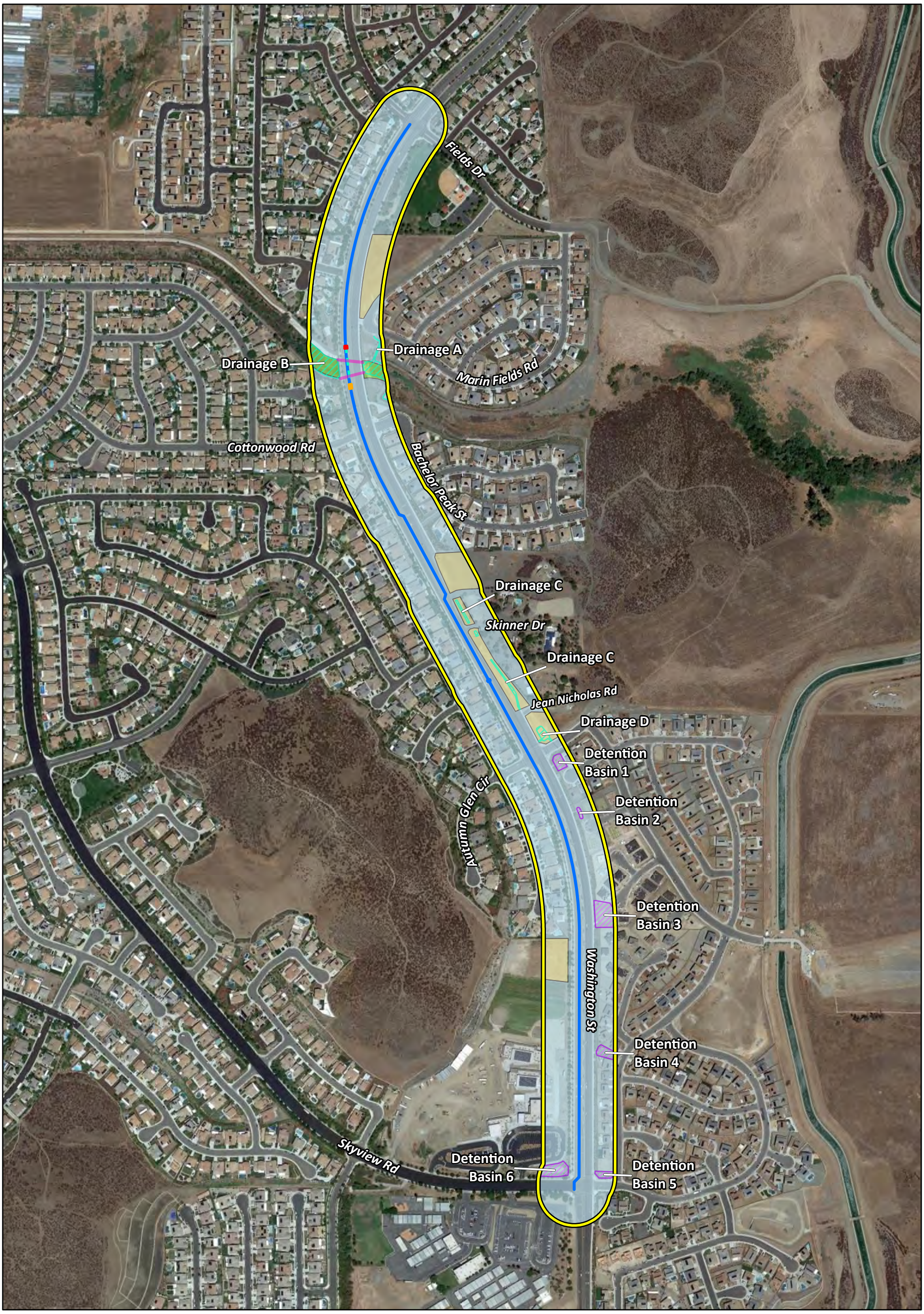
the United States. The MSHCP covers multiple species and multiple habitats within multiple jurisdictions.

The MSHCP was conceived, developed, and is being implemented specifically to address direct, indirect, cumulative, and growth-related effects on covered species resulting from buildout of planned land use and infrastructure. The MSHCP involves efforts by the County, State, and federal governments, the 14 cities in western Riverside County, and private and public entities engaged in construction activities that potentially affect the species covered under the MSHCP. The plan specifies an obligation of local projects, both public and private, to mitigate their impacts on species.

EMWD is CEQA lead agency, but not a signatory to the MSHCP. EMWD is not pursuing a Participating Special Entity (PSE) designation for the project site. The MSHCP defines PSE agencies as any regional public facility provider, such as a utility company, or public district, or any other agency that owns land or operates a facility within the MSHCP plan area. Due to the project not being processed through the MSHCP for covered species, the project is subject to the federal and/or State endangered species acts for threatened, endangered, and/or candidate species.

The project site is located within the unincorporated community of Winchester and within the boundaries of the MSHCP. The proposed project occurs within a mapped MSHCP Burrowing Owl Survey Area, Narrow Endemic Plant Species Survey Area (NEPSSA), and Criteria Area Species Survey Area (CASSA) plant species. As noted above, the EMWD is not signatory to the MSHCP, and surveys for these species would not be required, with the exception of burrowing owl (*Athene cunicularia* [BUOW]). No CASSA plant species, NEPSSA species, or BUOW, their sign or suitable burrows were observed during the reconnaissance survey conducted on July 17, 2023.

The proposed project site is a paved public road right-of-way within Washington Street; therefore, a "developed/ disturbed" category is applicable to the site. The project study area is defined as the project site and areas within a surrounding 200-foot buffer. As shown in Figure 4.4-1, the project study area primarily consists of developed/disturbed but also contains nonnative grassland and riparian scrub. The project study area is described as having a few undeveloped lands adjacent to the east and west side of Washington Street. These undeveloped lands contain nonnative grassland. Additionally, approximately 300 feet north of Bachelor Peak Street and Washington Street exists a natural drainage crossing that flows in an east-west direction underneath Washington Street. This natural drainage crossing, also referred to in this document as Drainage B, contains riparian scrub. Nonnative grassland and riparian scrub present may potentially be suitable habitat for special-status species. No special-status species were observed on the project site during the reconnaissance-level field survey. The special-status species analysis and database review within a 3-mile radius of the project site revealed six special-status species with the potential to occur within the limits of the project study area.



LSA

Proposed Plans 200-ft Buffer

Proposed Project
- Water Line
- Jack and Bore Line
- Jacking Pit Location
- Receiving Pit Location

Vegetation and Land Use
- Developed/Disturbed (56.07 acres)
- Nonnative Grassland (4.06 acres)
- Riparian Scrub (0.66 acres)

Potential Jurisdictional Features
- Drainage
- Detention Basin
- Drainage B flow under Washington Street

N

0 250 500
FEET

SOURCE: Google (2020)

FIGURE 4.4-1

Washington Street Transmission Main Project

Vegetation, Land Use, and Potential Jurisdictional Features

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Of the six special-status species with the potential to occur within the limits of the project study area, Parry's spineflower (*Chorizanthe parryi* var. *parryi*), coast horned lizard (*Phrynosoma blainvillii coronatum*), loggerhead shrike (*Lanius ludovicianus*), northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), and Stephens' kangaroo rat (*Dipodomys stephensi*) are considered to have a low probability for occurrence because the project site is entirely developed, but contains suitable habitat in areas that are small in size and isolated. Parry's spineflower has a State plant rank of 1B.1. Coast horned lizard, loggerhead shrike, and northwestern San Diego pocket mouse are all State Species of Special Concern (SSC). Stephens' kangaroo rat (SKR) is federally listed as endangered and State listed as threatened.

The project area contains a small amount of riparian scrub with the potential to provide habitat for the federally and State-listed endangered least Bell's vireo (*Vireo bellii pusillus* [LBVI]), which is the only special-status species considered to have a moderate probability for occurrence. The riparian scrub vegetation would be avoided by installing the pipe utilizing a jack-and-bore technique. Although burrowing owl is not expected to occur within the undeveloped lands adjacent to the site due to being small and isolated from larger habitat, in most of the undeveloped areas there is evidence of the species in the region and it may be adversely affected, if present.

During the bird breeding season (typically February 1 through August 31), the project site may be used by hawks, ravens, or other common or special-status open ground birds for nesting. Shrubs and other vegetation may provide nest sites for smaller birds, and burrowing owls may nest in ground squirrel burrows, pipes, or similar features. Direct impacts to sensitive and common avian species from development of the project site would be reduced to less than significant levels with implementation of **Mitigation Measure BIO-1** by ensuring that nesting birds would be protected until the young have fledged. Potentially occurring federal or State-listed species within the project vicinity are discussed below.

Mitigation Measure BIO-1 Vegetation, including suitable nesting habitat for birds, should be removed outside the bird nesting season (February 1 through August 31). If vegetation cannot be removed outside the bird nesting season (February 1 through August 31), nesting bird surveys should be conducted within 3 days prior to project ground disturbance or vegetation removal to ensure that nesting birds protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code are not disturbed by construction-related activities (i.e., brush clearing and noise). If nesting birds are documented on or in the immediate vicinity (approximately 300 feet) of the project site, no construction or clearing shall be conducted within an appropriate avoidance buffer surrounding the active nest(s), as determined by a qualified biologist, until the project biologist determines that the young have fledged or the nest is no longer active.

During the reconnaissance survey conducted on July 17, 2023, LSA biologists noted suitable riparian habitat for LBVI located adjacent to Washington Street, as shown in Figure 4.4-1. Although LBVI was not observed during the field survey, there is potential for this species to occupy areas adjacent to

the site prior to development of the project. LBVI may be subject to indirect noise disturbance through project implementation, therefore, mitigation is required to ensure that indirect impacts to LBVI would be reduced to a less than significant level. LBVI are federally listed as endangered, State-listed as endangered, and are covered and considered adequately conserved under the MSHCP, but still require focused surveys within designated survey areas containing suitable habitat. **Mitigation Measure BIO-2** has been identified to address potential impacts to LBVI. Implementation of this measure would ensure that no direct or indirect impacts to LBVI would occur by requiring that active nests and occupied habitats are avoided and protected with appropriate buffers.

Mitigation Measure BIO-2

In order to avoid impacts to the least Bell's vireo, focused least Bell's vireo breeding season surveys (April through July) are required in accordance with the Least Bell's Vireo Survey Guidelines (USFWS 2001)[17] if construction activities are expected to take place during the breeding season. Survey visits should be at least 10 days apart and spaced in order to maximize the detection of late and early arrivals, females, territorial males, "non-vocal" birds of both sexes, and nesting pairs. The eight focused surveys should start on or about April 10 and end by July 31. During the surveys, a qualified biologist familiar with the songs, whisper songs, calls, scolds, and plumage characteristics of adult and juvenile LBVI will survey the project area and adjacent potentially suitable LBVI habitat. Each survey will be conducted between dawn and 11:00 a.m. and avoid periods of excessive or abnormal cold, heat, wind, rain, or other inclement weather conditions.

If least Bell's vireo is found to be present, consultation with the wildlife agencies (USFW and California Department of Fish and Wildlife [CDFW]) shall be required to acquire take authorization or the Eastern Municipal Water District (EMWD) can decide to pursue a PSE designation for the project.

During the survey conducted on July 17, 2023, LSA biologists noted nonnative grassland habitat located adjacent to the east side of Washington Street, approximately 600 feet south of Fields Drive, north of Autumn Glen Circle, and on the west side, approximately 350 feet north of Skyview Road. No evidence of BUOW was identified on the project site. The location of the proposed project is within an urban environment with high levels of disturbance. Suitable undeveloped areas for BUOW are small in size and isolated. The soil within the project study area is suitable for ground squirrels to create burrows on site; however, none were observed. The proposed project site lacks suitable habitat for BUOW. Small patches of nonnative grassland within the project study area are disjunct, and the species is not anticipated to occur. However, this species may be indirectly impacted by noise disturbance from project activities should they occur adjacent to nonnative grasslands. Mitigation is required to ensure that impacts to BUOW would be reduced to a less than significant level. **Mitigation Measure BIO-3** has been identified to address potential impacts to BUOW.

[17] United States Fish and Wildlife Service (USFWS). 2001. *Least Bell's Vireo Survey Guidelines*. Ecological Services, Carlsbad Fish and Wildlife Service, California.

Implementation of this measure would ensure that no direct or indirect impacts to BUOW would occur by requiring that active nests are avoided and protected with appropriate buffers or that burrowing owls occupying the site could potentially be relocated by a qualified biologist through consultation with the CDFW.

Mitigation Measure BIO-3

In order to avoid potential indirect impacts to burrowing owl, a preconstruction survey for burrowing owl shall be required within 14 days prior to any ground-disturbing activities in accordance with the 2012 CDFW *Staff Report on Burrowing Owl Mitigation*. The preconstruction survey shall be conducted in the undeveloped lots containing nonnative grassland located adjacent to the site using the CDFW-accepted protocol.

During the surveys, a qualified biologist shall survey a 500-foot buffer, or to the edge of the property if less than 500 feet, for burrows that could be used by burrowing owl. If a burrow is located, the biologist will determine whether an owl is present in the burrow. If the burrow is determined to be occupied, consultation with CDFW shall be required to acquire take authorization and to mitigate accordingly due to EMWD not pursuing a PSE designation for the project site.

The project is within the Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP) area, a region-wide plan for species permitting and conservation so that individual projects could receive Federal Endangered Species Act (FESA) take authority for the species through the County, rather than individually. The SKR HCP is independent of the MSHCP. Stephens' kangaroo rat is federally and State listed as threatened. This species has been "reclassified" from endangered to threatened in February of 2022 by the United States Fish and Wildlife Service (USFWS) along with a concurrent FESA "4(d) rule" for management activities in approved management plans.[18] Although there is low potential for Stephens' kangaroo rat to occur within the project site due to regular discing and disturbance of the undeveloped lands adjacent to the site, EMWD is exempt from payment of the SKR HCP fee. Furthermore, suitable habitat for this species will not be impacted by the proposed project and no further action is required to comply with the SKR HCP and to obtain coverage for this species. If SKR is found in the survey area, EMWD may opt in to obtain coverage.

With implementation of **Mitigation Measures BIO-1** through **BIO-3**, impacts to special-status species that could be present in the project vicinity would be reduced to **less than significant with mitigation incorporated.**

[18] Riverside County Habitat Conservation Agency (RCHCA). 2022. The Stephens' Kangaroo Rat. Website: https://rchca.us/183/Stephens-Kangaroo-Rat (accessed July 17, 2023).

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? ***(No Impact)***

The reconnaissance-level biological resources assessment survey determined that the project site is entirely developed and does not contain any sensitive habitats. However, the proposed project is found adjacent to undeveloped lands that could result in indirect impacts to special-status species by noise disturbance. The nearest Critical Habitat unit is approximately 0.2 mile east of the project site and is part of southwest Riverside Unit 2 of USFWS-designated Critical Habitat for the federally listed as endangered and State special animal Quino checkerspot butterfly (*Euphydryas editha quino*). However, no portion of the project site is located in or adjacent to southwest Riverside Unit 2 or any other critical habitat. Riparian scrub and nonnative grassland can be found adjacent to the project site but would be avoided due to being present outside of the project limits.

A search of the California Natural Diversity Database (CNDDB) indicates the nearest sensitive habitat is Southern Cottonwood Willow Riparian Forest, which is located approximately 0.9 mile east of the project site. However, the field survey noted riparian scrub located adjacent to the east and west of the project site, approximately 300 feet north of Bachelor Peak Street and Washington Street. This natural drainage crossing, Drainage B, flows in an east-west direction underneath Washington Street. As part of the field survey, LSA biologists mapped all potential jurisdictional features within the project study area. It is noted that potential permits and approvals related to aquatic resources are not expected to be required because the proposed project would avoid all potential jurisdictional features and remain within the Washington Street right-of-way between Fields Drive and Abelia Street. This includes the avoidance of Drainage B, which is the only feature that crosses the project alignment. Drainage B and associated riparian scrub would be avoided by utilizing a jack-and-bore technique, thereby going under and avoiding the drainage.

Therefore, implementation of the proposed project would have **no impact** on any riparian habitat or other sensitive natural community identified in local or regional plans (i.e., MSHCP), policies, regulations, or by the CDFW or USFWS.

c. Would the project 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)***

No known federally or State-protected wetlands are present on the project site as seen on the National Wetlands Inventory Wetlands Mapper. LSA biologists conducted a field reconnaissance survey on July 17, 2023, where all potential jurisdictional features within the project study area were mapped. As show in Figure 4.4-1, the project study area consists of four drainage features (identified as A, B, C and D) and six detention basins (Detention Basins 1 through 6). As noted above, Drainage B is a natural drainage feature that flows in an east-west direction underneath Washington Street. Drainage B is the only feature that crosses the project alignment, and it would be avoided by utilizing a jack-and-bore technique, thereby going under and avoiding the drainage. All potential jurisdictional features within the project study area would be avoided, and approvals related to aquatic resources are not expected to be required because the proposed project would remain within the Washington Street right-of-way between Fields Drive and Abelia Street.

Since all potentially jurisdictional features within the project study area would be avoided, **no impact** to federally or State-protected wetlands would occur.

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? ***(Less Than Significant with Mitigation Incorporated)***

Habitat fragmentation occurs when a single, contiguous habitat area is divided into two or more areas, or where an action isolates the two or more new areas from each other. Isolation of habitat occurs when wildlife cannot move freely from one portion of the habitat to another or to/from one habitat type to another. Habitat fragmentation may occur when a portion of one or more habitats is converted to another habitat, as when scrub habitats are converted into annual grassland habitat because of frequent burning. Wildlife movement includes seasonal migration along corridors, as well as daily movements for foraging. Examples of migration corridors may include areas of unobstructed movement for deer, riparian corridors providing cover for migrating birds, routes between breeding waters and upland habitat for amphibians, and between roosting and feeding areas for birds.

The project site is located within the Washington Street right-of-way between Fields Drive and Abelia Street and mostly bordered by existing residential development on the majority of all four of its sides that already restrict wildlife movement in the project study area. However, undeveloped lands can be found sporadically on the east side of Washington Street approximately 600 feet south of Fields Drive and to the north of Autumn Glen Circle, and on the west side approximately 350 feet north of Skyview Road. These six parcels are comprised of nonnative grasslands and total 4.06 acres. Furthermore, 0.66 acre of riparian scrub exists within the drainage crossing located approximately 300 feet north of Bachelor Peak Street and Washington Street. Wildlife movement within the project study area is anticipated to be limited to wildlife present on site, present within Drainage B, or present on the undeveloped lands located to the east and west of the project site. Neither the site nor the adjacent properties to the east and west connect with larger contiguous segments of land that could offer opportunities for wildlife movement or act as a corridor.

The project site does not correspond to any natural landscape blocks, essential connectivity areas, or potential riparian connections as documented in the California Essential Habitat Connectivity (CEHC) Project report.[19] However, the CEHC Project report does indicate that part of the project study area is a natural landscape block. Specifically, areas adjacent to Washington Street from Jean Nicholas Road to Skyview Road, as shown on Figure 3 of the Biological Resources Assessment. The CEHC Project report describes a natural landscape block as a large, relatively natural habitat blocks that support native biodiversity. However, the project study area primarily consists of developed land and no longer provides for regional wildlife movement. Therefore, the proposed project would not substantially limit wildlife movement.

[19] Spencer, W.D., P. Beier, K. Penrod, K. Winters, C. Paulman, H. Rustigian-Romsos, J. Strittholt, M. Parisi, and A. Pettler. 2010. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. Prepared for the California Department of Transportation, the California Department of Fish and Game, and the Federal Highways Administration.

Most birds and their active nests are protected from "take" (meaning destruction, pursuit, possession, etc.) under the Migratory Bird Treaty Act (MBTA) and/or Sections 3503–3801 of the California Fish and Game Code. Activities that cause destruction of active nests or that cause nest abandonment and subsequent death of eggs or young may constitute violations of one or both of these laws. To avoid potential effects to fully protected raptors, special-status bird species, and other nesting birds protected by the California Fish and Game Code, and for compliance with MSHCP Incidental Take Permit Condition 5, State regulations require a nesting bird preconstruction survey to be conducted by a qualified biologist 3 days prior to ground-disturbing activities. Should nesting birds be found, an exclusionary buffer would be established by the qualified biologist. The buffer may be up to 500 feet in diameter depending on the species of nesting bird found. This buffer would be clearly marked in the field by construction personnel under guidance of the qualified biologist, and construction or clearing would not be conducted within this zone until the qualified biologist determines that the young have fledged or the nest is no longer active. Nesting bird habitat within the project site would be resurveyed during bird breeding season if there is a lapse in construction activities longer than 7 days. The nesting bird pre-construction survey would be satisfied through **Mitigation Measure BIO-1** as described above.

With implementation of **Mitigation Measure BIO-1,** impacts to potentially on-site nesting birds would be reduced to **less than significant with mitigation incorporated.**

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? ***(No Impact)***

The County of Riverside's tree preservation ordinance[20] (Chapter 12.24, Tree Removal) establishes requirements for tree removal in the unincorporated areas of Riverside County. It states that removal of native trees with a height of 30 feet and a diameter breast height of 12 inches on any land that is more than 0.5 acre and over 5,000 feet in elevation is not allowed without a permit. Native trees within the project study area are limited to coast live oak (*Quercus agrifolia*) and California sycamore (*Platanus racemosa*), which were sporadically planted as ornamentals along Washington Street in a residential area, making these installed trees landscaping trees. Additionally, arroyo willow (*Salix lasiolepis*) exists within the natural drainage crossing (i.e., Drainage B), however, no work will be conducted within Drainage B and no impact to these trees will occur. The project would not remove existing trees within the project study area; therefore, the project would not conflict with the County's tree removal ordinance.

Since the proposed project will not remove any native trees within the project study area, **no impact** to any local policies or ordinances protecting biological resources would occur.

[20] County of Riverside. 2023a. *Code of Ordinances Chapter 12.24 – Tree Removal*. June 27. Website: https://library.municode.com/ca/riverside_county/codes/code_of_ordinances?nodeId=TIT12STSIPUPL_CH12.24TRRE (accessed August 2023)

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? ***(No Impact)***

The proposed project is located within the MSHCP but EMWD is not signatory; therefore, the project is not subject to applicable provisions of the MSHCP as specified in Section 4.4.a above. EMWD is not pursuing a PSE designation for the project site, and the project would not be subject to MSHCP policies and procedures (e.g., Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools [MSHCP Section 6.1.2], Protection of the Narrow Endemic Plant Species [MSHCP Section 6.1.3], Additional Survey Needs and Procedures [MSHCP Section 6.3.2], and Urban/Wildland Interface Guidelines [MSHCP Section 6.1.4]).

As noted above, the project is within the SKR HCP fee area but EMWD, is exempt from this requirement and therefore, no further action is necessary to comply with the SKR HCP and obtain coverage for the species. If SKR is found in the survey area, EMWD may opt in to obtain coverage..

Since the proposed project is not signatory to the MSHCP and is exempt from payment of the SKR HCP fee, **no impact** to any local policies or ordinances protecting biological resources would occur.

4.5 CULTURAL RESOURCES

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

*a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? **(Less Than Significant with Mitigation Incorporated)***

For a cultural resource to be considered a historical resource (i.e., eligible for listing in the California Register of Historical Resources [California Register]), it generally must be 50 years or older. Under CEQA, historical resources can include precontact (i.e., Native American) archaeological deposits, historic-period archaeological deposits, historic buildings, and historic districts. To identify cultural resources at the project site, the following tasks were completed: (1) a records search at the Eastern Information Center of the California Historical Resources Information System; (2) a review of historical maps and aerial photographs to assess the potential for buried precontact and historic-period archaeological deposits; and (3) a field survey of the project site by a qualified archaeologist. The EMWD also undertook consultation outreach with California Tribal organizations pursuant to the requirements of Assembly Bill (AB) 52 (refer to Section 4.18, Tribal Cultural Resources).

Records Search. Data from the records search conducted at the Eastern Information Center indicate there have been 23 previous studies within 0.5 mile of the project site, 4 of which included portions of the project area. Although one resource is documented within the project area (33-13871, a segment of Winchester Road), this is erroneous (see the Field Survey section, below). An additional 12 resources have been recorded within 0.5 mile, including 6 prehistoric resources and 2 multi-component sites with both prehistoric and historic elements. The nearest prehistoric resource located approximately 75 meters west of the project area appears to have been removed sometime prior to 1980.

Field Survey. On July 12, 2023, a combination windshield and intensive pedestrian survey of the project alignment was conducted. Because the project alignment is a segment of road right-of-way in a suburban residential area, the pedestrian survey focused on the unpaved and unlandscaped portions of the project alignment on the east side of Washington Street between Autumn Glen Circle and Summersweet Drive. Areas of exposed soil were examined for surface artifacts, and features and rodent burrow holes and aprons were inspected for evidence of subsurface resources. The project alignment has been subjected to severe disturbance from road construction and no native (original) soil surfaces remain, but the route of Washington Street itself is historic in age.

Washington Street is realigned upon the previously documented historic-period route of Washington Avenue established in the late 19th century. The current project alignment lacks integrity of both materials (it was originally a dirt road) and setting (which was originally rural rather than suburban). As such, it does not meet any of the criteria either as an individual resource or a contributor to the eligibility of the entire resource for listing in the California Register, and it is neither a "unique archaeological resource" nor a "historical resource" under CEQA.

Summary of Results. A cultural resources records search and a field survey were conducted for the project area. Although the route of Washington Street is historic in age, the road itself has been realigned and improved (paved) and its setting obliterated by suburban development. The road's original integrity has been critically compromised, leaving it neither a "unique archaeological resource" nor a "historical resource" under CEQA. Despite the resources documented within 0.5 mile, the project alignment and immediate vicinity have sustained severe, deep disturbances from road construction/realignment and suburban development over the decades, and overall sensitivity for *in situ* undocumented subsurface resources is minimal. Therefore, neither further investigation nor archaeological monitoring is recommended.

Despite the negative results of the field survey, should archaeological deposits be encountered during project ground disturbance, a substantial adverse change in the significance of a historical resource would occur from its demolition, destruction, relocation, or alteration such that the significance of the resource would be materially impaired (*State CEQA Guidelines* Section 15064.5(b)(1)). To mitigate this potential impact, the EMWD would be required to implement **Mitigation Measure CULT-1 CULT-2**, and **CULT-3**, below. With implementation of **Mitigation Measure CULT-1**, **CULT-2**, and **CULT-3**, potential impacts to historical resources would be reduced to less than significant.

Mitigation Measure CULT-1 Prior to grading activities, a Cultural Resources Monitoring Plan (plan) shall be prepared by a qualified archaeologist in consultation with the Consulting Tribe(s). The plan shall also identify the location and timing of cultural resources monitoring. The plan shall contain an allowance for the qualified archaeologist, based on observations of subsurface soil stratigraphy or other factors during initial grading, and in consultation with the Native American monitor and the lead agency, may reduce or discontinue monitoring as warranted if the archaeologist determines that the possibility of encountering archaeological deposits is low. The plan shall outline the appropriate measures to be followed in the event of unanticipated discovery of cultural resources during project implementation (including the survey to occur following vegetation removal and monitoring during ground-disturbing activities). The plan shall identify avoidance as the preferred manner of mitigation impacts to cultural resources. The plan shall establish the criteria utilized to evaluate the historic significance (per CEQA) of the discoveries, methods of avoidance consistent with CEQA Guidelines Section 15126.4(b)(3), as well as identify the appropriate data recovery

methods and procedures to mitigate the effect of the project if avoidance of significant historical or unique archaeological resources is determined to be infeasible. The plan shall also include reporting of monitoring results within a timely manner, disposition of artifacts, curation of data, and dissemination of reports to local and state repositories, libraries and interested professionals. A qualified archaeologist and Consulting Tribe(s) tribal monitor shall attend a pre-grade meeting with Eastern Municipal Water District staff, the contractor, and appropriate subcontractors to discuss the monitoring program, including protocols to be followed in the event that cultural material is encountered.

Mitigation Measure CULT-2 Should an archaeological deposit be encountered during project subsurface construction activities, all ground-disturbing activities within 25 feet shall be redirected and a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology contacted to assess the situation, determine if the deposit qualifies as a historical resource, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. If the deposit is found to be significant (i.e., eligible for listing in the California Register of Historical Resources), the Easter Municipal Water District (EMWD) shall be responsible for funding and implementing appropriate mitigation measures. Mitigation measures may include recording the archaeological deposit, data recovery and analysis, and public outreach regarding the scientific and cultural importance of the discovery. Upon completion of the selected mitigations, a report documenting methods, findings, and recommendations shall be prepared by the qualified archaeologist and submitted to the EMWD for review, and the final report shall be submitted to the Eastern Information Center. Significant archaeological materials shall be submitted to an appropriate local curation facility and used for future research and public interpretive displays, as appropriate.

Mitigation Measure CULT-3 Artifacts discovered at the development site shall be inventoried and analyzed by the project archaeologist and tribal monitor(s). A monitoring report will be prepared, detailing the methods and results of the monitoring program, as well as the disposition of cultural material encountered. If no cultural material is encountered, a brief letter report will be sufficient to document monitoring activities.

Mitigation Measure CULT-1 requires work stoppage in the event of an archaeological discovery, **Mitigation Measure CULT-2** requires the preparation of a Cultural Resources Monitoring Plan, and

Mitigation Measure **CULT-3** requires an evaluation of discovered artifacts. With implementation of these Mitigation Measures, potential impacts to archaeological historical resources would be reduced to a **less than significant level with mitigation incorporated**.

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? ***(Less Than Significant with Mitigation Incorporated)***

According to the *State CEQA Guidelines*, "When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource" (*State CEQA Guidelines* Section 15064.5(c)(1)). Those archaeological sites that do not qualify as historical resources shall be assessed to determine if these qualify as "unique archaeological resources" (California Public Resources Code [PRC] Section 21083.2).

Archaeological deposits identified during project construction shall be treated by the EMWD—in consultation with a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology—in accordance with **Mitigation Measure CULT-1**, **CULT-2**, and **CULT-3**. With implementation of **Mitigation Measure CULT-1**, **CULT-2**, and **CULT-3**, identified above, impacts to archaeological resources would be **less than significant with mitigation incorporated**.

c. Would the project disturb any humans remains, including those interred outside of formal cemeteries? ***(Less Than Significant with Mitigation Incorporated)***

Based on previous archaeological investigation and analysis, there is a low potential for the disturbance of archaeological cultural resources or human remains at the project site. However, if human remains are encountered at the project site, State Health and Safety Code Section 7050.5 and *State CEQA Guidelines* Section 15064.5(e)(1) state that no further disturbance shall occur to the area of the find until the County Coroner has made a determination of origin and disposition of the human bone pursuant to PRC Section 5097.98. The County Coroner must be notified of the find immediately and shall make a determination within 2 working days of being notified. If the remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission (NAHC) by phone within 24 hours, and the NAHC shall then immediately determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection and make recommendations or preferences for treatment of the remains within 48 hours of being granted access to the site. The MLD's recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials, preservation of Native American human remains and associated items in place, relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment.

Mitigation Measure CULT-4 If Native American human remains are encountered, Public Resources Code Section 5097.98 and California Health and Safety Code Section 7050.5 will be followed. If human remains are encountered no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to the origin.

Further, pursuant to California Public Resources Code Section 5097.98(b), the remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the coroner shall contact the NAHC within 24 hours. Subsequently, the NAHC shall identify the person or persons it believes to be the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

With implementation of **Mitigation Measure CULT-4,** which requires compliance with Section 7050.5 of the California Health and Safety Code and PRC Section 5097.98 regarding the treatment of human remains, impacts to human remains would be **less than significant with mitigation incorporated**.

4.6 ENERGY

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

The project site is within the service territory of Southern California Edison (SCE). SCE provides electricity to more than 15 million people in a 50,000-square-mile area of Central, Coastal, and Southern California.[21] According to the California Energy Commission (CEC), total electricity consumption in the SCE service area in 2021 was 103,045 gigawatt-hours (GWh) (36,375 GWh for the residential sector and 51,057 GWh for the non-residential sector). Total electricity consumption in Riverside County in 2021 was 16,767.2 GWh (16,767,235,877 kilowatt-hours [kWh]).[22]

Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and sport utility vehicles. According to the most recent data available, total gasoline consumption in California was 319,514 thousand barrels or 1,613.5 trillion British thermal units (BTU) in 2021.[23] Of the total gasoline consumption, 302,881 thousand barrels or 1,529.5 trillion BTU were consumed for transportation.[24] Based on fuel consumption obtained from CARB's California Emissions Factor Model, Version 2021 (EMFAC2021), approximately 755.0 million gallons of gasoline and approximately 299.1 million gallons of diesel would be consumed from vehicle trips in Riverside County in 2023.

*a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation? **(Less Than Significant Impact)***

The proposed project would not increase the demand for electricity and gasoline when compared to existing site conditions. The discussion and analysis provided below is based on the data included in the CalEEMod output, which is included in Appendix A.

Construction-Period Energy Use. The anticipated construction schedule assumes that the proposed project would be built over approximately 6 months. Project construction activities would include demolition, grading, trenching, pipeline construction, and paving activities.

[21] Southern California Edison (SCE). 2020. About Us. Website: https://www.sce.com/about-us/who-we-are (accessed December 2022).
[22] California Energy Commission (CEC). 2020a. Electricity Consumption by County. Website: http://www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed December 2022).
[23] A British Thermal Unit is defined as the amount of heat required to raise the temperature of 1 pound of water by 1° Fahrenheit.
[24] United States Energy Information Administration (EIA). 2021. California State Profile and Energy Estimates. Table F3: Motor gasoline consumption, price, and expenditure estimates, 2021. Website: eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_mg.html&sid=CA (accessed December 2022).

Construction of the proposed project would require energy for the manufacture and transportation of building materials and for preparation of the site for grading activities and construction. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities.

Construction activities are not anticipated to result in an inefficient use of energy because gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the proposed project. Energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. Therefore, construction energy impacts would be less than significant, and no mitigation would be required.

Operational Energy Use. Operational energy use is typically associated with natural gas use, electricity consumption, and fuel used for vehicle trips associated with the project.

As discussed above, the proposed project would include the construction of an approximately 6,400-foot-long, 18-inch-diameter pipeline within Washington Street between Fields Drive and Abelia Avenue. Upon completion of construction activities, operation of the proposed project would be conducted remotely and there would be no full-time dedicated staff at the site. EMWD staff may visit the site occasionally for routine maintenance activities. Based on the analysis in Section 4.17, Transportation, no additional trips are anticipated due to implementation of the proposed project; as such, the proposed project is not expected to generate a substantial increase in fuel used for vehicle trips.

Implementation of the proposed project would not result in additional energy consumption. Therefore, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources. Impacts would be **less than significant**, and no mitigation measures would be necessary.

*b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? **(Less Than Significant Impact)***

As indicated above, energy usage on the project site during construction would be temporary in nature. In addition, once operational, the proposed project would not result in additional energy consumption. As such, the proposed project would not conflict with California's energy conservation plans as described in the CEC's 2023 Integrated Energy Policy Report. Thus, as shown above, the proposed project would avoid or reduce the inefficient, wasteful, and unnecessary consumption of energy and would not result in any irreversible or irretrievable commitments of energy. Therefore, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Impacts would be **less than significant**.

4.7 GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☐	☒
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
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?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

a. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

*i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. **(No Impact)***

Surface rupture occurs when the ground surface is broken due to fault movement during an earthquake. The location of surface rupture generally can be assumed to be along an active or potentially active major fault trace.

The State of California enacted the Alquist-Priolo Fault Zoning Act in 1972, requiring the State Geologist to delineate Earthquake Fault Zones (EFZs) along known active faults that have high potential for fault rupture. The project site is not located within a designated EFZ.[25] Therefore, the proposed project would not expose people or structures to potential substantial adverse

[25] California Geological Survey (CGS). 2016. California Earthquake Hazards Zone Application. Website: https://maps.conservation.ca.gov/cgs/EQZApp/app/ (accessed July 10, 2023).

effects, including the risk of loss, injury, or death involving the rupture of a known earthquake fault. **No impact** would occur.

*ii. Strong seismic ground shaking? **(Less Than Significant Impact)***

Ground shaking is a general term referring to all aspects of motion of the earth's surface resulting from an earthquake and is normally the major cause of damage in seismic events. The extent of ground shaking is controlled by the magnitude and intensity of the earthquake, distance from the epicenter, and local geologic conditions. The magnitude of a seismic event is a measure of the energy released by an earthquake; it is assessed by seismographs that measure the amplitude of seismic waves. The intensity of an earthquake is a subjective measure of the perceptible effects of a seismic event at a given point. The Modified Mercalli Intensity (MMI) scale is the most commonly used scale to measure the subjective effects of earthquake intensity. It uses values ranging from I to XII.[26] The closest fault to the project site is the Murietta Hot Spring Fault, located approximately 4 miles to the southwest.[27]

Buried pipelines, like the proposed project, are generally less susceptible to damage from strong ground shaking than aboveground structures since belowground pipelines are typically embedded in compacted backfill that can tolerate more seismic movement. Accepted procedures for placement of the water lines and construction measures necessary to minimize potential adverse effects have been incorporated into the project design. The proposed project would be required to comply with the most current California Building Code (CBC) standards, which stipulate appropriate seismic design provisions that shall be implemented with project design and construction. Compliance with the CBC, the recommendations in the Limited Preliminary Geotechnical Investigation,[28] EMWD standards, and the latest edition of the Standard Specifications for Public Works Construction[29] would reduce any potential impacts related to on-site seismic ground shaking to a less than significant level. While the project site would be exposed to seismic ground shaking, the proposed project would not cause or exacerbate strong seismic ground shaking that would expose people or structures to significant risk of injury or loss of property. Therefore, the proposed project would not expose people or structures to substantial effects related to ground shaking, and this impact would be **less than significant**.

*iii. Seismic-related ground failure, including liquefaction? **(Less Than Significant Impact)***

Liquefaction is the transformation of saturated, loose, fine-grained sediment to a fluid-like state because of earthquake shaking or other rapid loading. Soils most susceptible to liquefaction are

[26] United States Geological Survey. 2018. The Modified Mercalli Intensity Scale. Website: www.usgs.gov/natural-hazards/earthquake-hazards/science/modified-mercalli-intensity-scale?qt-science_center_objects=0#qt-science_center_objects (accessed July 10, 2023).

[27] California Department of Conservation (DOC). 2015. Fault Activity Map of California. Website: https://maps.conservation.ca.gov/cgs/fam/ (accessed July 20, 2023).

[28] Geocon West, Inc. 2022. *Limited Preliminary Geotechnical Investigation, Potable Water Main, Washington Street from Fields Drive to Abelia Street, French Valley Area of Riverside County, California*. November 14.

[29] Public Works Standards, Inc. 2021. "Greenbook" Standard Specifications for Public Works Construction, published by BNI Building News.

loose to medium dense, saturated sands, silty sands, sandy silts, non-plastic silts and gravels with poor drainage, or those capped by or containing seams of impermeable sediment.

The California Geological Survey (CGS) has mapped Seismic Hazard Zones that delineate areas susceptible to liquefaction and/or landslides that require proposed new developments in these areas to conduct additional investigation to determine the extent and magnitude of potential ground failure. According to CGS,[30] the northernmost portion of the project alignment between Cottonwood Road and Washington Park is located within a Seismic Hazard Zone for liquefaction. In addition, the Preliminary Geotechnical Investigation indicates that loose, cohesionless, and sloughing soils may be encountered during excavation activities.[31]

The objective of the project is to enhance the hydraulic reliability of the regional water distribution system connected to the newly approved Belle Terre Water Storage Tank. The new pipeline would reduce the potential for leaks and breaks that could take place along the pipeline, resulting in unplanned water service outages. As described in Section 4.7.a.iii., accepted procedures for placement of the water lines and construction measures necessary to minimize potential adverse effects have been incorporated into the project design. Additionally, the proposed project would not include structures for human occupancy. Therefore, the impact of seismic-related ground failure, including liquefaction, would be **less than significant**.

*iv. Landslides? **(No Impact)***

The project area and surrounding vicinity is generally level, and the surfaces along the project alignment are primarily impervious. The project site is located within a developed urban area and is not located within an earthquake-induced or rainfall-induced landslide zone.[32] Therefore, the project area is not subject to landslides. Implementation of the project would not adversely impact persons or structures due to landslides. **No impact** would occur.

*b. Would the project result in substantial soil erosion or the loss of topsoil? **(Less Than Significant Impact)***

During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions during the period of earthwork activities and between the time when earthwork is completed, and new vegetation is established or hardscape is installed. As discussed in Section 4.10(c)(i), because construction of the project would disturb more than 1 acre of soil, the proposed project would be subject to the requirements of the State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharge Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, as amended by Orders No. 2010-0014-DWQ and 2012-0006-DWQ, NPDES No. CAS000002) (CGP). Therefore, preparation of a Stormwater

30 California Geological Survey (CGS). 2021. Earthquake Zones of Required Investigation. Website: https://maps.conservation.ca.gov/cgs/EQZApp/app/ (accessed July 10, 2023).

31 Geocon West, Inc. 2022. *Limited Preliminary Geotechnical Investigation, Potable Water Main, Washington Street from Fields Drive to Abelia Street, French Valley Area of Riverside County, California*. November 14.

32 California Geological Survey. 2021. Earthquake Zones of Required Investigation. Website: https://maps.conservation.ca.gov/cgs/EQZApp/app/ (accessed July 10, 2023).

Pollution Prevention Plan (SWPPP) and implementation of Erosion Control and Sediment Control Best Management Practices (BMPs) would be required. The SWPPP would provide the details of the erosion control measures to be applied on the project site during the construction period, including BMPs for erosion control that are recognized by the Regional Water Quality Control Board (RWQCB). Implementation of a SWPPP as required by the CGP and as specified in Section 2.6, Environmental Commitments, would ensure that potential impacts related to soil erosion and loss of topsoil associated with project construction would be reduced to a **less than significant** level.

Operation of the project would be similar to the existing condition and would not result in any increase in impervious surface area or an associated increase in the rate and volume of stormwater runoff. Therefore, implementation of the project would not result in any long-term operational impacts related to soil erosion or loss of topsoil.

c. Would the project 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)***

Please refer to Section 4.7.a. As previously described, the project site is located on relatively level terrain and is currently developed. The proposed pipeline would be designed and constructed with adequate foundations and bedding in accordance with the CBC, standard engineering practices, and the recommendations of the geotechnical investigation. The project site is not anticipated to become unstable as a result of the proposed project or potentially result in on- or off-site landslides, liquefaction, or lateral spreading. Therefore, the proposed project would not result in a geologic hazard from landslide, lateral spreading, subsidence, liquefaction, or collapse, and the impact would be **less than significant**.

d. Would the project 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)***

Expansion and contraction of volume can occur when expansive soils undergo alternating cycles of wetting (swelling) and drying (shrinking). During these cycles, the volume of the soil changes markedly. Changes in soil volume could result in significant expansion pressure on any structures proposed as part of future development of the project site. Expansive soils are common throughout California and can cause damage to foundations and slabs unless properly treated during construction.

Soil types found on the project site include Escondido fine sandy loam (2 to 8 percent slopes), Ramona very fine sandy loam (0 to 8 percent slopes), Hanford coarse sandy loam (2 to 8 percent slopes), Lodo rocky loam (8 to 25 percent slopes), and Friant fine sandy loam (5 to 25 percent slopes) according to the Natural Resources Conservation Service web soil survey.[33] The shrink-swell potential for these soil types is low.[34] The proposed project would be designed and constructed using standard

[33] United States Department of Agriculture Natural Resources Conservation Service. 2019. Web Soil Survey. Website: websoilsurvey.sc.egov.usda.gov/App/HomePage.htm (accessed July 10, 2023).

[34] United States Department of Agriculture Natural Resources Conservation Service. 1971. Soil Survey, Western Riverside Area, California. Website: https://archive.org/details/usda-westerniversideCA1971 (accessed August 15, 2023).

construction methods and in accordance with the CBC, EMWD specifications, and the recommendations in the Preliminary Geotechnical Investigation, which includes the appropriate selection of backfill materials that do not exhibit expansive behavior. Therefore, impacts associated with expansive soils would be **less than significant**.

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? ***(No Impact)***

Implementation of the project would not include installation of septic tanks or alternative wastewater disposal systems. Therefore, there would be **no impact** to soils and wastewater disposal.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? ***(Less Than Significant with Mitigation Incorporated)***

According to the locality search conducted by the Western Science Center (WSC), no records of fossil localities were identified within the boundaries of the project site or from Pleistocene-age deposits similar to those that occur at the surface of the project site. However, a review of fossil locality searches conducted by the WSC for previous paleontological resource assessments for nearby projects identified two projects that produced fossils from similar Pleistocene-age sediments: (1) the Diamond Valley Lake Project, located less than 5 miles north-northeast of the project site, and (2) the Eastside Pipeline Project, located north of the project site.

The project site contains Artificial Fill (which has no paleontological sensitivity), Rocks of Menifee Valley, Phyllite (which have low paleontological sensitivity), and Very Old Axial Channel Deposits (which have high paleontological sensitivity). Excavation is expected to extend to 5 feet deep along the majority of the length of the project for trenching and as deep as 20 feet at the channel crossing for trenching and jack and bore. Based on the boring logs in the Preliminary Geotechnical Investigation,[35] trenching at the southern and northern ends of the project and excavation of the boring pit would reach paleontologically sensitive sediments of the Very Old Axial Channel Deposits. Additionally, based on the boring logs, there is a possibility that the Very Old Axial Deposits would be reached during trenching south of the channel crossing and near Skinner Drive. As such, these activities have the potential to impact scientifically significant paleontological resources. Implementation of **Mitigation Measures GEO-1a through GEO-1c** would reduce project impacts on paleontological resources to a less than significant level.

Mitigation Measure GEO-1a A paleontologist who meets the qualifications established by the Society of Vertebrate Paleontology (SVP) shall be retained to develop a Paleontological Resources Impact Mitigation Program (PRIMP) for this project. The PRIMP shall be consistent with the standards of the SVP and include the methods that will be used to protect paleontological resources that may exist within the project site, as well as procedures for monitoring, fossil preparation and

[35] Geocon West, Inc. 2022. *Limited Preliminary Geotechnical Investigation, Potable Water Main, Washington Street from Fields Drive to Abelia Street, French Valley Area of Riverside County, California*. November 14.

identification, curation into a repository, and preparation of a report at the conclusion of grading.

Mitigation Measure GEO-1b Excavation and grading activities in deposits with high paleontological sensitivity (i.e., Very Old Axial Channel Deposits) shall be monitored by a qualified paleontological monitor following a PRIMP. No monitoring is required for excavations in deposits with no or low paleontological sensitivity (i.e., Artificial Fill and Rocks of Menifee Valley, Phyllite). If paleontological resources are encountered during the course of ground disturbance, the paleontological monitor shall have the authority to temporarily redirect construction away from the area of the find. In the event that paleontological resources are encountered when a paleontological monitor is not present, work in the immediate area of the find shall be redirected, and the paleontologist or paleontological monitor shall be contacted to assess the find for scientific significance. If determined to be scientifically significant, the fossil shall be collected from the field.

Mitigation Measure GEO-1c Collected resources shall be prepared to the point of identification, identified to the lowest taxonomic level possible, catalogued, and curated into the permanent collections of a museum repository. At the conclusion of the monitoring program, a report of findings shall be prepared to document the results of the monitoring program.

Implementation of **Mitigation Measures GEO-1a through GEO-1c** would reduce the level of the potential impact through monitoring during excavation in paleontologically sensitive formations; identification of paleontological resources during construction; the evaluation of unanticipated discoveries; and the recovery of significant paleontological data from those resources that warrant such investigation. This process would recover scientifically consequential information from at-risk resources to offset their potential loss. Therefore, with implementation of **Mitigation Measures GEO-1a through GEO-1c**, this impact would be **less than significant with mitigation incorporated**.

4.8 GREENHOUSE GAS EMISSIONS

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

Greenhouse gases (GHGs) are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO_2);
- Methane (CH_4);
- Nitrous oxide (N_2O);
- Hydrofluorocarbons (HFCs);
- Perfluorocarbons (PFCs); and
- Sulfur hexafluoride (SF_6).

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, believed to be causing global warming. While man-made GHGs include naturally occurring GHGs (e.g., CO_2, CH_4, and N_2O), some gases (i.e., HFCs, PFCs, and SF_6) are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by 1 unit mass of the GHG to the ratio of heat trapped by 1 unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO_2 equivalents" (CO_2e).

State CEQA Guidelines Section 15064(b) provides that the "determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data," and further states that an "ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting."

Appendix G of the *State CEQA Guidelines* includes significance thresholds for GHG emissions. A project would normally have a significant effect on the environment if it would do either of the following:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Currently, there is no Statewide GHG emissions threshold that has been used to determine the potential GHG emissions impacts of a project. Threshold methodology and thresholds are currently developed and revised by air districts in California.

a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? ***(Less Than Significant Impact)***

In October 2008, the SCAQMD released a Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold (Draft Guidance Document)[36] that suggested a tiered approach to analyzing GHG emissions in a project-level analysis. In the Draft Guidance Document, the SCAQMD provided numerical thresholds that can be applied to smaller projects (like the proposed project). The operational interim GHG significance threshold is 3,000 metric tons (MT) per year of CO_2e for residential and commercial land uses. If emissions exceed the numerical screening threshold, a more detailed review of the project's GHG emissions is warranted. The SCAQMD has not addressed emission thresholds for construction; however, the SCAQMD requires quantification and disclosure.

This section discusses the project's impacts related to the release of GHG emissions for the construction and operational phases of the project. Construction and operational GHG emissions were estimated with CalEEMod and using the same methodology for the criteria pollutants described in Section 4.3, Air Quality.

Construction Activities. Construction activities associated with the proposed project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy

[36] South Coast Air Quality Management District (SCAQMD). 2008b. *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*. October. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf (accessed February 2023).

equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

The SCAQMD does not provide a separate GHG significance threshold for construction emissions; rather, applicable guidance specifies that construction emissions should be amortized over 30 years (a typical project lifetime) and added to the project operational emissions, and that total compared to the GHG significance threshold. As shown in Table 4.8.A, the construction emissions associated with the proposed project would be approximately 174. MT CO_2e per year. Based on the 30-year lifespan of the proposed project, the proposed project would result in GHG emissions of approximately 5.8 MT CO2e per year (see the CalEEMod output in Appendix A for details).

Table 4.8.A: Construction Greenhouse Gas Emissions

Construction Year	Total Emissions per Year (MT)			Total Emissions per Year (MT CO_2e)
	CO_2	CH_4	N_2O	
2024	109.7	<1.0	<1.0	110.5
2025	64.0	<1.0	<1.0	64.3
Total Emissions for the Entire Construction Process				**174.8**
Total Construction Emissions Amortized Over 30 Years				**5.8**

Source: Compiled by LSA (October 2023).
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
MT CO_2e = metric tons of carbon dioxide equivalent
MT = metric tons
N_2O = nitrous oxide

Since there is no separate GHG significance threshold for construction emissions, project-level and cumulative GHG emissions during construction activities alone would be **less than significant**.

Operational GHG Emissions. Long-term GHG emissions are typically generated from mobile sources (e.g., cars, trucks, and buses), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption, waste sources (land filling and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). Mobile-source GHG emissions would include project-generated vehicle and truck trips to and from the project site. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Waste source emissions are typically generated by the energy generated by land filling and other methods of disposal related to transporting and managing project-generated waste.

As discussed in Section 4.3, Air Quality, the proposed project would include the construction of an approximately 6,400-foot-long, 18-inch-diameter pipeline within Washington Street between Fields Drive and Abelia Avenue. Upon completion of construction activities, operation of the proposed project would be conducted remotely and there would be no full-time dedicated staff at the site. EMWD staff may visit the site occasionally for routine maintenance activities. Based on Section 4.17, Transportation, no additional trips are anticipated due to implementation of the proposed project. As such, the project would not result in a significant increase in the generation of vehicle trips or VMT that would increase GHG emissions. The project would not be a substantial source of energy, area, waste, or water source emissions. Therefore, the proposed project would not generate GHG

emissions that would have a significant impact on the environment. Therefore, impacts would be **less than significant**.

b. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? ***(Less Than Significant Impact)***

Executive Order (EO) B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. The CARB released a second update to the Scoping Plan (i.e., the 2017 Scoping Plan) to reflect the 2030 target set by EO B-30-15 and codified by Senate Bill (SB) 32. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. The companion bill to SB 32 (i.e., AB 197) provides additional direction to the CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data collected by the CARB was posted in December 2016. Furthermore, AB 1279 codifies California's goal of achieving Statewide carbon neutrality by 2045 and net negative GHG emissions thereafter.

The 2022 Scoping Plan assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The 2022 Scoping Plan contains GHG reduction measures that work toward reducing GHG emissions, consistent with the targets set by EO B-30-15 and codified by SB 32, AB 197, and AB 1279. The measures applicable to the proposed project include energy efficiency measures, water conservation and efficiency measures, and transportation and motor vehicle measures, as discussed below.

Energy efficient measures are intended to maximize energy efficiency building and appliance standards, pursue additional efficiency efforts, including new technologies and new policy and implementation mechanisms, and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. The proposed project would not result in additional energy consumption; therefore, the proposed project would not conflict with energy efficient measures.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. As noted above, the proposed project would include the construction of an approximately 6,400-foot-long, 18-inch-diameter pipeline within Washington Street between Fields Drive and Abelia Avenue. The project purpose is to enhance the hydraulic reliability of the regional water distribution system connected to the newly approved Belle Terre Water Storage Tank, located north of Fields Drive and east of the San Diego Canal. This endeavor would significantly enhance transmission capabilities to and from the Belle Terre Water

Storage Tank. The proposed project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. As identified above, no additional trips are anticipated due to implementation of the proposed project. Therefore, the proposed project would not conflict with the identified transportation and motor vehicle measures.

The proposed project would be determined to have a less than significant individual and cumulative impact related to GHG emissions. Therefore, the proposed project would not generate GHG emissions that would have a significant impact on the environment, nor would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Associated impacts would be **less than significant**.

4.9 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? ***(Less Than Significant Impact)***

Hazardous materials are chemicals that could potentially cause harm during an accidental release or mishap, and are defined as being toxic, corrosive, flammable, reactive, and irritant, or a strong sensitizer.[37] Hazardous substances include all chemicals regulated under the United States Department of Transportation (USDOT) "hazardous materials" regulations and the EPA "hazardous waste" regulations. Hazardous wastes require special handling and disposal because of their potential to damage public health and the environment. The probable frequency and severity of consequences from the routine transport, use, or disposal of hazardous materials is affected by the type of substance, the quantity used or managed, and the nature of the activities and operations.

Construction. The proposed project would result in the installation of an approximately 6,400-foot-long, 18-inch-diameter potable water main within the existing Washington Street right-of-way between Fields Drive and Abelia Avenue. Construction activities associated with the proposed

[37] A "sensitizer" is a chemical that can cause a substantial proportion of people or animals to develop an allergic reaction in normal tissue after repeated exposure to a chemical.

project would use a limited amount of hazardous and flammable substances (e.g., oils) during heavy equipment operation for site excavation and construction. Potentially hazardous substances (e.g., chemical agents, solvents, and paints) would also be used during construction. However, the amount of hazardous chemicals present during construction is limited and would be used in compliance with existing government regulations, including implementation of BMPs to protect water quality. In addition, the potential for the release of hazardous materials during project construction is low, and even if a release would occur, it would not result in a significant hazard to the public, surrounding land uses, or environment due to the small quantities of these materials associated with construction vehicles.

Operation. Operation of the proposed project would be conducted remotely and there would be no full-time dedicated staff at the site. EMWD staff may visit the site occasionally for routine maintenance activities. During operation and maintenance (O&M), no hazardous materials would be routinely transported, used, or disposed of. As currently occurs, the EMWD would be required to comply with existing government regulations in the use and disposal of any hazardous materials necessary for maintenance of the project pipeline, and such materials would not be used in sufficient strength or quantity to create a substantial risk to human or environmental health. Therefore, the proposed project would have a **less than significant impact** related to the routine transport, use, or disposal of hazardous materials.

b. Would the project 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)***

As described in Section 4.9.a above, operation of the project would not require the routine use of hazardous materials; therefore, no hazards or hazardous materials impacts related to long-term operation of the project are anticipated.

Hazardous materials most likely to be used during construction include typical construction materials (e.g., gasoline, diesel, motor oil, lubricants, solvents, and adhesives). Such materials would be kept at construction staging areas and would be secured when not in use. In the unlikely event of a spill, fuels would be controlled and disposed of in accordance with applicable regulations. Drips and small spills would be the most likely potential hazardous materials releases to occur; however, any release that occurs in close proximity to a stream or drainage channel could have a significant impact on the environment if it is not properly controlled. The EMWD would be required to prepare and implement a SWPPP for the proposed project in accordance with the CGP permitting requirements, which would reduce the potential for hazardous materials releases to occur during construction and would reduce the potential for spills to impact sensitive habitat or human health to a less than significant level. Therefore, development of the proposed project would not create a significant hazard to the public or environment. This impact would be **less than significant**.

c. Would the project 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)***

Schools in the project area include: Home Instead Innovation Academy, which is located on the project alignment; Temecula Valley Charter School and Temecula Preparatory School, which are located less than 0.1 mile south of the project site; Susan La Vorgna Elementary, which is located approximately 1.2 miles southwest of the project site; and Storybook Cottage Preschool, which is located approximately 0.6 mile west of the project site. The proposed project would install a water pipeline within the public right-of-way. Due to the nature of the proposed project being a water pipeline installation project, the proposed project is not the type that would emit hazardous emissions or handle hazardous or acutely hazardous materials or substances, as described above in Sections 4.9.a and 4.9.b. Therefore, the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. This impact would be **less than significant**.

d. Would the project 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? ***(Less Than Significant Impact)***

Government Code Section 65962.5 states that the California Department of Toxic Substances Control (DTSC) shall compile and maintain annually a list of hazardous waste facilities subject to corrective action as part of the Health and Safety Code. This list is commonly referred to as the Cortese List. The project site is not located on the RWQCB Leaking Underground Storage Tank (LUST) Cleanup Site or any other Cleanup Program Sites (formerly known as spills, leaks, investigations, and cleanups or SLIC). These two components comprise the State Cortese List of known hazardous materials sites compiled pursuant to Government Code Section 65962.5.

According to the SWRCB Geotracker website,[38] no State-listed hazardous materials cleanup sites are located within 1,000 feet of the project site. Four sites that are occupied by the Robert A. Skinner Water Treatment Plant, located approximately 2.5 miles southeast of the project site, are listed as LUST sites. These sites are designated “closed.” A closed site indicates that regulatory requirements for response actions (e.g., site assessment and remediation) have either been completed or were not necessary. Therefore, potential migration of residual contaminants in groundwater beneath the project site (if any) does not likely pose a risk to human health and the environment.

The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Since the project would not be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and would not create a significant hazard to the public or the environment, impacts would be **less than significant**.

[38] State Water Resources Control Board (SWRCB). 2021. Geotracker Website Application. Website: https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Sacramento (accessed July 17, 2023).

e. Would the project be located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project 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 airport land use plan, or within 2 miles of a public airport or public use airport. The closest airport to the project site is the French Valley Airport, located approximately 4.7 miles to the southwest. Therefore, the project would not result in a safety hazard for people residing or working in the project area. **No impact** would occur.

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? ***(Less Than Significant Impact)***

The Riverside County Emergency Management Department is responsible for creating and maintaining the Riverside County Emergency Operations Plan (EOP). The plan establishes a management organization and assigns functions and tasks consistent with California's Standardized Emergency Management System (SEMS) and the National Incident Management Systems (NIMS). It provides for the integration and coordination of planning efforts of Riverside County and the intent of the EOP is to provide direction on how to respond for an emergency from the onset through extended response and into the recovery process.[39] The Riverside County Emergency Management Department also prepares and maintains the Riverside County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP), which identifies risks and ways to minimize damage from natural and human-made disasters.[40] Neither of these plans identify specific evacuation routes within Riverside County.

Roads used as response corridors/evacuation routes usually follow the most direct path to or from various parts of a community. For the project site and the surrounding areas, the main corridors anticipated to be used by emergency services providers are Washington Street, Abelia Avenue, Fields Drive, SR-79, and other arterials and freeways in this part of Riverside County.

Construction. Construction of the proposed project would not result in substantial temporary traffic delays because traffic flow would largely be maintained even though temporary lane closures may be required. Temporary lane closures would be implemented consistent with the recommendations of the current California Temporary Traffic Control Handbook (CATTCH) (previously known as the California Joint Utility Traffic Control Manual). The CATTCH provides basic standards for the safe movement of all road users (including emergency responders) through construction zones in accordance with Section 21400 of the California Vehicle Code and the Caltrans MUTCD. As identified in Section 2.6, Environmental Commitments, the EMWD prepares a Construction Traffic Management Plan (CTMP) based on the recommendations of the CATTCH. The CTMP would further ensure that the proposed project would not inhibit an emergency response plan or an emergency evacuation plan. Adherence to applicable emergency access codes and ordinances and preparation of the CTMP would ensure that construction and operation of the proposed project would not

[39] County of Riverside, Emergency Management Department. 2019. *Riverside County Emergency Operations Plan (EOP).* Website: http://riversidecountyca.iqm2.com/Citizens/Detail_LegiFile.aspx?Frame=&MeetingID=2048&MediaPosition=3715.315&ID=10490&CssClass= (accessed August 15, 2023).

[40] County of Riverside, Emergency Management Department. 2023. *County of Riverside Multi-Jurisdictional Local Hazard Mitigation Plan.* April. Website: https://rivcoready.org/sites/g/files/aldnop181/files/2023-08/MJLHMP%208.7.23.pdf (accessed August 15, 2023).

impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, the proposed project would not physically interfere with the implementation of an adopted emergency response plan or evacuation plan. This impact would be **less than significant**.

Operation. The proposed project would result in installation of a new water pipeline within the existing Washington Street right-of-way between Fields Drive and Abelia Street. The proposed project would be required to comply with all applicable codes and ordinances for emergency vehicle access, which would ensure adequate access to, from, and on site for emergency vehicles. Further, the proposed project would not reconfigure any existing roadways, result in road closures during operation of the project, or include features that would otherwise hinder emergency response or evacuation. Therefore, operation of the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Potential project impacts would be **less than significant**.

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? ***(Less Than Significant Impact)***

The project site is located within a developed urban area; however, according to CAL FIRE, the project site is located in a Very High Fire Hazard Severity Zone (VHFHSZ).[41] Construction of the proposed pipeline would occur along the existing alignment in developed areas consisting primarily of impervious surface; therefore, there would be a low fire hazard risk. Project construction and operation would not change the characteristics of the project site in a way that would make the project site more susceptible to wildland fires. During construction, the most likely source of ignition would be by mechanical activities such as operation of backhoes, mini excavators, or rolled compactors. However, the potential for ignition can be greatly reduced through equipment features, fuel treatment, and management of behavior. Additionally, all construction work would require the contractor to implement fire hazard reduction measures (e.g., having fire extinguishers located on site, use of spark arrestors on equipment, and using a spotter during welding activities). All construction work would require the contractor to implement standard fire prevention methods. Therefore, impacts associated with exposing people or structures to a significant risk of loss, injury, or death involving wildland fires would be **less than significant**.

[41] California Department of Fire and Forestry Protection (CAL FIRE). 2022. Riverside County State Responsibility Area Fire Hazard Severity Zones Map. Website: https://osfm.fire.ca.gov/media/4rbmwazl/fhsz_county_sra_11x17_2022_riverside_2.pdf (accessed July 17, 2023).

4.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
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 which would result in flooding on- or offsite;	☐	☐	☐	☒
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?	☐	☐	☐	☒
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

*a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? **(Less Than Significant Impact)***

The SWRCB and nine RWQCBs regulate the quality of surface water and groundwater bodies throughout California. In southern Winchester (where the project site is located), the San Diego RWQCB is responsible for implementation of the Water Quality Control Plan (Basin Plan). The Basin Plan establishes beneficial water uses and water quality objectives for waterways and water bodies within the region. Section 303(d) of the federal Clean Water Act requires that states identify water bodies, including bays, rivers, streams, creeks, and coastal areas, that do not meet water quality standards and the pollutants that are causing the impairment. A Total Maximum Daily Load (TMDL) describes the maximum amount of a pollutant that a water body can receive while still meeting established water quality standards. A TMDL establishes limits for pollutant discharges into impaired water bodies.

Storm water from the project site discharges to the French Valley Channel and an unnamed tributary to Warm Springs Creek, which flows into Murrieta Creek, which flows into Santa Margarita River, which discharges to the Pacific Ocean. According to the SWRCB Surface Water Quality Assessment 2020-2022 Integrated Report for Clean Water Act Sections 303(d) and 305(b), Warm Springs Creek is

listed as an impaired water body for chlorpyrifos, indicator bacteria, iron, manganese, nitrogen, and phosphorus. Murrieta Creek is listed as an impaired water body for benthic community effects, bifenthrin, chlorpyrifos, copper, lambda cyhalothrin, indicator bacteria, iron, manganese, mercury, nitrogen, dissolved oxygen, phosphorus, pyrethroids, toxicity, and turbidity. Santa Margarita River (Upper) is listed as an impaired water body for benthic community effects, bifenthrin, lambda cyhalothrin, indicator bacteria, iron, manganese, nitrogen, phosphorus, pyrethroids, total dissolved solids, toxicity, and turbidity. Santa Margarita River (Lower) is listed as an impaired water body for benthic community effects, chlorpyrifos, indicator bacteria, nitrogen, phosphorus, and toxicity.[42]

Runoff water quality is regulated by the NPDES Program (established through the federal Clean Water Act). The NPDES Program objective is to control and reduce pollutant discharges to surface water bodies. Compliance with NPDES permits is mandated by State and federal statutes and regulations. Locally, the NPDES Program is administered by the San Diego RWQCB. Construction activities are subject to the SWRCB NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (CGP), Order No. 2022-0057-DWQ, NPDES No. CAS000002. Any construction activity, including grading, that would result in the disturbance of 1 acre or more would require compliance with the SWRCB's CGP, which requires preparation of an SWPPP and implementation of Construction BMPs during construction activities. Construction BMPs would include, but not be limited to, Erosion Control and Sediment Control BMPs designed to minimize erosion and retain sediment on site as well as Good Housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into receiving waters.

Construction. The proposed project would result in the installation of an approximately 6,400-foot-long, 18-inch-diameter potable water main in the Winchester area of Riverside County. The new pipeline would be installed within the existing right-of-way using open trench construction methods with the potential for trenchless (e.g., jack and bore) to be used at the French Valley Channel crossing. Construction of the proposed pipeline would include demolition and removal of existing asphalt, trenching/trenchless work, fill/compaction activities, pavement reconstruction, landscaping, and concrete flatwork over the length of the project site. The proposed project would include 75,000 square feet (1.7 acres) of asphalt demolition and soil disturbance. Pollutants of concern during construction include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, chemicals, liquid products, petroleum products (e.g., paints, solvents, and fuels), and concrete-related waste may be spilled or leaked, and they have the potential to be transported via storm water runoff into receiving waters.

Because construction of the proposed project would disturb greater than 1 acre of soil, the project is subject to the requirements of the CGP, which requires preparation of an SWPPP and implementation of construction BMPs during construction activities, as specified in Section 2.6, Environmental Commitments. Construction BMPs would include, but are not limited to, Erosion

[42] State Water Resources Control Board (SWRCB). 2023. *2020-2022 California Integrated Report (Clean Water Act Section 303(d) List and 305(b) Report)*. Website: https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_integrated_report.html (accessed July 2023).

Control and Sediment Control BMPs designed to minimize erosion and retain sediment on site as well as Good Housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into receiving waters.

Historic groundwater levels in the project vicinity range from approximately 10 to 41 feet in depth.[43] Borings performed in proximity to the channel crossing between Brookridge Lane and Cottonwood Road encountered groundwater at a depth of 16 feet.[44] Static groundwater is expected to be encountered during construction activities associated with the 20-foot-deep trenchless pits. Therefore, it is anticipated that groundwater dewatering would be required during project construction. Groundwater dewatering activities could affect surface water quality through the discharge of polluted groundwater to surface waterbodies. Groundwater encountered during construction would be discharged to land, storm drain, or to EMWD's sewer for treatment and reuse. If groundwater quality does not meet permitted discharge requirements for the storm drain, it would be discharged to the sanitary sewer for treatment at EMWD's wastewater treatment plant or would be temporarily stored (on site or at one of the identified staging areas) until it could be properly disposed of to the sewer or other permitted disposal site. If groundwater is discharged to land, groundwater dewatering activities would be required to comply with the *Conditional Waivers of Waste Discharge Requirements for Low Threat Discharges in the San Diego Region* (Order No. R9-2019-0005). If groundwater is discharged to storm drains, groundwater dewatering activities would be required to comply with the *General Waste Discharge Requirements for Groundwater Extraction Discharges to Surface Waters Within the San Diego Region* (Order No. R9-2015-0013, NPDES No. CAG919003). Under either of these orders, discharges must comply with discharge specifications, receiving water limitations, and monitoring and reporting requirements detailed in the respective orders.

Adherence with the CGP and Groundwater Discharge Permits, including implementation of the required SWPPP and Construction BMPs, would ensure that construction impacts related to surface water quality standards, waste discharge requirements, and surface water quality would be less than significant.

Operation. The proposed project includes construction and operation of the new water pipeline to provide improved distribution capacity and improved operations at the recently approved Belle Terre Water Storage Tank. The new pipeline would be installed within the existing right-of-way, would not result in an increase in impervious surfaces, and would not require any structures. Therefore, the proposed project would not result in any changes to the physical environment that would impact drainage patterns or water quality. Therefore, operational impacts related to surface water quality standards, waste discharge requirements, and surface water quality would be **less than significant**.

[43] Geocon West, Inc. 2022. *Limited Preliminary Geotechnical Investigation, Potable Water Main, Washington Street from Fields Drive to Abelia Street, French Valley Area of Riverside County, California.* November 14.

[44] Ibid.

b. Would the project 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 project site is located within the Temecula Valley Groundwater Basin,[45] which underlies several valleys in southwestern Riverside County and a portion of northern San Diego County, including Murrieta, Temecula, Pauba, Long, and Lancaster Valleys. The basin is bounded by non-water-bearing crystalline rocks of the Peninsular Ranges. The surface area of the Temecula Valley Groundwater Basin is approximately 87,800 acres or 137 square miles, with an average annual precipitation ranging from approximately 7 to 15 inches. Natural recharge is from direct precipitation and percolation in the Warm Springs, Tucalota, Santa Gertrudis, Murrieta, and Pechanga Creeks and the Temecula River. Groundwater flows southeastward under the Murrieta and Temecula Valleys and southwestward beneath Pauba Valley to the southwestern part of the basin. The total storage capacity of the Temecula Valley Groundwater Basin is estimated to be 253,000 acre-feet.[46]

Construction. As discussed in Section 4.10.a above, historic groundwater levels in the project vicinity range from approximately 10 to 41 feet in depth.[47] Borings performed in proximity to the channel crossing between Brookridge Lane and Cottonwood Road encountered groundwater at a depth of 16 feet.[48] Static groundwater is expected to be encountered during construction activities associated with the 20-foot-deep trenchless pits. Therefore, it is anticipated that groundwater dewatering would be required during project construction. Any dewatering would be temporary and affect only the uppermost water-bearing zone. Such dewatering would be localized and would not result in the lowering of surrounding groundwater levels or substantially contribute to depletion of groundwater supplies.

Operation. The project includes construction and operation of a new water pipeline to provide improved distribution capacity and improved operations at the recently approved Belle Terre Water Storage Tank. The new pipeline would be installed within the existing right-of-way and would not result in an increase in impervious surfaces. The project purpose is to enhance the hydraulic reliability of the regional water distribution system connected to the newly approved Belle Terre Water Storage Tank, located north of Fields Drive and east of San Diego Canal. This endeavor would significantly enhance transmission capabilities to and from the Belle Terre Storage Tank. The project would not result in an increase in the amount of water that is distributed and new or expanded water supply entitlements would not be required to serve the project. Therefore, operation of the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge.

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45 California Department of Water Resources (DWR). 2019. Groundwater Basin Boundary Assessment Tool. Website: https://gis.water.ca.gov/app/bbat/ (accessed May 1, 2023).

46 State Water Resources Control Board Division of Water Rights. 2004. *Temecula Valley Groundwater Basin Bulletin 118.* February 27. Website: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/9_005_TemeculaValley.pdf (Accessed August 2023).

47 Geocon West, Inc. 2022. *Limited Preliminary Geotechnical Investigation, Potable Water Main, Washington Street from Fields Drive to Abelia Street, French Valley Area of Riverside County, California*. November 14.

48 Ibid.

For the reasons listed above, impacts related to the decrease of groundwater supplies or interference with groundwater recharge would be **less than significant**.

c. Would the project 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)***

During construction activities, more than 1 acre of soil would be disturbed. Soil would be exposed and drainage patterns temporarily altered during construction activities, and there would be an increased potential for soil erosion and siltation compared to existing conditions. Additionally, during a storm event, soil erosion and siltation could occur at an accelerated rate. The CGP requires the preparation of an SWPPP to identify construction BMPs to be implemented as part of the proposed project to reduce impacts on water quality during construction, including those impacts associated with soil erosion and siltation. Adherence with the CGP and Groundwater Discharge Permit, including implementation of the required SWPPP and Construction BMPs, would ensure that construction impacts related to on- or off-site erosion or siltation would be less than significant.

After the completion of project construction, the new pipeline would be installed within the existing right-of-way, would not result in an increase in impervious surfaces, and would not require any structures. Therefore, the proposed project would not result in any changes to the physical environment that would impact drainage patterns or water quality. Therefore, operation of the proposed project would not result in substantial erosion or siltation either on site or off site, and impacts would be **less than significant**.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; ***(No Impact)***

The proposed project would not alter the existing drainage pattern of the site or result in an increase in impervious surfaces on the project site during project construction or operation. Therefore, the proposed project would not increase the rate or amount of surface runoff in a manner that would result in flooding on site or off site, and there would be **no 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)***

Stormwater Drainage System Capacity. The proposed project would not alter the existing drainage pattern of the site or result in an increase in impervious surfaces on the project site during project construction or operation. Therefore, the proposed project would not contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems, and there would be no impact.

Polluted Runoff. As discussed in Section 4.10.a, pollutants of concern during construction include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. Drainage patterns would be temporarily altered during construction activities, and construction-related pollutants could be spilled, leaked, or transported via storm runoff into adjacent drainages and downstream receiving waters. However, as previously discussed, the proposed project would be required to comply with the requirements set forth by the CGP, including preparation of an SWPPP, which would specify BMPs to be implemented to control the discharge of pollutants in stormwater runoff as a result of construction activities. Operation of the proposed project would not result in the generation of any pollutants of concern or impacts to water quality. After the completion of construction, the new pipeline would be installed within the existing right-of-way, would not result in an increase in impervious surfaces, and would not require any structures. Therefore, the proposed project would not result in any changes to the physical environment that would impact drainage patterns or water quality. Therefore, impacts would be **less than significant**.

iv. Impede or redirect flood flows? ***(No Impact)***

The proposed project would not alter the topography of the project site, which is relatively flat, and would not alter drainage patterns. Furthermore, the proposed project would not result in an increase in impervious surfaces or place any improvements within a floodplain. Therefore, the proposed project would not impede or redirect flood flows, and there would be **no impact**.

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation? ***(Less Than Significant Impact)***

Flooding. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06065C2730G, the project site is in an area labeled as "not printed". The Riverside County Floodplain Map indicates that some portions of the project site are located within a Riverside County Flood Control zone.[49] During construction, BMPs would be implemented to ensure that during a rain event, pollutants would be retained on site and would be prevented from reaching downstream receiving waters. During operation, the proposed project would not place any improvements within a floodplain or generate any pollutants.

Tsunami. The project site is approximately 30 miles northeast of the Pacific Ocean at an elevation of approximately 1,400 to 1,450 feet above mean sea level. Based on the distance from the Pacific Ocean, the project site is not located in a tsunami hazard zone and therefore would not be susceptible to impacts associated with a tsunami.

Seiches. Seiches are waves created in an enclosed body of water (e.g., a bay, lake, or harbor) that go up and down or oscillate and do not progress forward like standard ocean waves. The nearest sizeable, enclosed body of water to the proposed project is Skinner Reservoir, which is located

[49] Riverside County Flood Control. n.d. Riverside County Floodplain Map. Website: https://content.rcflood.org/floodplainmap/ (accessed July 2023).

approximately 1 mile southeast of the project site. Because impacts from seiches are very localized, it is not anticipated that the project site would be susceptible to impacts associated with a seiche.

Dam Inundation. According to the Division of Safety of Dams California Dam Breach Inundation Maps, the project site is not located within any dam inundation areas.[50]

Overall, because the proposed project would be subject to construction BMPs and operation of the proposed project would not generate any pollutants or require any new structures or other improvements at the project site, and because the project site is not within a tsunami, seiche, or dam inundation area, implementation of the proposed project would not result in the release of pollutants from a flood, dam inundation, tsunami, or seiche, and impacts would be **less than significant.**

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? ***(Less Than Significant Impact)***

The project is within the jurisdiction of the San Diego RWQCB. The San Diego RWQCB adopted a Basin Plan (September 1994, with amendments effective on or before September 2021) that designates beneficial uses for all surface and groundwater within their jurisdiction and establishes the water quality objectives and standards necessary to protect those beneficial uses. As previously discussed, the proposed project would comply with existing NPDES permit requirements, including the CGP, and would implement construction BMPs to reduce pollutants of concern in stormwater runoff. Compliance with these regulatory requirements would ensure that the proposed project would not degrade or alter water quality, causing the receiving waters to exceed the water quality objectives, or impair the beneficial use of receiving waters during construction. After the completion of construction, the new pipeline would be installed within the existing right-of-way, would not result in an increase in impervious surfaces, and would not require any structures. Therefore, the proposed project would not result in any changes to the physical environment that would impact drainage patterns or water quality. As such, the proposed project would not result in water quality impacts that would conflict with the Basin Plan. Construction and operational impacts related to a conflict with the Basin Plan would be less than significant.

The Sustainable Groundwater Management Act (SGMA), which was enacted in September 2014, requires governments and water agencies of high- and medium-priority basins to halt overdraft of groundwater basins. The SGMA requires the formation of local Groundwater Sustainability Agencies (GSAs), which are required to adopt Groundwater Sustainability Plans to manage the sustainability of the groundwater basins. The project site is in the Temecula Valley Groundwater Basin, which the California Department of Water Resources (DWR) designates as a very low priority basin.[51] Therefore, a Groundwater Sustainability Plan has not been adopted for the Temecula Valley Groundwater Basin. Nevertheless, the proposed project would not interfere with groundwater recharge in the vicinity of the project site as discussed in Section 4.10.b, and the project would not

[50] California Department of Water Resources (DWR). 2023. Inundation Maps. Website: https://water.ca.gov/programs/all-programs/division-of-safety-of-dams/inundation-maps (accessed July 2023).

[51] California Natural Resources Agency. 2020. Sustainable Groundwater Management Act 2019 Basin Prioritization Process and Results. May. Website: https://data.cnra.ca.gov/dataset/sgma-basin-prioritization (accessed August 2023).

provide substantial additional sources of polluted runoff as detailed in Section 4.10.c.iii. Therefore, the proposed project would not conflict with or obstruct the implementation of a sustainable groundwater management plan, and this impact would be **less than significant**.

4.11 LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☒	☐

*a. Would the project physically divide an established community? **(No Impact)***

The physical division of an established community typically refers to the construction of a physical feature (e.g., an interstate highway or railroad tracks) or removal of a means of access (e.g., a local road or bridge) that would impair mobility within an existing community or between a community and outlying areas. The proposed pipeline would be installed within the Washington Street right-of-way between Fields Drive and Abelia Street. Implementation of the project would provide a new water pipeline to provide improved distribution capacity and improve operations at the recently approved Belle Terre Water Storage Tank. Therefore, implementation of the project would not physically divide an established community, and **no impact** would occur.

*b. Would the project 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? **(Less Than Significant Impact)***

The County of Riverside General Plan and the Southwest Area Plan are the primary land use plans containing policies and regulations applicable to the project. The project would be located within the Washington Street right-of-way between Fields Drive and Abelia Street, which has no land use or zoning designation. The proposed project would not change existing land use within the project area and would not result in the conversion of adjacent land uses or conflicts with applicable County of Riverside (County) land use designations or zoning standards. The proposed project would not conflict with any applicable land use plan, policy, or regulation with jurisdiction over the project.

The County of Riverside General Plan and the Southwest Area Plan outline relevant policies and regulations applicable to the proposed project, including policies to preserve visual, cultural, and natural resources and to protect the health and safety of their citizens. Consistent with the goals and policies of these relevant planning documents, the project has been designed to minimize impacts to natural and cultural resources. Project conformance and/or potential conflicts with these ordinances are described in the relevant resource sections of this IS/MND. Where potentially significant environmental impacts have been identified in this IS/MND, they have been mitigated to less than significant with implementation of appropriate mitigation measures. Therefore, the project would be consistent with applicable land use plans, policies, and regulations, and no additional mitigation is required.

4.12 MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒	☐
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?	☐	☐	☒	☐

*a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? **(Less Than Significant Impact)***

Minerals are any naturally occurring chemical element or compound, or groups of elements and compounds, formed from inorganic processes and organic substances including, but not limited to, coal, peat, and oil-bearing rock, but excluding geothermal resources, natural gas, and petroleum. In 1975, the California Legislature enacted the Surface Mining and Reclamation Act (SMARA), which, among other things, provided guidelines for the classification and designation of mineral lands. Areas are classified on the basis of geologic factors without regard to existing land use and land ownership. The areas are categorized into four Mineral Resource Zones (MRZs):

- **MRZ-1:** An area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- **MRZ-2:** An area where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
- **MRZ-3:** An area containing mineral deposits, the significance of which cannot be evaluated.
- **MRZ-4:** An area where available information is inadequate for assignment to any other MRZ.

Of the four categories, lands classified as MRZ-2 are of the greatest importance. Such areas are underlain by demonstrated mineral resources or are located where geologic data indicate that significant measured or indicated resources are present. MRZ-2 areas are designated by the Mining and Geology Board as being “regionally significant”. Such designations require that a Lead Agency’s land use decisions involving designated areas be made in accordance with its mineral resource management policies and that it consider the importance of the mineral resource to the region or the State as a whole, not just to the Lead Agency’s jurisdiction.

The County of Riverside has extensive deposits of clay, limestone, iron, sand, and aggregates. The California Geological Survey and acting State Geologist have not classified any areas in the project area as containing mineral deposits that are either of Statewide significance or the significance of

which requires further evaluation.[52] The project site has been classified as being located in MRZ-3, indicating that the project is located in an area that contains known or inferred construction aggregate resources of undetermined mineral resource significance.[53] However, the proposed project would be installed within existing public right-of-way. The project site is not designated or zoned for the extraction of mineral deposits. Therefore, the proposed project would not 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. This impact would be **less than significant**.

b. Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? ***(Less Than Significant Impact)***

As stated in Response 4.12.a., the project site is classified as MRZ-3. According to the County of Riverside General Plan Multipurpose Open Space Element,[54] the project site is not located within an area known to contain locally important mineral resources. Therefore, the proposed project would not 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. This impact would be **less than significant**.

52 State of California. 2014. California Geological Survey – Mineral Resources Program. Updated Mineral Land Classification Map for Portland Cement Concrete-Grade Aggregate in the Temescal Valley Production Area, Riverside County. Special Report 231, Plate 1.

53 Ibid.

54 County of Riverside. 2015. Multipurpose Open Space Element. Website: https://planning.rctlma.org/sites/g/files/aldnop416/files/migrated/Portals-14-genplan-general-Plan-2017-elements-OCT17-Ch05-MOSE-120815.pdf (accessed July 20, 2023).

4.13 NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b. Generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☒	☐	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

The following provides an overview of the characteristics of sound and vibration as well as the regulatory framework that applies to noise within the vicinity of the project site. The existing noise environment in and around the project site is also described.

Characteristics of Sound. Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep.

Several noise measurement scales exist that are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative intensity of a sound. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a 10-fold increase in acoustic energy, while 20 dB is 100 times more intense, and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness; and similarly, each 10 dB decrease in sound level is perceived as half as loud.

Sound intensity is normally measured through the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for 24-hour sound measurements that better represent human sensitivity to sound at night. As noise spreads from a source, it loses energy so that the farther away the noise receiver is from the noise source, the lower the perceived noise level would be. Geometric spreading causes the sound level to attenuate or be reduced, resulting in a 6 dB reduction in the noise level for each doubling of distance from a single point source of noise to the noise sensitive receptor of concern.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level (L_{eq}) is the total sound energy of time varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq}, the Community Noise Equivalent Level (CNEL), and the day-night average noise level (L_{dn}) based on dBA.

L_{dn}, sometimes denoted as DNL, represents the time varying noise over a 24-hour period, with a 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale, but without the adjustment for events occurring during the evening relaxation hours from 7:00 p.m. to 10:00 p.m.

Characteristics of Vibration. Vibration refers to ground-borne noise and perceptible motion. Ground-borne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors, where the motion may not be discernible. Typically, there is more adverse reaction to effects associated with the shaking of a building. Vibration energy propagates from a source through intervening soil and rock layers to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by occupants as the motion of building surfaces, the rattling of items on shelves or hanging on walls, or a low-frequency rumbling noise. The rumbling noise is caused by the vibration of walls, floors, and ceilings that radiate sound waves. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by 10 dB or less. This is an order of magnitude below the damage threshold for normal buildings.

Typical sources of ground-borne vibration are construction activities (e.g., blasting, pile driving, and operating heavy-duty earthmoving equipment), steel-wheeled trains, and occasional traffic on rough roads. Problems with both ground-borne vibration and noise from these sources are usually localized to areas within approximately 100 feet from the vibration source, although there are examples of ground-borne vibration causing interference out to distances greater than 200 feet.[55] When roadways are smooth, vibration from traffic, even heavy trucks, is rarely perceptible. It is assumed for most projects that the roadway surface would be smooth enough that ground-borne vibration from street traffic would not exceed the impact criteria; however, both the construction of the project could result in ground-borne vibration that may be damaging.

Ground-borne vibration has the potential to damage buildings. Although it is very rare for typical construction activities to cause even cosmetic building damage, it is not uncommon for construction processes such as blasting and pile driving to cause vibration of sufficient amplitudes to damage nearby buildings. Ground-borne vibration is usually measured in terms of vibration velocity, either the root-mean-square (RMS) velocity or peak particle velocity (PPV). The PPV is used to characterize potential for damage.

Regulatory Framework. A project would have a significant noise effect if it would substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals of applicable regulatory agencies. While the EMWD is not required to comply with local criteria or standards, the County of Riverside noise level standards are used for CEQA impact determination. The following analysis compares the potential impacts to the criteria within the Riverside County General Plan and Municipal Code. Because the County does not provide vibration assessment criteria for damage related to construction, the guidelines within the Federal Transit

[55] California Department of Transportation (Caltrans). 2013. *Caltrans Transportation and Construction Vibration Guidance Manual*. September.

Administration's (FTA) *Transit Noise and Vibration Impact Assessment Manual* (FTA Manual)[56] have been used.

Riverside County General Plan. The County's General Plan Noise Element[57] provides the following policies, which are applicable to the project:

> **Temporary Construction**
>
> **Policy N 13.1** Minimize the impacts of construction noise on adjacent uses within acceptable practices.
>
> **Policy N 13.2** Ensure that construction activities are regulated to establish hours of operation in order to prevent and/or mitigate the generation of excessive or adverse noise impacts on surrounding areas.
>
> **Policy N 13.3** Condition subdivision approval adjacent to developed/occupied noise-sensitive land uses (see policy N 1.3) by requiring the developer to submit a construction-related noise mitigation plan to the County for review and approval prior to issuance of a grading permit. The plan must depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of this project, through the use of such methods as:
>
> - Temporary noise attenuation fences;
> - Preferential location of equipment; and
> - Use of current noise suppression technology and equipment.
>
> **Policy N 13.4** Require that all construction equipment utilizes noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.

Riverside County Municipal Code. The Riverside County Municipal Code (Chapter 9.52 – Noise Regulation)[58] sets allowable hours for construction activity to between the hours of 6:00 a.m. and 6:00 p.m., during the months of June through September, and between 7:00 a.m. and 6:00 p.m. during the months of October through May.

Because the County's Municipal Code does not establish construction noise thresholds, for the purposes of analyzing significance under CEQA, the FTA's criteria[59] are used. The general assessment criteria for construction noise identifies a 1-hour noise level of 90 dBA L_{eq} for residential uses during

[56] Federal Transit Administration. 2018. *Transit Noise and Vibration Impact Assessment Manual, FTA Report No. 0123.* September.

[57] County of Riverside. 2015b. General Plan, Noise Element. December 8. Website: https://planning.rctlma.org/sites/g/files/aldnop416/files/migrated/Portals-14-genplan-general-Plan-2017-elements-OCT17-Ch07-Noise-120815.pdf (accessed August 2023).

[58] County of Riverside. 2023b. *Code of Ordinances*, *Chapter 9.52 – Noise Regulation*. June 27. Website: https://library.municode.com/ca/riverside_county/codes/code_of_ordinances?nodeId=TIT9PUPEMOWE_CH9.52NORE (Accessed August 2023).

[59] Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual, FTA Report No. 0123*. September.

daytime hours. This provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction when the noise criteria are exceeded.

Additionally, the County's Noise Element and Municipal Code do not provide specific noise level requirements or vibration impact criteria associated with construction activities; therefore, the FTA criteria has been used in this analysis.

Federal Transit Administration. The criteria for environmental impacts resulting from ground-borne vibration are based on the maximum levels for a single event. The guidelines within the FTA Manual have been used to determine vibration impacts (refer to Table 4.13.A).

Table 4.13.A: Construction Vibration Damage Criteria

Building Category	PPV (in/sec)
Reinforced concrete, steel, or timber (no plaster)	0.50
Engineered concrete and masonry (no plaster)	0.30
Non-engineered timber and masonry buildings	0.20
Buildings extremely susceptible to vibration damage	0.12

Source: Table 12-3, *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018).
FTA = Federal Transit Administration
in/sec = inches per second
PPV = peak particle velocity

The FTA Manual guidelines show that a vibration level of up to 0.2 inch per second (in/sec) PPV is considered safe for non-engineered timber and masonry buildings and would not result in any construction vibration damage. Therefore, in order to be conservative, the 0.2 in/sec PPV threshold has been used when evaluating vibration impacts at the nearest structures to the site.

Thresholds of Significance. A project would normally have a significant effect on the environment related to noise and vibration if it would substantially increase the ambient noise levels for adjoining areas or conflict with the adopted environmental plans and the goals of the community in which the project is located. The applicable noise standards governing this project site are the criteria in the County's Noise Ordinance and the 2018 FTA Manual.[60]

Existing Noise Environment. The project site is surrounded by residential uses including the single-family homes to the east and west of the project site. In order to assess the existing noise environment surrounding the project site, a combination of long-term and short-term noise measurements were gathered around the perimeter of the project site. LSA conducted two long-term, 24-hour measurements from July 27, 2023, to July 28, 2023. The locations of the noise measurements are shown on Figure 4.13-1, with the results shown in Table 4.13.B. Additionally, two short-term noise levels measurements were gathered along the major roadway in the project vicinity. Daytime traffic noise levels range from 52.4 to 71.8 dBA L_{eq}. Noise monitoring sheets are included in Appendix C.

[60] Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual*, *FTA Report No. 0123*. September.

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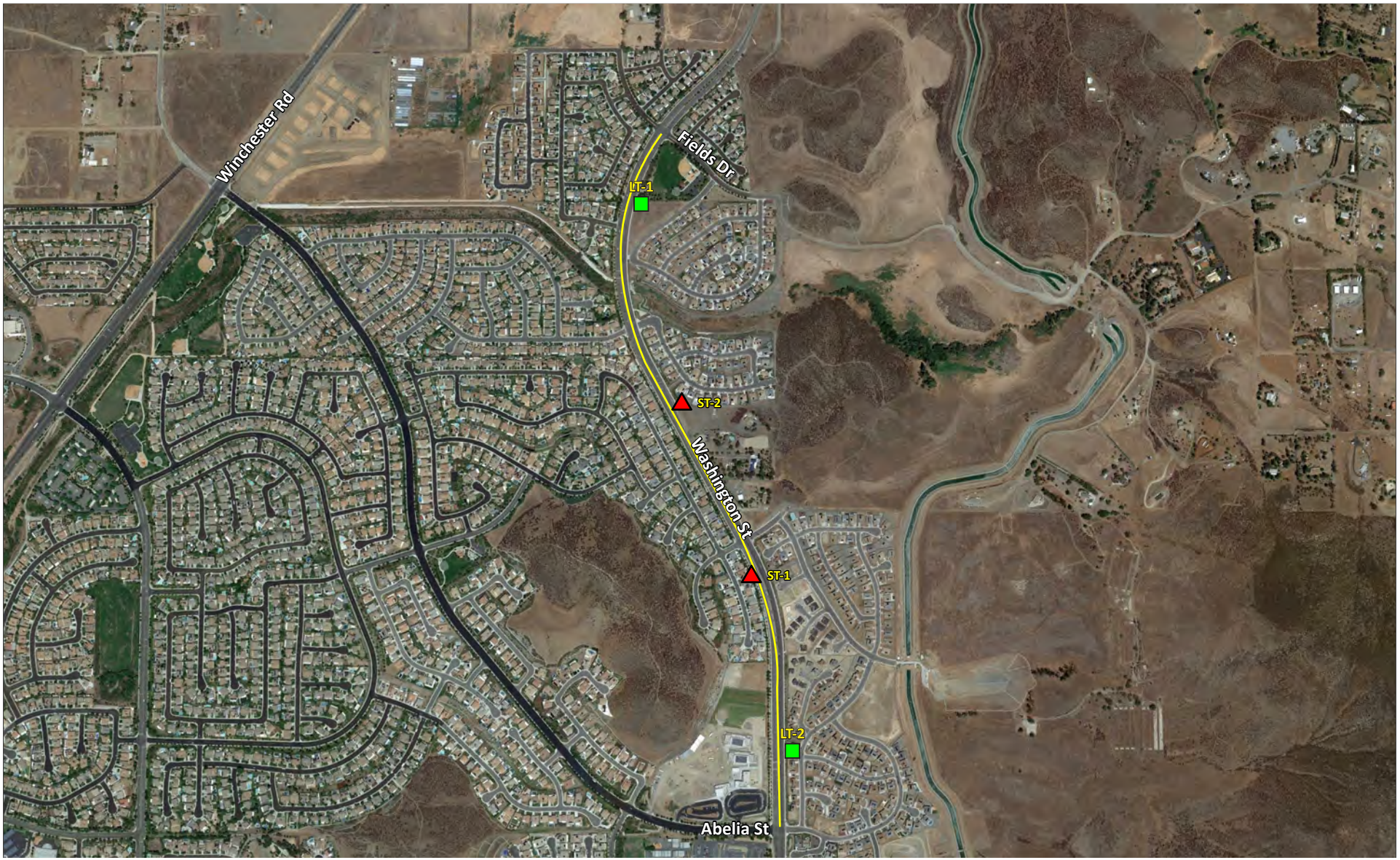

LSA

FIGURE 4.13-1

LEGEND

Project Site Boundary

ST-1 Short-term Noise Monitoring Location

LT-1 Long-term Noise Monitoring Location

0 .14 .28

MILES

SOURCE: Google Earth (2023)

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Washington Street Transmission Main Project

Noise Monitoring Locations

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Table 4.13.B: Existing Noise Level Measurements

Location	Date	Noise Levels (dBA L_{eq})	
		Daytime[1]	Nighttime[2]
LT-1: Located along the southwestern border of the Washington Park, Valley-Wide Recreation and Park District, on a fence approximately 100 feet away from Washington Street centerline.	7/27/23 to 7/28/23	52.4 – 63.7	43.6 – 56.6
LT-2: Located west of a single-family home at 35411 Tavel Street, Winchester. On a utility pole approximately 50 feet away from Washington Street centerline.	7/27/23 to 7/28/23	64.2 – 70.8	51.0 – 64.8
ST-1: Located east of a single-family home on the sidewalk along Washington Street, approximately 70 feet away from Washington Street centerline. [3]	7/27/23	65.2 – 71.8	52.0 – 65.8
ST-2: Located west of a single-family home on 32859 Peak St, near a utility pole along Washington Street, approximately 60 feet away from Washington Street centerline. [3]	7/27/23	58.0 – 69.3	49.2 – 62.2

Source: Compiled by LSA (2023).
[1] Daytime Noise Levels were measured from 7:00 a.m. to 10:00 p.m.
[2] Nighttime Noise Levels were measured from 10:00 p.m. to 7:00 a.m.
[3] Short-term measurement data estimated based on corresponding long-term
dBA = A-weighted decibel
L_{eq} = the average noise level during a specific hour
LT = long-term measurement
ST = short-term measurement

Sensitive Land Uses in the Vicinity. Certain land uses are considered more sensitive to noise than others. Examples of these include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. The closest sensitive receptors to the project site are existing residential properties located 80 feet from the proposed drilling, trenching, and boring activities as shown on Figure 4.13-1.

a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? ***(Less Than Significant with Mitigation Incorporated)***

Noise impacts from the proposed project would be associated with construction activities. The project would consist of the installation of an approximately 6,400-foot-long, 18-inch-diameter potable water main in the Winchester area of Riverside County.

Construction Noise Impacts. Construction-related noise levels would be higher than existing ambient noise levels in the project area today but would no longer occur once construction of the project is completed.

Two types of potential short-term noise impacts could occur during construction of the proposed project: (1) noise impacts related to construction crew commutes and the transportation of construction equipment and materials to the site; and (2) noise impacts associated with demolition, grading, jack and bore, trenching, pipeline construction, and paving activities.

Construction crew commutes and the transport of construction equipment and materials to the project site would result in a maximum of 114 trips per day in passenger car equivalent (PCE) volume during the phase with the highest construction activity, which would incrementally increase noise levels on access roads leading to the site. Although there would be a relatively high single-event noise exposure from heavy trucks, potentially causing intermittent noise nuisance (passing pickup trucks at 50 feet would generate up to a maximum of 75 dBA), the effect on longer-term (hourly or daily) ambient noise levels would be small (i.e., less than 0.1 dBA) given that the traffic volume increase on adjacent roadways is at most 114 trips PCE. Therefore, construction-related impacts associated with worker commutes and equipment transport to the project site would be less than significant.

The second type of potential short-term noise impact is related to noise generated during demolition, grading, jack and bore, trenching, pipeline construction, and paving activities. Construction is completed 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 generated on the site and therefore the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings.

Table 4.13.C: Typical Maximum Construction Equipment Noise Levels (L_{max})

Type of Equipment	Acoustical Usage Factor	Suggested Maximum Sound Levels for Analysis (dBA L_{max} at 50 feet)
Air Compressor	40	80
Backhoe	40	80
Boring Jack Power Unit	50	80
Cement Mixer	40	85
Concrete/Industrial Saw	20	90
Crane	16	85
Excavator	40	85
Generator	50	82
Grader	40	85
Loader	40	80
Paver	50	85
Roller	20	85
Rubber Tire Dozer	40	85
Scraper	40	85
Tractor	40	84
Truck	40	84
Welder	40	73

Source: *Roadway Construction Noise Model User's Guide* (FHWA 2006).
dBA = A-weighted decibels
FHWA = Federal Highway Administration
L_{max} = maximum instantaneous noise level

Utilizing the methodology above and the reference information in Tables 4.13.C and 4.13.D, the composite noise level would be 89 dBA L_{eq} at a distance of 50 feet from the construction area, as presented in Appendix C. This noise level would be the same for the loudest phase at each project location. Table 4.13.D provides a summary of the reference noise levels during construction by phase.

Table 4.13.D: Noise Levels by Construction Phase

Phase	Composite Reference Level at 50 feet	
	dBA L_{max}	dBA L_{eq}
Linear, Demolition & Land Cleaning	86	82
Linear, Grading & Excavation	91	89
Linear, Drainage, Utilities & Sub-Grade	91	89
Linear, Paving	89	86
Pipeline Construction	87	84

Source: Compiled by LSA (2023).
dBA = A-weighted decibels
L_{eq} = equivalent continuous noise level
L_{max} = maximum instantaneous noise level

The nearest sensitive receptor would be the single-family homes located within approximately 80 feet of the water line. It is expected that noise levels during construction at the nearest

residences would approach 85 dBA L_{eq}. All other sensitive receptors are located farther from areas of construction and would therefore experience lower noise levels.

While construction-related, short-term noise levels have the potential to be higher than existing ambient noise levels (which range from 52.4 to 71.8 dBA L_{eq} during daytime hours) in the vicinity of the proposed project, the noise impacts would no longer occur once project construction is completed. Furthermore, construction-related noise impacts at the nearest sensitive receptors would remain below the 90 dBA L_{eq} 1-hour construction noise level criteria as established by the FTA.[61]

Compliance with the County's General Plan Policies and Noise Ordinance would ensure that construction noise does not disturb the residential uses during hours when ambient noise levels are likely to be lower (i.e., at night). **Mitigation Measure NOI-1** would limit construction hours and require the implementation of noise-reducing measures during construction. Therefore, with implementation of **Mitigation Measure NOI-1**, construction activity noise impacts would be less than significant.

Mitigation Measure NOI-1

Construction Noise. Prior to commencement of construction activities, the Eastern Municipal Water District (EMWD) shall verify that grading and construction plans include the following requirements to ensure that the greatest distance between noise sources and sensitive receptors during construction activities has been achieved:

- Construction activities occurring as part of the project shall be subject to the limitations and requirements of the Riverside County Municipal Code, which states that construction activities are prohibited between the hours of 6:00 p.m. and 6:00 a.m. during the months of June through September and between the hours of 6:00 p.m. and 7:00 a.m. during the months of October through May.
- During all project area excavation and on-site grading, the project contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
- To the best extent possible, the project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project area.
- Construction staging areas shall be located as far away from sensitive receptors as possible during all phases of construction.

[61] Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual, FTA Report No. 0123*. September.

Operational Noise Impacts. The proposed project would consist of the installation of an approximately 6,400-foot-long, 18-inch-diameter potable water main in the Winchester area of Riverside County. Once construction activities are complete, staging areas would be returned to existing conditions. Thus, no operational noise would be associated with the new pipeline.

As described above, with the incorporation of **Mitigation Measure NOI-1**, the project would not result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the proposed project in excess of standards established in the local general plan or noise ordinance, or any other applicable standards. Therefore, this impact would be **less than significant with mitigation incorporated**.

b. Would the project result in generation of excessive ground-borne vibration or ground-borne noise levels? ***(Less Than Significant with Mitigation Incorporated)***

Construction of the proposed project could result in the generation of ground-borne vibration. The construction vibration impact analysis assessed the potential for building damages using vibration levels in peak particle velocity (in/sec PPV). The FTA Manual guidelines indicate that a vibration level up to 0.2 in/sec PPV is considered safe for non-engineered timber and masonry buildings.

Table 4.13.E shows the PPV values at 25 feet from a construction vibration source. As shown in Table 4.13.E, bulldozers and other heavy-tracked construction equipment (except for vibratory rollers) generate approximately 0.089 in/sec PPV of ground-borne vibration when measured at 25 feet. For the jack and bore activities, jackhammers generate approximately 0.035 in/sec PPV.

Table 4.13.E: Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV (in/sec) at 25 feet
Vibratory Roller	0.210
Hoe Ram	0.089
Large Bulldozer	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozer	0.003

Sources: *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018).
in/sec = inches per second
PPV = peak particle velocity

Construction vibration, similar to vibration from other sources, would not have any significant effects on outdoor activities (e.g., those outside of residential buildings in the project vicinity). The proposed project is expected to include the use of heavy equipment similar to a large bulldozer. Additionally, the proposed project is expected to include jack and bore activities at the drainage. The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings and the project disturbance areas because vibration impacts occur normally within the buildings. The formula for vibration transmission is provided below.

$$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$$

As identified above, residential structures located 60 feet away from the proposed trenching activities would experience vibration levels approaching 0.02 in/sec PPV. Residential structures located approximately 60 feet away from jack and bore activities would experience vibration levels approaching 0.009 in/sec PPV. Although the proposed construction activities are located 60 feet from existing structures based on preliminary plans, construction vibration levels at these structures could exceed the FTA threshold of 0.2 in/sec PPV for non-engineered timber and masonry building damage if heavy equipment were to operate within 15 feet of the structures. For example, vibration levels at a distance of 14 feet would be 0.212 in/sec PPV. Therefore, construction that would occur within 15 feet of existing homes would exceed the FTA vibration damage thresholds resulting in a potentially significant impact. Implementation of **Mitigation Measure NOI-2** would be required to maintain a minimum distance of 15 feet between the heavy construction equipment and the adjacent structures. Implementation of **Mitigation Measure NOI-2** would ensure that construction vibration levels would be below the FTA threshold of 0.2 in/sec PPV for building damage, thereby reducing potential vibration impacts to less than significant. In addition, due to the linear nature of the project, construction activities at any one receptor location would occur for a limited duration.

Mitigation Measure NOI-2 The use of heavy construction equipment, such as large bulldozers or excavators, within 15 feet of existing structures shall be prohibited.

Construction vibration associated with the project would be less than significant with implementation of **Mitigation Measure NOI-2**. Therefore, construction of the proposed project would not result in generation of excessive ground-borne vibration or ground-borne noise levels. This impact would be **less than significant with mitigation incorporated**.

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? ***(No Impact)***

The proposed project is not located within 2 miles of a public or public use airport. Aircraft noise is occasionally audible at the project site; however, no portion of the project site lies within the 60 dBA CNEL noise contours of any public airport nor does any portion of the project site lie within 2 miles of any private airfield or heliport. Therefore, the proposed project would not result in the exposure of people residing or working in the project area to excessive noise levels. **No impact** would occur.

4.14 POPULATION AND HOUSING

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

*a. Would the project 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)? **(No Impact)***

The proposed project would install a new underground pipeline within the Washington Street right-of-way between Fields Drive and Abelia Street. Land uses in the vicinity consist of single-family residential, undeveloped open space, and public facilities, including several parks and the Temecula Preparatory School.

Construction of the proposed project would provide short-term jobs over an approximately 8-month period, starting in September 2024. Many of the construction jobs would be temporary or seasonal and would be specific to the variety of construction activities. The workforce would include a variety of craftspeople (e.g., cement finishers, ironworkers, welders, carpenters, electricians, painters, and laborers). Generally, construction workers are only at a job site for the time frame in which their specific skills are needed to complete that phase of construction. Although the proposed project would generate employees at the project site during construction activities, it is expected that local and regional construction workers would be available to serve the proposed project's construction needs. Project-related construction workers would not be expected to relocate their household's place of residence as a consequence of working on the proposed project; therefore, project construction would not be expected to increase the population of Riverside County or surrounding communities.

The proposed pipeline would be constructed within existing right-of-way and would provide improved distribution capacity and improved operations at the recently approved Belle Terre Water Storage Tank. The proposed project would not provide additional major infrastructure or increase the capacity of the existing water system to accommodate new development nor would the project extend or expand infrastructure or services to existing undeveloped areas in the vicinity of the proposed alignment. Because the proposed water line would be installed to serve the existing water system and not anticipated demand for future development around the project site, it would not substantially induce growth. The project would not expand the capacity of the current water system or provide additional major infrastructure so as to encourage population growth or new development. The project would not include any new housing, commercial, or industrial space.

Therefore, the project would not directly or indirectly induce substantial population growth, and **no impact** would occur.

*b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? (**No Impact**)*

The project would be constructed within the Washington Street right-of-way between Fields Drive and Abelia Street. Although existing residences are located adjacent to the project boundaries, no housing or people would be displaced as a result of implementation of the project. Therefore, implementation of the proposed project would not result in an impact related to the displacement of substantial numbers of existing housing or people, thereby necessitating the construction of replacement housing elsewhere. **No impact** would occur.

4.15 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	☐	☐	☐	☒
ii. Police protection?	☐	☐	☐	☒
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☐	☒
v. Other public facilities?	☐	☐	☐	☒

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:

i. Fire protection?
ii. Police protection?
iii. Schools?
iv. Parks?
v. Other public facilities? ***(No Impact)***

The project site is located in a developed urban area served by existing public services, as described below.

- **Fire Protection:** Fire protection and emergency response services are provided by Riverside County Fire. The County's fire department serves all of Riverside County and many neighboring cities. The closest fire station to the project site is Station 83 at 37500 Sky Canyon Drive, #401.[62]

- **Police Protection:** Police protection in the unincorporated parts of Riverside County is provided by the Riverside County Sheriff's Department. The Southwest Sheriff's Station is the closest station to the project site and is located at 30755 Auld Road, Suite A. The station services the

62 Riverside County Fire Department. 2021. Riverside County Fire Station. Website: https://www.rvcfire.org/resources/fire-stations (accessed July 19, 2023).

contract city of Temecula and the De Luz Community Services District as well as other unincorporated communities in the area.[63]

- **Schools:** Twenty-two (22) school districts serve Riverside County, and the project site is located within the Temecula Valley Unified School District (TVUSD). Currently, there are 18 elementary schools, 7 middle schools, 3 comprehensive high schools, 1 continuation high school, 1 independent study high school, 1 virtual school, 1 virtual/homeschool, and 1 adult school in the Temecula Valley School District, for a total of 33 schools.[64] Schools in the project area include Home Instead Innovation Academy (located on the project alignment), Temecula Valley Charter School and Temecula Preparatory School (located less than 0.1 mile south of the project site), Susan La Vorgna Elementary (located approximately 1.2 miles southwest of the project site), and Storybook Cottage Preschool (located approximately 0.6 mile west of the project site).

- **Parks:** Refer to Section 4.16, Recreation, for a discussion about parks.

Development of the project would provide improved distribution capacity and improved operations at the existing Belle Terre Water Storage Tank by installing a new water pipeline within Washington Street. The proposed project does not include the construction of structures that would increase the population in the area or that would generate a higher demand for fire or police protection, schools, parks, or other public services. Therefore, the demand for public services for the project would be the same as under existing conditions, and **no impact** would occur.

[63] Riverside County Sheriff's Department. n.d. Southwest Station. Website: https://www.riversidesheriff.org/747/Southwest-Station (accessed July 19, 2023).

[64] Temecula Valley Unified School District (TVUSD). 2022. About TVUSD. Website: https://www.tvusd.k12.ca.us/site/Default.aspx?PageID=17569 (accessed August 2023).

4.16 RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

*a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? **(No Impact)***

The Riverside County Regional Park and Open Space District operates and maintains a variety of outdoor recreational sites, neighborhood parks, community parks, community facilities, open space areas, and a series of trail networks.[65]

As discussed in Section 4.14, Population and Housing, and Section 4.15, Public Services, development of the project would install a new water pipeline to enhance the hydraulic reliability of the regional water distribution system connected to the newly approved Belle Terre Water Storage Tank. No housing would be constructed as part of the project, and the proposed project would not change the number of employees on site or increase the number of residents in Riverside County or surrounding communities. Therefore, implementation of the proposed project would not increase the use of existing neighborhood or regional parks in the project vicinity. Implementation of the project would not have an adverse effect on existing park facilities and would not generate a demand for additional recreational facilities. Therefore, **no impact** would occur.

*b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? **(No Impact)***

Refer to Section 4.16.a above. The proposed project does not include recreational facilities and would not change the number of employees on site or increase the number of residents in Riverside County or the surrounding communities. Therefore, the proposed project would not result in the increased use of existing neighborhood or regional parks or other recreational facilities or create a demand for the construction or expansion of parks and recreational facilities beyond what currently exists. Therefore, there would be **no impact** to parks or recreation resources.

65 Riverside County Regional Park and Open Space District. 2023. Welcome to RivCo Parks. Website: https://www.rivcoparks.org/ (accessed July 19, 2023).

4.17 TRANSPORTATION

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

a. Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? ***(Less Than Significant Impact)***

The proposed project would install an approximately 6,400-foot-long, 18-inch-diameter water pipeline within the Washington Street right-of-way between Abelia Street and Fields Drive. Regional access to the project site is provided by SR-79 via Abelia Street. SR-79 is located west of Washington Street and travels north to south. SR-79 intersects Washington Street approximately 1.3 miles north of the northern project limits.

Upon completion of construction, no additional daily or peak-hour trips are anticipated to be attracted to or generated by the project site. Typical O&M activities associated with the proposed project would be similar to existing operations for other EMWD facilities. There would not be any full-time dedicated staff at the site. The proposed project would not generate vehicle trips for normal day-to-day operations.

As outlined in Chapter 2.0, Project Description, project construction is anticipated to start in September 2024 and last approximately 8 months. During the construction period, workers would arrive at the site at 7:00 a.m. and leave at 5:00 p.m. Access to the project site would likely be via SR-79 to eastbound Washington Street and traveling about 1.5 miles to the northern limit of the project on Fields Drive. It is anticipated that project construction would require a 12-person crew.

The contractor would employ the use of heavy construction machinery, likely including the following: wheel-mounted/track-mounted drill rig, horizontal drilling machine, excavator, backhoe, and roller compactor. All of the material excavated during the pipeline installation would be used to fill in the access pits following the pipeline's installation. No import or export of soils would be required, but asphalt demolition and delivery is anticipated. The equipment would likely be delivered when the construction begins and removed when it ends. Therefore, on a typical day, heavy equipment related to construction activities would be limited to asphalt demolition and delivery.

The project description states that approximately 75,000 sf of asphalt could be demolished. At a depth of 9 inches, the volume of asphalt would be 56,250 cubic feet (75,000 sf x 0.75 ft = 56,250 ft^3) or 2,083 cubic yards (at 27 cubic feet per cubic yard). A total of 116 truckloads would be required to haul this amount of material (2,083 cubic yards / 18 cubic yards per truck = 116 trucks). Approximately 15 one-way trips are anticipated over a three-week period (116 truckloads / 15 days x 2 truck trips per truckload = 15.47 truck trips). Heavy duty trucks could have a passenger vehicle equivalent (PCE), so 46 PCE trips could be generated each day of asphalt demolition (15.47 truck trips x 3 PCE per truck = 46.4 PCE). If the period of asphalt remover is longer than three weeks, then fewer truck trips per day would be necessary. Asphalt replacement would require approximately the same number of truck trips for asphalt delivery.

Based on the anticipated construction needs, the following travel patterns are possible:

- 12 inbound passenger vehicle trips during the a.m. peak hour
- 12 outbound passenger vehicle trips during the p.m. peak hour
- 15 daily truck trips (for approximately 2 during a.m. and p.m. peak hours)

The anticipated 12 inbound worker trips in the a.m. peak hour and 12 outbound worker trips in the p.m. peak hour would equate to 24 daily passenger vehicle trips. Heavy duty trucks could have a passenger vehicle equivalent (PCE) of 3.0 so the 2 a.m. peak hour and 2 p.m. peak hour truck trips could result in an additional 12 PCE trips. This level of traffic volume (36 PCE total) is less than the 50 or more peak-hour trips necessary to be included in the study area according to thresholds provided in the County of Riverside *Transportation Analysis Guidelines for Level of Service Vehicle Miles Traveled* (County Guidelines)[66]. Therefore, the proposed project is not anticipated to contribute to any level of service (LOS) or operational deficiencies to the surrounding circulation system based on its low number of trips for a temporary duration.

Although the proposed project would generate construction (temporary) vehicles/trucks, it would not preclude alternative modes of transportation or facilities (e.g., transit, bicycle, or pedestrian). No bus stops are located along Washington Street. A portion of the project area (i.e., from Autumn Glen Circle to Abelia Street, approximately 2,400 feet) includes Class II bicycle lanes. Bicycle lanes are not consistently provided along Washington Street north or south of this segment. Any temporary closure of bicycle lanes within this segment during construction would be consistent with the California Temporary Traffic Control Handbook. The proposed project is consistent with the County's General Plan Circulation Element and Healthy Communities Element,[67,68] and the circulation policies

66 County of Riverside. 2020b. *Transportation Analysis Guidelines for Level of Service Vehicle Miles Traveled*. December 15. Website: https://trans.rctlma.org/sites/g/files/aldnop401/files/migrated/Portals-7-2020-12-15-20--20Transportation-20Analysis-20Guidelines.pdf (accessed August 2023).

67 County of Riverside. 2020a. General Plan, Circulation Element. July 7. Website: https://planning.rctlma.org/sites/g/files/aldnop416/files/migrated/Portals-14-genplan-2019-elements-Ch04-Circulation-072720v2.pdf (accessed August 2023).

68 County of Riverside. 2021a. General Plan, Healthy Communities Element. September 21. Website: https://planning.rctlma.org/sites/g/files/aldnop416/files/migrated/Portals-14-Ch10-HCE-092121.pdf (accessed August 2023).

identified in the County's General Plan Southwest Area Plan.[69] The proposed project would not make any permanent changes to the public right-of way in the project vicinity and would not conflict with existing or planned transit, roadway, bicycle, or pedestrian facilities. Therefore, the proposed Project would not conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. This impact would be **less than significant**.

*b. Would the project conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)? **(Less Than Significant Impact)***

State CEQA Guidelines Section 15064.3, subdivision (b), states that transportation impacts for land use projects are to be measured by evaluating the project's VMT as outlined in the following:

> Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.

VMT is the amount and distance of automobile travel attributable to a project. According to the Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA*,[70] "automobile" refers to "on-road passenger vehicles, specifically cars and light trucks." Thus, construction trucks do not need to be included in the project VMT assessment.

Additionally, the OPR technical advisory recommends VMT screening thresholds for smaller projects. The footnote on page 12 of the OPR technical advisory states the following:

> **Screening Thresholds for Small Projects**
>
> Many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact.

The OPR technical advisory recommends that projects generating fewer than 110 trips would be assumed to cause a less than significant transportation impact. Additionally, the recommendation of a small project screening threshold is included in the County Guidelines.[71]

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69 County of Riverside. 2021b. General Plan, Southwest Area Plan. September 28. Website: https://planning.rctlma.org/sites/g/files/aldnop416/files/migrated/Portals-14-genplan-GPA-2022-Compiled-SWAP-4-2022-rev.pdf (accessed August 2023).

70 Office of Planning and Research (OPR). 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. December. Website: http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf (accessed May 2023).

71 County of Riverside. 2020b. *Transportation Analysis Guidelines for Level of Service Vehicle Miles Traveled.* December 15. Website: https://trans.rctlma.org/sites/g/files/aldnop401/files/migrated/Portals-7-2020-12-15-20--20Transportation-20Analysis-20Guidelines.pdf (accessed August 2023).

The proposed project is estimated to generate nominal average daily traffic (ADT) (i.e., 70 PCE ADT) and peak-hour trips (i.e., 36 PCE trips) on a temporary basis for construction, and it would not generate any new vehicle trips during day-to-day operations since the project is addressing the infrastructure needs. As such, it is considered a small project and assumed to have a less than significant impact on transportation. Therefore, the proposed project is not subject to a VMT analysis.

Potential impacts would be **less than significant**.

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

The proposed project would not change the existing roadway design. Temporary contractor laydown areas would be identified prior to construction activities. Potential construction staging areas are located within the eastern right-of-way corridor of Washington Street between Cottonwood Road and Autumn Glen Circle. All construction equipment, including construction worker vehicles, would be staged on the project site, unless determined otherwise by the contractor, for the duration of the construction period. Additional heavy vehicles may travel along major arterials and SR-79 during construction.

Construction of the proposed pipeline would require one temporary lane closure on Washington Street. The remaining lanes would remain open to through traffic. Traffic control measures would be set up in phases as the work traverses along and across the streets. Conventional traffic control measures (e.g., cones, K-rails, signs, message boards, and flaggers, as needed) would be used to direct traffic flow during potential lane closures. When work is not being performed, trenches would be plated with steel plates to restore normal traffic flow. As described in Section 2.6, Environmental Commitments, a Traffic Control Plan (TCP) would be approved for all construction work within public roadways. The TCP would be prepared in accordance with the USDOT Manual of Uniform Traffic Control Devices, the Caltrans Manual of Uniform Traffic Control Devices, and permit requirements by the authority having jurisdiction. Implementation of the TCP would facilitate safe passage of both construction vehicles and private vehicles. As a result, the proposed project would not substantially increase hazards for vehicles due to a design feature or incompatible uses. This impact would be **less than significant**.

d. Would the project result in inadequate emergency access? ***(Less Than Significant Impact)***

Effects of the proposed project on emergency access would be limited to construction and would be temporary in nature. Only one lane would be closed during construction; therefore, emergency access would still be possible along all roadways and full access would be restored following construction. During construction, parallel routes on Pourroy Road and SR-79 would remain fully open. Therefore, the proposed project would not result in inadequate emergency access. Impacts associated with emergency access would be **less than significant**.

4.18 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or	☐	☒	☐	☐
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Chapter 532, Statutes of 2014 (i.e., AB 52), requires that Lead Agencies evaluate a project's potential to impact "tribal cultural resources," which are:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe and are one of the following:
    - Included or determined to be eligible for inclusion in the California Register.
    - Included in a local register of historical resources as defined in subdivisions (k) of PRC Section 5020.1.
    - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivisions (c) of PRC Section 5024.1. In applying the criteria set forth in subdivisions (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

A "historical resource" (PRC Section 21084.1), a "unique archaeological resource" (PRC Section 21083.2(g)), or a "nonunique archaeological resource" (PRC Section 21083.2 (h)) may also be a tribal cultural resource if it is included or determined to be eligible for inclusion in the California Register. AB 52 also gives lead agencies the discretion to determine, supported by substantial evidence, whether a resource qualifies as a "tribal cultural resource."

The consultation provisions of the law require that a public agency consult with local Native American tribes that have requested placement on that agency's notification list for CEQA projects. Within 14 days of determining that a project application is complete, or a decision by a public agency to undertake a project, the lead agency must notify tribes of the opportunity to consult on the project, should a tribe have previously requested to be on the agency's notification list. California Native American tribes must be recognized by the California Native American Heritage Commission (NAHC) as traditionally and culturally affiliated with the project site and must have previously requested that the lead agency notify them of projects. Tribes have 30 days following notification of a project to request consultation with the lead agency.

The purpose of the consultation is to inform the lead agency in its identification and determination of the significance of tribal cultural resources. If a project is determined to result in a significant impact on an identified tribal cultural resource, the consultation process must occur and conclude prior to the adoption of a Negative Declaration or Mitigated Negative Declaration, or certification of an EIR (PRC Sections 21080.3.1., 21080.3.2, 21080.3).

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

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

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. ***(Less Than Significant with Mitigation Incorporated)***

As described in Section 4.5, Cultural Resources, data from the records search conducted at the Eastern Information Center indicate there have been 23 previous studies within 0.5 mile of the project site, 4 of which included portions of the project area. Although one historic resource is documented within the project area (33-13871, a segment of Winchester Road), this is erroneous (see Section 4.5, Cultural Resources). An additional 12 resources have been recorded within 0.5 mile, including 6 prehistoric resources and 2 multi-component sites with both prehistoric and historic elements. The nearest prehistoric resource located approximately 75 meters west of the project area appears to have been removed sometime prior to 1980. No listed or eligible tribal cultural resources were identified.

Per AB 52, EMWD initiated consultation with Native Tribes that are traditionally and culturally affiliated with the geographic area of the proposed Project to identify resources of cultural or spiritual value to the Tribe. On July 6, 2023, EMWD sent consultation notification letters to Native Tribes on EMWD's Master List pursuant to the requirements of AB 52 pertaining to government-to-government consultation. Table 4.18.A summarizes EMWD's consultation efforts. To date, EMWD has conducted consultation with two federally recognized Native Tribes: The Agua Caliente Band of

Cahuilla Indians and the Pechanga Band of Luiseno Indians. An additional four Native Tribes were contacted but declined consultation or did not respond, as noted in Table 4.18.A.

Table 4.18.A: Native American Tribal Consultation

Tribe	Individual Contacted	Date Letter Mailed	Response Received	Consultation Held
Agua Caliente	Pattie Garcia	07/06/2023	Accepted	09/21/2023
Morongo	Laura Chatterton	07/06/2023	Accepted	DNR
Pechanga	Ebru Ozdil	07/06/2023	Accepted	10/05/2023
Rincon	Cheryl Madrigal	07/06/2023	Undecided	N/A
San Manuel	Ryan Nordness	07/06/2023	DNR	N/A
Soboba	Joe Ontiveros	07/06/2023	DNR	N/A

Source: EMWD, 2023
DNR = Did Not Response
N/A = Not Applicable

During the consultation meeting, the responding Tribe highlighted their concerns for the general area noting that it is within Traditional Use Areas and considered sensitive as there are existing sites in the surrounding areas. The Tribe provided recommendations with regards to mitigation. The Tribe expressed concern with potential unearthing of unknown artifacts while grading the selected site. The Tribe recommended tribal monitoring consistent with those measures used in prior CEQA analysis conducted by EMWD to mitigate the potential for uncovering of unknown buried artifacts.

Implementation of the following mitigation measures would satisfy the agreement between EMWD and tribal representatives under AB 52 and reduce potential impacts from the proposed project to a less than significant level.

Mitigation Measure TCR-1 **Tribal Resources Monitoring Agreement.** At least 30 days prior to the start of ground-disturbing activities, Eastern Municipal Water District (EMWD) shall contact the Consulting Tribe(s) to develop Cultural Resources Treatment Monitoring Agreement (Agreement). The Agreement shall address the treatment of archaeological resources that may be Tribal cultural resources inadvertently discovered on the project site; project grading; ground disturbance and development scheduling; the designation, responsibilities, and participation of tribal monitor(s) during grading, excavation, and ground disturbing activities; and compensation for the tribal monitors, including overtime, weekend rates, and mileage reimbursement.

Mitigation Measure TCR-2 **Tribal Monitoring.** Prior to the start of ground-disturbing activities, a Tribal monitor may participate in the construction workers archaeological resources sensitivity training, conducted by the project archaeologist. At least seven business days prior to ground-disturbing activities, EMWD shall notify the Tribe of the

grading/excavation schedule and coordinate the tribal monitoring schedule.

A Tribal monitor shall be present for ground-disturbing activities associated with the Project. Both the project archaeologist and Tribal monitor working together will determine the areas with a potential for encountering potential Tribal cultural resources. Both the archaeologist and tribal monitor shall have the authority to stop and redirect grading activities in order to evaluate the nature and significance of any archaeological resources discovered within the project limits. Such evaluation shall include culturally appropriate temporary and permanent treatment pursuant to the Cultural Resources Treatment and Monitoring Agreement, which may include avoidance of tribal cultural resources, in-place preservation, data recovery, and/or reburial so the resources are not subject to further disturbance in perpetuity. Any reburial shall occur at a location determined between the EMWD and the consulting Tribe as described in TCR-4. Treatment may also include curation of the resources at a tribal curation facility or an archaeological curation facility, as determined in discussion among the EMWD, the Tribe and the project archaeologist as addressed in the Cultural Resources Treatment and Monitoring Agreement. The on-site Tribal monitoring shall end when all ground disturbing activities on the project site are completed, or when the Tribal representatives and Tribal monitor have indicated that the project site has little or no potential for impacting Tribal Cultural Resources.

Mitigation Measure TCR-3

Disposition of Inadvertent Discoveries. In the event that Tribal Cultural Resources are recovered during the course of grading, the EMWD shall relinquish ownership of all cultural resources, including sacred items, burial goods, archaeological artifacts, and non-human remains. The EMWD will coordinate with the project archaeologist and the Tribe to conduct analysis of recovered resources. If it is determined that the resource is a Native American resource and thus significant under CEQA, avoidance of the resource will be explored as the preferred option and on-site reburial will be evaluated as the second option. If avoidance and on-site reburial are not possible, a treatment plan shall be prepared with State guidelines and in consultation with the Tribe. The treatment plan may include, but would not be limited to capping in place, excavation and removal of the resource, interpretive displays, sensitive area signage, or other mutually agreed upon measures. Treatment may also include curation of the cultural resources at a tribal curation facility, as determined by the EMWD and the consulting Tribe.

Mitigation Measure TCR-4 **Non-Disclosure of Reburial Locations.** It is understood by all parties that unless otherwise required by law, the site of any reburial of culturally sensitive resources shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The coroner, pursuant to the specific exemption set forth in California Government Code 6254(r), parties, and Lead Agencies will be asked to withhold public disclosure information related to such reburial.

Mitigation Measures TCR-1 through TCR-4 would ensure that a Cultural Resources Treatment Monitoring Agreement is developed in consultation with the Consulting Tribe(s), a Tribal Monitor is present during ground-disturbing activities and that if tribal cultural resources are identified during these activities, these resources would be evaluated, documented, and studied in accordance with standard archaeological practice and under the supervision of the Consulting Tribe(s). As such, with implementation of these mitigation measures the project's potential impacts to tribal cultural resources would be **less than significant with mitigation incorporated**.

4.19 UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

*a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? **(Less Than Significant Impact)***

A variety of local and regional purveyors in this area provide and maintain utility and service system facilities associated with electricity, water, stormwater, wastewater, solid waste, communications, and natural gas. Several of these utilities run parallel to the water pipeline route in the form of sewer pipes, storm drains, power lines, gas mains, and telephone lines.

Water Supply. The EMWD has jurisdiction over the water service lines within a 558-square-mile service area in western Riverside County.[72] The EMWD has four sources of water supply: imported water from the Metropolitan Water District of Southern California (MWD), local groundwater, desalinated groundwater, and recycled water. Potable imported water is treated and delivered to the EMWD directly from MWD's two large filtration plants: Henry J. Mills (Mills) Water Treatment Plant and the Robert F. Skinner (Skinner) Water Treatment Plant. The EMWD owns and operates two microfiltration plants that filter raw imported water delivered through MWD, removing particulate contaminants to achieve potable water standards. The two treatment plants (i.e., Perris Water Filtration Plant and Hemet Water Filtration Plant) are located in Perris and Hemet, respectively.

[72] Eastern Municipal Water District (EMWD). n.d. Who We Are. Website: https://www.emwd.org/who-we-are (accessed August 2023).

The EMWD also produces potable and brackish groundwater from the San Jacinto Groundwater Basin that underlies the EMWD service area. The EMWD's groundwater wells pump primarily from the eastern portion of the EMWD, with the largest amount of production taking place around the cities of Hemet and San Jacinto. The EMWD owns and operates two desalination plants in Sun City (i.e., the Menifee Desalter and the Perris I Desalter), which treat brackish groundwater through reverse osmosis to achieve potable water standards. In addition to the potable water system, the EMWD maintains a regional recycled water system that provides tertiary-treated recycled water to customers for agricultural, landscape irrigation, environmental, and industrial use. The EMWD's recycled water system consists of four regional water reclamation facilities (RWRFs) that treat municipal sewage and produce water for recycling. The four RWRFs (i.e., San Jacinto Valley RWRF, Moreno Valley RWRF, Temecula Valley RWRF, and Perris Valley RWRF) are spread throughout the EMWD service area. A network of pipelines connects the four RWRFs, as well as several distribution storage ponds, to manage the delivery of recycled water.[73]

The project would not result in the construction of new water treatment facilities or the expansion of such facilities. The proposed project would install a new underground water pipeline for the Belle Terre Water Storage Tank. Development of the proposed project would improve hydraulic reliability of the regional water distribution system and enhance transmission capabilities to and from the Belle Terre Water Storage Tank. Although the proposed project itself includes the construction of a new water pipeline, measures (e.g., BMPs, Best Available Control Technologies) have been incorporated into the project design along with conformance with appropriate guidelines and policies to reduce possible environmental impacts to the extent practicable. Additionally, as described in Section 2.5.2, Project Operation, O&M activities associated with the proposed project would be similar to existing EMWD operations and maintenance for other water pipelines within its jurisdiction. Further, overall water demands would remain similar to existing conditions, and any increase in water demand during project construction or operation would be minimal and incidental to the overall EMWD system. Therefore, a **less than significant impact** would occur.

Wastewater. The EMWD provides wastewater services to approximately 268,000 customers within its service area and currently treats approximately 49 million gallons per day of wastewater at its four active regional water reclamation facilities through 1,813 miles of sewer pipelines.[74]

Implementation of the project would not require or result in the relocation or construction of new or expanded wastewater treatment facilities. The project entails installation of a new water pipeline within the public right-of-way. Project construction could result in the discharge of potable and non-potable water. Discharge of potable and non-potable water would be in compliance with NPDES Municipal Regional Permit requirements. Dewatering of the work area may be necessary in areas where groundwater is encountered within the planned depth of excavation, depending on surface and groundwater levels at the time of construction. This discharge would be consistent with RWQCB

[73] Eastern Municipal Water District (EMWD). 2021. *2020 Urban Water Management Plan*. July 1. Website: https://www.emwd.org/sites/main/files/file-attachments/urbanwatermanagementplan_0.pdf?1625160721 (accessed August 2023).

[74] Eastern Municipal Water District (EMWD). n.d. Wastewater Service. Website: https://www.emwd.org/wastewater-service (accessed August 2023).

requirements and would not require or result in the relocation of construction of new or expanded wastewater treatment facilities. Therefore, this impact would be **less than significant**.

Stormwater. As described in Section 4.10, Hydrology and Water Quality, storm water from the project site discharges to the French Valley Channel and an unnamed tributary to Warm Springs Creek, which flows into Murrieta Creek, which flows into Santa Margarita River, which discharges to the Pacific Ocean.

The project would entail construction of a water pipeline that would be located underground. Implementation of the proposed project would not affect the amount of on-site runoff and therefore would not require the expansion of stormwater facilities. No additional stormwater drainage facilities would be required, and **no impact** would occur.

Gas, Electricity, and Telecommunications. SCE provides electricity in Riverside County. The Southern California Gas Company (SoCalGas) provides natural gas service. Traditional telephone service is provided by AT&T and its various precursor companies. A variety of cellular and wireless service companies operate in Riverside County.

The project would entail construction of a water pipeline that would be located underground. No new gas, electricity, or telecommunications facilities would be required to serve the proposed project. The proposed pipeline alignment has been designed to avoid impacts to other utilities located within the existing right-of-way. Therefore, the proposed project would not require or result in the relocation or construction of new or expanded gas, electricity, or telecommunications facilities, and **no impact** would occur.

b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? ***(Less Than Significant Impact)***

The project would not result in an increase in the amount of water that currently is distributed to the site. New or expanded water supply entitlements would not be required to serve the project. During pipeline installation, water would be used to create the drilling fluid (i.e., a mixture of water and additives) that facilitates both the soil borings and directional drilling. Water would be provided via a water truck during construction activities. The amount of water required would be relatively small and would only be needed during the construction period. Therefore, the proposed project would result in a **less than significant impact** related to water supplies.

c. Would the project 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? ***(Less Than Significant Impact)***

Refer to Section 4.19.a above. Implementation of the project would not result in a change in the wastewater treatment needed. Impacts related to wastewater treatment would be **less than significant**.

d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? ***(Less Than Significant Impact)***

Implementation of the project would generate solid waste associated with construction activities, including construction materials and general refuse. As outlined in Chapter 2.0, Project Description, all of the material excavated during pipeline installation would be used to fill in the access pits following pipeline installation. No import or export of soils would be required. Therefore, minimal non-hazardous waste would be hauled to local disposal centers for recycling or taken to landfills.

The closest landfill to the project site is Lamb Canyon Landfill (approximately 20 miles northwest). As of January 2015, the Lamb Canyon Landfill had a remaining capacity of approximately 19.2 million cubic yards, with a total capacity of 39.6 million cubic yards.[75] The quantity of solid waste materials associated with construction would be limited to the construction period and would not pose a significant impact upon existing landfills. No additional solid waste would be generated by long-term operations of the proposed project. Impacts related to solid waste disposal are considered **less than significant**.

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste? ***(Less Than Significant Impact)***

As described in Section 4.19.d, implementation of the project would generate solid waste associated with construction activities. To the extent possible, solid waste would be recycled either on site or transported to a local disposal center for recycling. Solid waste generation would be limited to the construction period; no solid waste would be generated from long-term operation of the proposed project. The proposed project would comply with federal, State, and local statutes and regulations related to solid waste. This impact would be **less than significant**.

[75] California Department of Resources Recycling and Recovery (CalRecycle). 2019. SWIS Facility/Site Activity Details, Lamb Canyon Sanitary Landfill (33-AA-0007). Website: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2246?siteID=2368 (accessed July 19, 2023).

4.20 WILDFIRE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒
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?	☐	☐	☒	☐

*a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan? **(Less Than Significant Impact)***

According to CAL FIRE, the project site is located in a VHFHSZ.[76] As discussed in Section 4.9.f, operation of the proposed project would be the same or similar to the O&M of existing facilities and would not impair or physically interfere with emergency response or evacuation plans. The proposed project would be required to comply with all applicable codes and ordinances for emergency vehicle access, which would ensure adequate access to, from, and on site for emergency vehicles. Adherence to these codes and ordinances would ensure that construction and operation of the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, the proposed project would not inhibit an emergency response plan or an emergency evacuation plan during construction. Therefore, this impact would be **less than significant**.

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

The proposed project is located in a developed area with some undeveloped hillsides nearby. However, as discussed in Section 4.9.g, implementation of the project would not change the degree of exposure to wildfires because no new aboveground structures or housing would be constructed, and people would not regularly access the project site. Implementation of BMPS identified in

[76] California Department of Fire and Forestry Protection (CAL FIRE). 2022. Riverside County State Responsibility Area Fire Hazard Severity Zones Map . Website: https://osfm.fire.ca.gov/media/4rbmwazl/fhsz_county_sra_11x17_2022_riverside_2.pdf (accessed July 17, 2023).

Section 4.9, Hazards and Hazardous Materials, would reduce the potential for construction activities to cause a wildland fire to **less than significant**.

c. Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? ***(No Impact)***

The proposed project would install an underground water pipeline within an existing road via open trench construction and jack and bore beneath the existing culvert. No infrastructure (e.g., roads, fuel breaks, emergency water sources, or power lines) would be required to serve the proposed pipeline. Therefore, the proposed project would not require the installation or maintenance of associated infrastructure. **No impact** would occur.

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

The proposed project would install an underground water pipeline within an existing road via open trench construction and jack and bore beneath the existing culvert. The pipeline would be installed at depths from 6 to 20 feet below ground surface. In its existing condition, the project site is predominantly flat. According to the FEMA FIRM, the project site is located in an area labeled as "not printed". The Riverside County Floodplain Map indicates that some portions of the project site are located within a Riverside County Flood Control Zone.[77] However, as described in Response 4.10.d, BMPs would be implemented during construction to ensure that pollutants would be retained on site and would be prevented from reaching downstream receiving waters during a rain event. During operation, the proposed project would not place any improvements within a floodplain or generate any pollutants. As described in Response 4.7.a.iv, the project site is not located within a landslide zone.[78] Therefore, downslope flooding as a result of runoff, post-fire slope instability, or drainage changes are unlikely to occur at the site. Furthermore, due to the developed nature of the project site, risks associated with wildfires are considered less than significant. The proposed project would not 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, and impacts would be **less than significant**.

[77] Riverside County Flood Control. n.d. Riverside County Floodplain Map. Website: https://content.rcflood.org/floodplainmap/ (accessed July 2023).

[78] California Geological Survey (CGS). 2021. Earthquake Zones of Required Investigation. Website: https://maps.conservation.ca.gov/cgs/EQZApp/app/ (accessed July 10, 2023).

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

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

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

The proposed project would install an approximately 6,400-foot-long, 18-inch-diameter potable water main within the Washington Street right-of-way between Fields Drive and Abelia Street. The project's purpose is to enhance the hydraulic reliability of the regional water distribution system connected to the newly approved Belle Terre Water Storage Tank, located north of Fields Drive and east of San Diego Canal. As described in Section 4.4, Biological Resources, Section 4.5, Cultural Resources, and Section 4.18, Tribal Cultural Resources, with the incorporation of the identified mitigation measures, implementation of the proposed project: (a) would not degrade the quality of the environment; (b) would not substantially reduce the habitats of fish or wildlife species; (c) would not cause a fish or wildlife population to drop below self-sustaining levels; (d) would not threaten to eliminate a plant or animal; and (e) 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. This impact would be **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 with Mitigation Incorporated)***

The *State CEQA Guidelines* require a discussion of significant environmental impacts that would result from project-related actions in combination with "closely related past, present, and probably future projects located in the immediate vicinity (*State CEQA Guidelines* Section 15130[b][1][A]). Cumulative environmental impacts are those impacts that by themselves are not significant, but when considered with impacts occurring from other projects in the vicinity would result in a cumulative impact. Related projects considered to have the potential of creating cumulative impacts in association with the proposed project consist of projects that are reasonably foreseeable and that would be constructed or operated during the life of the proposed project.

The proposed project's impacts would be individually limited and not cumulatively considerable. The potentially significant impacts that can be reduced to a less than significant level with implementation of recommended mitigation measures include the topics of biological resources, cultural resources, geology and soils, and noise. These impacts would primarily be related to construction-period activities, would be temporary in nature, and would not substantially contribute to any potential cumulative impacts associated with these topics. For the topic of biological resources, implementation of **Mitigation Measures BIO-1 through BIO-4** would ensure that impacts to special-status species, including nesting birds, LBVI, BUOW, and Stephen's kangaroo rat are reduced to a less than significant level. For the topic of cultural resources, potentially significant impacts to archaeological and cultural resources would be reduced to less than significant levels with implementation of **Mitigation Measures CULT-1 through CULT-4.** For the topic of geology and soils, implementation of **Mitigation Measures GEO-1a through GEO-1c** would ensure that impacts related to paleontological resources are reduced to less than significant levels. For the topic of noise, implementation of **Mitigation Measures NOI-1 and NOI-2** would ensure that impacts related to construction noise and vibration are reduced to less than significant levels. For the topic of tribal cultural resources, implementation of **Mitigation Measures TCR-1 through TCR-4** would satisfy the agreement between EMWD and tribal representatives under AB 52 and reduce potential impacts from the proposed project to a less than significant level.

For the topics of aesthetics, agricultural and forestry resources, air quality, energy, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, transportation, utilities and service systems, and wildfire, the project would have either no impacts or less than significant impacts and, therefore, would not substantially contribute to any potential cumulative impacts for these topics. All environmental impacts that could occur as a result of the proposed project would be reduced to a less than significant level through the implementation of the mitigation measures recommended in this document.

Implementation of these measures would ensure that the impacts of the project would be below established thresholds of significance and that these impacts would not combine with the impacts of other cumulative projects to result in a cumulatively considerable impact on the environment as a

result of project development. Therefore, this impact would be **less than significant with mitigation incorporated.**

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)***

The proposed project would install an approximately 6,400-foot-long, 18-inch-diameter potable water main within the Washington Street right-of-way between Fields Drive and Abelia Street. Based on the analysis in Chapter 4.0, CEQA Environmental Checklist, development of the proposed project would not cause substantial adverse effects to human beings because all impacts would be less than significant or, as described in Section 4.13, Noise, can be mitigated to a less than significant level. This impact would be **less than significant with mitigation incorporated**.

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APPENDIX A

AIR QUALITY MODELING RESULTS

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Washington Street Pipeline Project Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Washington Street Pipeline Project
Construction Start Date	9/2/2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	14.0
Location	33.616384353903015, -117.08761013241661
County	Riverside-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5685
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.20

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Road Construction	1.21	Mile	13.0	0.00	—	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.58	1.57	49.6	38.6	0.06	1.58	5.60	5.81	1.45	0.89	1.62	—	6,700	6,700	0.27	0.18	2.91	6,726
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.58	1.57	49.6	38.3	0.06	1.58	1.41	2.99	1.45	0.17	1.62	—	6,686	6,686	0.27	0.06	0.02	6,711
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.19	0.18	4.71	3.82	0.01	0.17	0.33	0.50	0.16	0.05	0.21	—	663	663	0.03	0.01	0.11	668
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.03	0.03	0.86	0.70	< 0.005	0.03	0.06	0.09	0.03	0.01	0.04	—	110	110	< 0.005	< 0.005	0.02	111

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2024	1.58	1.57	49.6	38.6	0.06	1.58	5.60	5.81	1.45	0.89	1.62	—	6,700	6,700	0.27	0.18	2.91	6,726
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.58	1.57	49.6	38.3	0.06	1.58	1.41	2.99	1.45	0.17	1.62	—	6,686	6,686	0.27	0.06	0.02	6,711
2025	1.23	1.23	41.5	31.1	0.05	1.21	1.19	2.40	1.10	0.15	1.25	—	5,851	5,851	0.24	0.05	0.02	5,872
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.19	0.18	4.71	3.82	0.01	0.17	0.33	0.50	0.16	0.05	0.21	—	663	663	0.03	0.01	0.11	668
2025	0.11	0.10	2.85	2.27	< 0.005	0.10	0.06	0.16	0.09	0.01	0.10	—	387	387	0.02	< 0.005	0.03	388
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.03	0.03	0.86	0.70	< 0.005	0.03	0.06	0.09	0.03	0.01	0.04	—	110	110	< 0.005	< 0.005	0.02	111
2025	0.02	0.02	0.52	0.41	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	—	64.0	64.0	< 0.005	< 0.005	0.01	64.3

3. Construction Emissions Details

3.1. Linear, Grubbing & Land Clearing (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.17	4.25	3.43	< 0.005	0.19	—	0.19	0.18	—	0.18	—	491	491	0.02	< 0.005	—	492
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	4.97	4.97	—	0.75	0.75	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.17	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	20.2	20.2	< 0.005	< 0.005	—	20.2
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.20	0.20	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.34	3.34	< 0.005	< 0.005	—	3.35
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	1.00	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	173	173	0.01	0.01	0.69	175
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.04	0.02	1.19	0.29	0.01	0.02	0.27	0.29	0.02	0.08	0.10	—	1,051	1,051	0.02	0.17	2.22	1,104
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.61	6.61	< 0.005	< 0.005	0.01	6.70
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	43.2	43.2	< 0.005	0.01	0.04	45.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.09	1.09	< 0.005	< 0.005	< 0.005	1.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.15	7.15	< 0.005	< 0.005	0.01	7.50

3.3. Linear, Grading & Excavation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.51	1.51	49.5	37.5	0.06	1.58	—	1.58	1.45	—	1.45	—	6,495	6,495	0.26	0.05	—	6,518
Dust From Material Movement	—	—	—	—	—	—	1.24	1.24	—	0.13	0.13	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.51	1.51	49.5	37.5	0.06	1.58	—	1.58	1.45	—	1.45	—	6,495	6,495	0.26	0.05	—	6,518
Dust From Material Movement	—	—	—	—	—	—	1.24	1.24	—	0.13	0.13	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	2.71	2.06	< 0.005	0.09	—	0.09	0.08	—	0.08	—	356	356	0.01	< 0.005	—	357
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.49	0.38	< 0.005	0.02	—	0.02	0.01	—	0.01	—	58.9	58.9	< 0.005	< 0.005	—	59.1
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	1.00	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	173	173	0.01	0.01	0.69	175
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	31.0	31.0	< 0.005	< 0.005	0.09	32.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.07	0.76	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	159	159	0.01	0.01	0.02	161
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	31.1	31.1	< 0.005	< 0.005	< 0.005	32.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.81	8.81	< 0.005	< 0.005	0.02	8.93
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.70	1.70	< 0.005	< 0.005	< 0.005	1.78
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.46	1.46	< 0.005	< 0.005	< 0.005	1.48
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.29
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Linear, Drainage, Utilities, & Sub-Grade (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	1.18	41.5	30.4	0.05	1.21	—	1.21	1.10	—	1.10	—	5,694	5,694	0.23	0.05	—	5,713

Dust From Material Movement	—	—	—	—	—	—	1.03	1.03	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.70	1.25	< 0.005	0.05	—	0.05	0.05	—	0.05	—	234	234	0.01	< 0.005	—	235
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.31	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	38.7	38.7	< 0.005	< 0.005	—	38.9
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.70	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	155	155	0.01	0.01	0.02	157
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.47	6.47	< 0.005	< 0.005	0.01	6.56
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.07	1.07	< 0.005	< 0.005	< 0.005	1.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Linear, Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54	0.54	14.1	11.3	0.01	0.63	—	0.63	0.60	—	0.60	—	1,620	1,620	0.07	0.01	—	1,625
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.39	0.31	< 0.005	0.02	—	0.02	0.02	—	0.02	—	44.4	44.4	< 0.005	< 0.005	—	44.5
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.07	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.35	7.35	< 0.005	< 0.005	—	7.37
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.70	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	155	155	0.01	0.01	0.02	157
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.31	4.31	< 0.005	< 0.005	0.01	4.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.72
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Pipeline Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	0.58	12.5	10.1	0.01	0.53	—	0.53	0.50	—	0.50	—	1,445	1,445	0.06	0.01	—	1,450
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	1.75	1.43	< 0.005	0.07	—	0.07	0.07	—	0.07	—	204	204	0.01	< 0.005	—	204
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.32	0.26	< 0.005	0.01	—	0.01	0.01	—	0.01	—	33.7	33.7	< 0.005	< 0.005	—	33.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.07	0.76	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	159	159	0.01	0.01	0.02	161
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.7	22.7	< 0.005	< 0.005	0.04	23.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.75	3.75	< 0.005	< 0.005	0.01	3.80
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Pipeline Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.56	12.4	10.1	0.01	0.52	—	0.52	0.49	—	0.49	—	1,445	1,445	0.06	0.01	—	1,450
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.75	0.61	< 0.005	0.03	—	0.03	0.03	—	0.03	—	87.7	87.7	< 0.005	< 0.005	—	88.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.14	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	14.5	14.5	< 0.005	< 0.005	—	14.6

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.70	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	155	155	0.01	0.01	0.02	157
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.55	9.55	< 0.005	< 0.005	0.02	9.69
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.58	1.58	< 0.005	< 0.005	< 0.005	1.60
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	9/2/2024	9/20/2024	5.00	15.0	—
Linear, Grading & Excavation	Linear, Grading & Excavation	9/23/2024	10/18/2024	5.00	20.0	—
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	2/3/2025	2/21/2025	5.00	15.0	—
Linear, Paving	Linear, Paving	2/24/2025	3/7/2025	5.00	10.0	—
Pipeline Construction	Linear, Trenching	10/21/2024	1/31/2025	5.00	75.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Linear, Grubbing & Land Clearing	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Linear, Grubbing & Land Clearing	Crawler Tractors	Diesel	Tier 2	1.00	8.00	87.0	0.43
Linear, Grubbing & Land Clearing	Excavators	Diesel	Tier 2	1.00	8.00	36.0	0.38
Linear, Grading & Excavation	Excavators	Diesel	Tier 2	3.00	8.00	36.0	0.38

Linear, Grading & Excavation	Crawler Tractors	Diesel	Tier 2	1.00	8.00	87.0	0.43
Linear, Grading & Excavation	Graders	Diesel	Tier 2	1.00	8.00	148	0.41
Linear, Grading & Excavation	Rollers	Diesel	Tier 2	2.00	8.00	36.0	0.38
Linear, Grading & Excavation	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Tier 2	2.00	8.00	84.0	0.37
Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Tier 2	1.00	8.00	150	0.36
Linear, Grading & Excavation	Scrapers	Diesel	Tier 2	2.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Tier 2	2.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Tier 2	1.00	8.00	96.0	0.40
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Tier 2	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Tier 2	1.00	8.00	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Tier 2	1.00	8.00	8.00	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Tier 2	1.00	8.00	11.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Tier 2	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Tier 2	1.00	8.00	14.0	0.74
Linear, Paving	Rollers	Diesel	Tier 2	3.00	8.00	36.0	0.38

Linear, Paving	Paving Equipment	Diesel	Tier 2	1.00	8.00	89.0	0.36
Linear, Paving	Pavers	Diesel	Tier 2	1.00	8.00	81.0	0.42
Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Tier 2	2.00	8.00	84.0	0.37
Linear, Paving	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Pipeline Construction	Excavators	Diesel	Tier 2	1.00	8.00	36.0	0.38
Pipeline Construction	Tractors/Loaders/Backhoes	Diesel	Tier 2	1.00	8.00	84.0	0.37
Pipeline Construction	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Pipeline Construction	Tractors/Loaders/Backhoes	Diesel	Tier 2	1.00	8.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	12.0	18.5	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	10.2	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	15.0	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	12.0	18.5	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	1.00	10.2	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	—	—	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	12.0	18.5	LDA,LDT1,LDT2

Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	10.2	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	0.00	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	—	—	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	12.0	18.5	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	10.2	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	—	—	HHDT
Pipeline Construction	—	—	—	—
Pipeline Construction	Worker	12.0	18.5	LDA,LDT1,LDT2
Pipeline Construction	Vendor	0.00	10.2	HHDT,MHDT
Pipeline Construction	Hauling	0.00	20.0	HHDT
Pipeline Construction	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Linear, Grubbing & Land Clearing	0.00	0.00	13.0	75,000	—
Linear, Grading & Excavation	0.00	0.00	13.0	0.00	—
Linear, Drainage, Utilities, & Sub-Grade	0.00	0.00	13.0	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Road Construction	13.0	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	117	532	0.03	< 0.005
2025	117	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Construction is anticipated to begin in September 2024 and end in March 2025. Pipeline construction would utilize open trench construction as indicated by applicant. Total of 135 workdays.
Construction: Off-Road Equipment	Default construction equipment with Tier 2 engines. Pipeline construction will include excavators, backhoes, roller, and loaders.
Construction: Demolition	approximately 75,000 square feet of asphalt would be demolished and offhauled
Construction: Trips and VMT	Project construction would require a 12 person crew. In addition, based on the trip generation prepared for the project, the asphalt demolition would require approximately 15 daily truck trips during Linear, Grubbing & Land Clearing. .

APPENDIX B

BIOLOGICAL RESOURCES ASSESSMENT

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CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

August 17, 2023

Joseph Broadhead
Principal Water Resources Specialist
Eastern Municipal Water District
2270 Trumble Road
Perris, California 92572-8300

Subject: Biological Resources Assessment for the Washington Street Transmission Main Project, Winchester, California (LSA Project No. EWD2101.03)

Dear Mr. Broadhead:

LSA was retained by the Eastern Municipal Water District (EMWD) to conduct a biological resources assessment of a proposed 1.21-mile-long, 18-inch diameter water pipeline for the Washington Street Transmission Main Project (project) site. This biological resources assessment has been prepared for compliance with the California Environmental Quality Act (CEQA). The project site is located on Washington Street between Fields Drive and Abelia Street in the unincorporated community of Winchester, Riverside County, California. The project site is depicted on the United States Geological Survey (USGS) *Bachelor Mountain* and *Winchester*, *California* topographic quadrangle maps in Township 6 South, Range 2 West in Sections 28, and 33 (USGS 1978 and 1979,[1] respectively; see Figure 1; Attachment B provides all figures). The proposed project includes construction and operation of the new water pipeline to provide improved distribution capacity and improved operations at the recently approved Belle Terre Water Storage Tank. The proposed project occurs within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) area. The MSHCP is a comprehensive multi-jurisdictional effort that includes western Riverside County and multiple cities. EMWD is the lead agency but is not signatory to the MSHCP. EMWD is not pursuing a Participating Special Entity (PSE) designation for the project site. The MSHCP defines PSE agencies as any regional public facility provider, such as a utility company, or public district, or any other agency that owns land or operates a facility within the MSHCP plan area. The following MSHCP policies and procedures do not apply to this project: Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (MSHCP Section 6.1.2), Protection of the Narrow Endemic Plant Species (MSHCP Section 6.1.3), Additional Survey Needs and procedures (MSHCP Section 6.3.2), and Urban/Wildland Interface Guidelines (MSHCP Section 6.1.4). The MSHCP allows participating entities to issue take permits for listed species so that individual applicants need not seek their own permits from the United States Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW). In order to obtain MSHCP coverage as a PSE, the project is required to demonstrate MSHCP compliance through specific habitat assessments, applicable biological surveys, and the provision of an MSHCP consistency analysis. Due to the project not being processed through the MSHCP for covered species, the project is subject to the Federal

[1] United States Geological Survey (USGS). 1978 and 1979. *Bachelor Mountain* and *Winchester, California* topographic quadrangle maps.

Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA) for threatened, endangered, and/or candidate species.

METHODS

A literature review was conducted to investigate the potential occurrence of sensitive species on or near the project site. Database records for *Bachelor Mountain* and *Winchester, California* USGS 7.5-minute quadrangles and surrounding quadrangles within a 3-mile radius of the project were searched on July 17, 2023, using Rarefind 5 version 5.3.0, the CDFW Natural Diversity Database,[2] and the USFWS Information for Planning and Consultation (IPaC) system.[3] Soil types were determined using the *WebSoil Survey* (USDA/NRCS, available at http://websoilsurvey.sc.egov.usda.gov).[4]

The general biological resources assessment included a site visit on July 17, 2023, by LSA biologist Carla Cervantes between 6:00 a.m. and 11:00 a.m. Notes were taken on general site conditions, vegetation, and suitability of habitat for various special-status elements. Weather conditions were partly cloudy skies (5–15 percent cloud cover), cool temperatures (70–86 degrees Fahrenheit), and 1–3 mile per hour (mph) winds during the site survey. The entire project study area, which includes a 200-foot (ft) buffer from the project site, was surveyed on foot. Binoculars were used as needed. All plant and animal species observed or otherwise detected during this field survey were noted and are listed in Table A (Attachment A).

RESULTS

Environmental Setting

Existing and Adjacent Land Use

The project site for the new pipeline is within the existing right-of-way and would use open trench construction methods with the potential for trenchless (e.g., jack and bore) to be used for the drainage crossing located approximately 300 ft north of Cottonwood Road and Washington Street. The project site for the proposed water pipeline is a developed paved road and is bordered by residential development on both sides of Washington Street. Undeveloped lands can be found on the east side of Washington Street approximately 600 ft south of Fields Drive and north of Autumn Glen Circle. Additionally, undeveloped land exists approximately 1,000 ft on the west side north of Washington Street and Skyview Road. Four drainage features and four detention basins are present within the project area, in off-pavement areas: (1) south of Marin Fields Road, (2) approximately 300 ft north of the Bachelor Peak Street and Washington Street intersection, (3) along the northeastern side of Washington Street and Jean Nicholas Road, and (4) on the northeastern corner of Washington Street and Autumn Glen Circle. Undeveloped lands adjacent to the site have been affected by weed abatement practices and by prior and surrounding land use practices.

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2 California Department of Fish and Wildlife (CDFW). California Natural Diversity Database. Website: https://wildlife.ca.gov/Data/CNDDB (accessed July 2023).

3 United States Fish and Wildlife Service. IPaC Information for Planning and Consultation. Website: https://ecos.fws.gov/ipac/ (accessed July 2023).

4 United States Department of Agriculture (USDA). 2019. Web Soil Survey. Website: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx (accessed July 17, 2023).

Elevation, Topography, and Soils

The project site is more or less flat and level. The site elevation ranges from approximately 1,420 to 1,452 ft above mean sea level. A variety of soil types occurs within the project site; the soil types are mapped by the *Natural Resource Conservation District Soil Data Mart SSURGO metadata and GIS maps* as the following types:

- BkC2: Buchenau silt loam, 2 to 8 percent slopes, eroded
- EcC2: Escondido fine sandy loam, 2 to 8 percent slopes, eroded
- FwE2: Friant fine sandy loam, 5 to 25 percent slopes, eroded
- GyC2: Greenfield sandy loam, 2 to 8 percent slopes, eroded
- HcC: Hanford coarse sandy loam, 2 to 8 percent slopes
- HuC2: Honcut loam, 2 to 8 percent slopes, eroded
- LoF2- Lodo gravelly loam, 15 to 50 percent slopes, eroded
- LpE2: Lodo rocky loam, 8 to 25 percent slopes, eroded
- PoC: Porterville clay, 0 to 8 percent slopes
- PtB: Porterville clay, moderately deep, slightly saline-alkali, 0 to 5 percent slopes
- PvD2: Porterville gravelly clay, moderately deep, 2 to 15 percent slopes, eroded
- RaB2: Ramona sandy loam, 2 to 5 percent slopes, eroded
- ReC2: Ramona very fine sandy loam, 0 to 8 percent slopes, eroded
- WyC2: Wyman loam, 2 to 8 percent slopes, eroded

Given the amount of development that the project study area has seen, clay soils are highly developed or highly disturbed. Soils observed on the project site appeared consistent with the sandy loam designation. Figure 2 shows the soils mapped within the project study area.

Vegetation and Disturbance

Vegetation on the site consists primarily of disturbed and barren ground, with patches of mixed herbaceous invasive species, as well as ornamental plants located throughout residential areas and along Washington Street. A few undeveloped lands are found along the project study area that are characterized as non-native grasslands. Furthermore, riparian scrub exists within the drainage crossing located approximately 300 ft north of Bachelor Peak Street and Washington Street. Native trees within the project area are limited to coast live oak (*Quercus agrifolia*) and California sycamore (*Platanus racemosa*) planted as an ornamental sporadically located along Washington Street in a residential area. Additionally, arroyo willow (*Salix lasiolepis*) exists within the drainage crossing located approximately 300 ft north of Cottonwood Road and Washington Street. Non-native trees located within the project site include crape myrtle (*Lagerstroemia indica*) and Peruvian pepper tree (*Schinus molle*).

Dominant species within riparian scrub include mule fat (*Baccharis salicifolia*) and arroyo willow (*Salix lasiolepis*). Other species observed within mulefat thickets include tamarisk (*Tamarix* sp.).

Dominant species within non-native grassland include mouse barley (*Hordeum murinum*), brome grasses (*Bromus* sp.), and common Mediterranean grass (*Schismus barbatus*). Other species observed within non-native grassland include Russian thistle (*Salsola tragus*), prickly lettuce (*Lactuca serriola*), London rocket (*Sisymbrium irio*), and shortpod mustard (*Hirschfeldia incana*).

There are no other plant communities on the site. Areas mapped as developed/disturbed consist of lawn, ornamental landscaping, areas containing manmade structures, and paved roads. A complete list of plant species observed on the site is included in Table A. Figure 3 shows the project site in relation to Criteria Cell #5279, #5372, and #5471 and adjacent criteria cells/groups. Figure 4 shows plant communities, land cover, and photograph locations. Site photographs are provided in Figure 5.

Wildlife

A few wildlife species common to urban and disturbed areas were observed during the field survey. American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura),* house finch (*Haemorhous mexicanus*), lesser goldfinch (*Spinus psaltria*), house sparrow* (*Passer domesticus*), Anna's hummingbird (*Calypte anna*), northern mockingbird (*Mimus polyglottos*), black phoebe (*Sayornis nigricans*), western meadowlark (*Sturnella neglecta*), red-winged blackbird (*Agelaius phoeniceus*), Brewer's blackbird (*Euphagus cyanocephalus*), and American robin (*Turdus migratorius*) were observed in ornamental vegetation adjacent to the project site. Botta's pocket gopher (*Thomomys bottae*) burrows were identified along Washington Street and Autumn Glen Circle within non-native grassland areas of the project study area. A complete list of wildlife species observed is attached as Table A.

Special-Status Species

This section discusses special-status species observed or potentially occurring within a 3-mile radius of the project site. Legal protection for special-status species varies widely, from the comprehensive protection extended to listed threatened/endangered and candidate species to no legal status at present. The CDFW, USFWS, local agencies, and special-status groups, such as the California Native Plant Society, publish watch lists of declining species. Species on watch lists can be included as part of the special-status species assessment. Inclusion of species described in the special-status species analysis is based on the following criteria:

- Direct observation of the species or its sign in the study area or immediate vicinity during previous biological studies;
- Sighting by other qualified observers;
- Record reported by the California Natural Diversity Database (CNDDB), published by the CDFW;
- Presence or location information for specific species provided by private groups; and/or
- The study area lies within known distribution of a given species and contains appropriate habitat.

The special-status species analysis and database review revealed 7 special-status species with the potential to occur within the limits of the project study area. Table B (Attachment A) lists these species with a data summary and determination of the likelihood of each species occurring within the site.

CEQA COMPLIANCE

Adopted Habitat Conservation Plans

The project site is located within the boundary of two adopted Habitat Conservation Plan (HCP) areas, and they are described below.

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

The MSHCP is a comprehensive multi-jurisdictional effort that includes western Riverside County and multiple cities. The MSHCP focuses on the conservation of species and their associated habitats in Western Riverside County. The overall goal of this plan is to maintain biological and ecological diversity within a rapidly urbanizing region. The MSHCP was prepared to provide for the take and mitigation of the 146 species covered under the MSHCP pursuant to the Federal Endangered Species Act (FESA). The MSHCP allows for the issuance of take at the local level, by MSHCP permittees including the City of Riverside, thereby streamlining the take authorization process on a project-by-project basis. EMWD is the lead agency but is not signatory to the MSHCP. EMWD is not pursuing a Participating Special Entity (PSE) designation for the project site. Due to the project not being processed through the MSHCP for covered species, the project is subject to FESA and/or CESA for threatened, endangered, and/or candidate species.

As shown in Figure 3, the proposed project occurs within Criteria Cell #5279, #5372, and #5471. Additionally, the project site occurs within the MSHCP Burrowing Owl Survey Area, the Narrow Endemic Plant Species Survey Area (NEPSSA), and the Criteria Area Species Survey Area (CASSA) plant species. The project site is within an MSHCP NEPSSA for six plant species: Munz's onion (*Allium munzii* [ALMU6]), San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*), and Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*). NEPSSA species were not observed during the field survey conducted in July. The project site is within a mapped survey area for eight CASSA plant species: Parish's brittlescale (*Atriplex parishii*), Davidson's saltscale (*Atriplex serenana* var. *davidsonii*), thread-leaved brodiaea (*Brodiaea filifolia*), round-leaved filaree (*Erodium macrophyllum),* smooth tarplant (*Centromandia pungens* ssp. *laevis*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), little mousetail (*Myosurus minimus*), and mud nama (*Nama stenocarpum*). CASSA plant species were not observed during the field survey conducted in July.

Furthermore, a conservation easement that intersects Washington Street approximately 300 ft north of Bachelor Peak Street, referred to as Drainage B below, occurs within the project study area. Due to EMWD not being a signatory to the MSHCP, a reserve assembly analysis is not required. Additionally, focused surveys for burrowing owl (*Athene cunicularia* [BUOW]), narrow endemic plant species, and criteria area species are not required.. Additional survey requirements are described below.

Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP)

In 1996, USFWS approved a long-term HCP for Stephens' kangaroo rat and granted an incidental take permit for Riverside County, covering 533,954 acres within Riverside County Habitat Conservation Agency (RCHCA) member jurisdictions, including approximately 30,000 acres of occupied SKR habitat. The HCP authorizes the incidental take of half of the occupied habitat remaining in the HCP area while using development fees to implement the plan, purchase private

property, and create a reserve system. The Stephens' Kangaroo Rat HCP and corresponding permits are in effect for areas covered by the MSHCP; however, the Stephens' Kangaroo Rat HCP and the MSHCP remain separate. The Stephens' Kangaroo Rat Fee Area is subject to mandatory conservation measures as outlined in the Stephens' Kangaroo Rat HCP (RCHCA 1996)[5] and as a subsequently modified Stephens' Kangaroo Rat HCP area.

The project is within the Stephens' Kangaroo Rat HCP area and payment of the appropriate fee will be required.

Threatened and Endangered Species

Under provisions of Section 7(a)(2) of the Federal Endangered Species Act (FESA), a federal agency that permits, licenses, funds, or otherwise authorizes a project activity must consult with the USFWS to ensure that its actions would not jeopardize the continued existence of any listed threatened or endangered species or destroy or adversely modify critical habitat. The USFWS designates as threatened or endangered, species that are at risk of extinction and may also adopt recovery plans that identify specific areas that are essential to the conservation of a listed species. Critical habitat areas that may require special management considerations or protections can also be designated.

The California Endangered Species Act (CESA) is administered by the CDFW and prohibits the "take" of plant and animal species identified as either threatened or endangered in the State of California by the Fish and Game Commission (Fish and Game Code Section 2050 to 2097). "Take" is defined as hunt, pursue, catch, capture, or kill. Sections 2091 and 2081 of the CESA allow the CDFW to authorize exceptions to the prohibition of "take" of State-listed threatened or endangered plant and animal species for purposes such as public and private development. The CDFW requires formal consultation to ensure that a proposed project's actions would not jeopardize the continued existence of any listed species or destroy or adversely affect listed species' habitats.

The following nine federally/State listed species were identified as potentially present (see Table B) in the project vicinity based on the literature review:

- Munz's onion (*Allium munzii* [ALMU6]): Federally listed endangered, State listed threatened, and State plant rank 1B.1;
- Vernal pool fairy shrimp (*Branchinecta lynchi* [VPFS]): Federally listed as threatened and State Special Animal;
- Quino checkerspot butterfly (*Euphydryas editha quino* [QCB]): Federally listed as endangered and State Special Animal;
- Riverside fairy shrimp (*Streptocephalus woottoni* [RFS]): Federally listed as endangered and State Special Animal;
- Tricolored blackbird (*Agelaius tricolor* [TRBL]): State listed as threatened and State Species of Special Concern;

[5] Riverside County Habitat Conservation Agency (RCHCA). 1996. Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County.

- Bald eagle (*Haliaeetus leucocephalus* [BAEA]): State listed as endangered and State Fully Protected species;
- Coastal California gnatcatcher (*Polioptila californica californica* [CAGN]) Federally listed as threatened and State Species of Special Concern;
- Least Bell's vireo (*Vireo bellii pusillus* [LBVI]) Federally listed as endangered, State listed as endangered; and
- Stephens' kangaroo rat (*Dipodomys stephensi* [SKR]): Federally listed as endangered and State listed as threatened.

Habitat within the project study area is considered unsuitable for seven of the nine species identified above including ALMU6, VPFS, QCB, RFS, TRBL, BAEA, and CAGN. Although LBVI and SKR were not found to be present within the project site, low quality habitat for both species was observed within the project study area at the time of the field survey. No suitable habitat within the project site itself is present due to it being a paved road. LBVI is covered and adequately conserved under the MSHCP, and the project site lacks suitable habitat for this species. However, suitable habitat in the form of riparian scrub exists adjacent to the project site and this species may be subject to indirect noise disturbance through project implementation. Protocol least Bell's vireo surveys are required if construction takes place during the least Bell's vireo nesting season (February 1 through August 31). If LBVI is found to be present, consultation with the wildlife agencies (USFWS and CDFW) would be required to acquire take authorization due to EMWD not pursuing a PSE designation for the project site. The project site is within the SKR HCP fee area. Focused surveys for SKR will not be required for this project; however, a fee associated with the SKR HCP is required. Therefore, no surveys or additional mitigation measures are required for this species or other federally/state listed species for the project site.

Other Special-Status Species

Of the 18 other non-listed special-status species identified and discussed in Table B, a total of 14 species are considered absent from the project based on lack of suitable habitat, including smooth tarplant (*Centromadia pungens* ssp. *laevis*), long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*), Palmer's grapplinghook (*Harpagonella palmeri*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*), Crotch's bumblebee (*Bombus crotchii*), Southern California legless lizard (*Anniella stebbinsi*), orange-throated whiptail (*Aspidoscelis hyperythra*), western pond turtle (*Emys marmorata*), western spadefoot (*Spea hammondii*), BUOW, southern California rufous-crowned sparrow (*Aimophila ruficeps canescens),* Bell's sparrow (*Artemisiospiza belli belli*), and San Diego black-tailed jackrabbit (*Lepus californicus bennettii).*

Four species are considered to have a low probability of occurrence, including Parry's spineflower (*Chorizanthe parryi* var. *parryi*), coast horned lizard (*Phrynosoma blainvillii coronatum*), loggerhead shrike (*Lanius ludovicianus*), northwestern San Diego pocketmouse (*Chaetodipus fallax fallax*). No other non-listed special-status species identified are considered to have a moderate or high probability for occurrence. Nesting bird species, including special-status species identified in Table B, with potential to occur (i.e., loggerhead shrike) are protected by California Fish and Game Code Sections 3503, 3503.5, and 3800, and by the Migratory Bird Treaty Act (MBTA) (16 United States

Code [USC] 703–711). These laws regulate the take, possession, or destruction of the nest or eggs of any migratory bird or bird of prey. However, the USFWS has recently determined that the MBTA should apply only to "… affirmative actions that have as their purpose the taking or killing of migratory birds, their nests, or their eggs" and will not be applied to incidental take of migratory birds pursuant to otherwise lawful activities.

BUOW is covered and is considered adequately conserved under the MSHCP but still requires focused surveys within designated survey areas containing suitable. The project site lacks suitable habitat for this species. Small patches of non-native grassland within the project study area is disjunct and the species is not anticipated to occur. This species may be indirectly impacted by project activities should they occur in adjacent non-native grasslands and a preconstruction survey for burrowing owl is required to prevent indirect impacts.

Wildlife Movement, Corridors, and Nursery Sites

Wildlife movement includes seasonal migration along corridors, as well as daily movements for foraging. Migration corridors may include areas of unobstructed movement of deer, riparian corridors providing cover for migrating birds, routes between breeding waters and upland habitat for amphibians, and between roosting and feeding areas for birds. While the project vicinity mostly consists of residential development, wildlife movement of species such as coyotes (*Canis latrans*) is possible within portions of the project, particularly large undeveloped lands adjacent to the site. Wildlife movement observed during the 2023 field survey was limited to bird species flying throughout the study area. Undeveloped lands can be found sporadically on the east side of Washington Street approximately 600 ft south of Fields Drive and to the north of Autumn Glen Circle and on the west side approximately 350 ft north of Skyview Road. These undeveloped lands are small in size and are isolated from larger contiguous segments of land that could offer opportunities for wildlife movement.

As shown in Figure 3, the project site does not correspond to any special linkages or corridors as described in the MSHCP. However, it does correspond to Proposed Linkage 18 as described in the MSHCP, which includes part of the northern portion of the project site. Despite this, the majority of lands adjacent to the project site that correspond with Proposed Linkage 18 are already developed. Within the project study area, a single undeveloped land area located approximately 600 ft south of Fields Road corresponds to Proposed Linkage 18 and could offer opportunities for wildlife movement. However, this undeveloped land will not be impacted by the proposed project. The project site does not correspond to any essential connectivity areas or potential riparian connections, as documented in the California Essential Habitat Connectivity (CEHC) Project report (Spencer et al. 2010)[6]. However, the CEHC does indicate part of the project study area as a natural landscape block. Specifically, areas adjacent to Washington Street from Jean Nicholas Road to Skyview Road, as shown in Figure 3. Undeveloped lands within the study area are bordered by existing paved roads that already restrict wildlife movement in the project vicinity. Due to the project occurring within an urban environment, wildlife movement within the project site is

[6] Spencer, W.D., P. Beier, K. Penrod, K. Winters, C. Paulman, H. Rustigian-Romsos, J. Strittholt, M. Parisi, and A. Pettler. 2010. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. Prepared for California Department of Transportation, California Department of Fish and Game, and Federal Highways Administration.

anticipated to be limited to wildlife present on site, present within Drainage B, or present on the undeveloped lands located to the east and west of the project site.

The wildlife species that occur in the vicinity of the project site are adapted to the urban-wildland interface, due to the amount of development seen in the area and the project would not introduce new effects to the area. Potential noise, vibration, light, dust, or human disturbance associated with project activities would only temporarily deter wildlife from using areas in the immediate vicinity. These indirect effects could temporarily alter migration behaviors, territories, or foraging habitats in select areas. However, because these are temporary effects, it is likely that wildlife already living and moving in close proximity to the project site would alter their normal functions for the duration of land use changes and development, and then re-establish these functions once all temporary effects have been removed. Project activities would not place any permanent barriers within any known wildlife movement corridors or interfere with habitat connectivity. Therefore, the proposed project would not substantially limit wildlife movement.

Sensitive Natural Communities

Riparian habitats, oak woodlands, and vernal pools are among some of the natural communities of interest to the CDFW. In addition, CDFW maintains a list of natural communities occurring in the state and identifies those that are sensitive as having ranks of S1–S3.

Plant communities and land covers present on site are limited to developed/disturbed. This land cover is not considered a sensitive natural community. Plant communities and land covers present within the project study area include non-native grassland, riparian scrub, and developed/disturbed. Riparian scrub, which occurs within the drainage crossing located approximately 300 ft north of Bachelor Peak Street and Washington Street, would be considered a sensitive natural community. However, the proposed project would not have any impact to any plant communities located outside of the right-of-way. Therefore, the proposed project would have no effects related to sensitive natural communities.

Potential Jurisdictional Waters, Wetlands and Streambeds

The United States Army Corps of Engineers (USACE), under Section 404 of the Federal Clean Water Act (CWA), regulates discharges of dredged or fill material into “waters of the United States.” These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a connection to interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or it may be indirect (through a connection identified in USACE regulations). The USACE typically regulates as non-wetland waters of the United States (waters of the U.S.) any body of water displaying an “ordinary high water mark” (OHWM). In order to be considered a “jurisdictional wetland” under Section 404, an area must possess hydrophytic vegetation, hydric soils, and wetland hydrology. The CDFW, under Sections 1600 et seq. of the California Fish and Game Code, regulates alterations to lakes, rivers, and streams. A stream is defined by the presence of a channel bed and banks and at least an occasional flow of water. The Regional Water Quality Control Board (RWQCB) is responsible for the administration of Section 401 of the CWA, through water quality certification of any activity that may result in a discharge to jurisdictional waters of the U.S. The RWQCB may also regulate discharges to “waters of the State,” including wetlands, under the California Porter-Cologne Water Quality Control Act.

There are four drainage features on the project site (Figure 6), and they are identified as Drainages A, B, C, and D for purposes of this report. Additionally, six detention basins exist adjacent to Washington Street. Although an official jurisdictional delineation was not conducted as part of the biological resources assessment for this project, the preliminary results of these drainage features and detention basins are discussed below.

Drainage A is located adjacent to Marin Fields Road and to the east of Washington Street. It flows in a southwest direction and flows into a developed area surrounded by ornamental vegetation which eventually drains into Drainage B. This drainage is an ephemeral, v-shaped, concrete bottom drainage created to carry stormwater flows into Drainage B. Vegetation within Drainage A is considered developed/disturbed.

Drainage B is a natural drainage feature that intersects Washington Street approximately 300 ft north of Bachelor Peak Street. It is an ephemeral drainage that flows under Washington Street in a northwest-to-east direction. Storm drains exist within the curb of the east and west side of Washington Street that drain directly into the natural drainage. Vegetation within Drainage B is dominated by riparian scrub species.

Drainage C is a roadside drainage ditch that runs parallel to the easterly side of Washington Street from just south of Skinner Drive to Jean Nicholas Road within the project study area. It enters a concrete catch basin/culvert located approximately 250 ft south of Skinner Drive that seems to redirect water flow underground to the west. It receives flow from the north to south and is an ephemeral, v-shaped, earthen bottom drainage created to carry stormwater flows. Vegetation within Drainage C is dominated by non-native grassland species.

Drainage D is a drainage feature that is located on the northeast intersection of Washington Street and Autumn Glen Circle. It appears to be a shallow catch basin that receives stormwater runoff from the east, west, and south. A concrete culvert located on the south side and a flat concrete storm drain on the west direct water flow into the area. Vegetation within Drainage D is dominated by non-native grassland species.

Six detention basins (Detention Basin 1 through Detention Basin 6; Figure 6) were observed during the field survey that did not display an observable OHWM, bed and bank, or other evidence of conveying regular flows on site. Detention Basins 1–5 are depressions located on the eastern side of Washington Street from south of Autumn Glen circle to north of Skyview Road. Detention Basins 1–5 are nestled within residential areas and are bordered by cinder block walls. Detention Basin 6 is a concave area located on the northwestern corner of Washington Street and Skyview Road. This detention basin is also adjacent to the south of Home Instead Innovation Academy, a K-12 school, and subsequently is not bordered by a cinder block wall. Vegetation within Detention Basin 6 consists of ornamental vegetation. All detention basins are manmade, created to capture flows from nearby roads and development areas.

These four drainage features and six detention basins are considered potential jurisdiction waters that may be subject to the regulatory authority of the USACE, CDFW, or RWQCB. A jurisdictional delineation would be required to determine any project effects to these potential jurisdictional waters if project activities were proposed within these features. However, potential permits and approvals related to aquatic resources are not expected to be required as the proposed project

plans to avoid all potential jurisdictional features. This includes the avoidance of Drainage B which is the only feature that crosses the project alignment. Drainage B will be avoided by utilizing a jack and bore technique and therefore going under and avoiding the drainage.

Local Policies and Ordinances Protecting Biological Resources

City and County General Plans and development ordinances may include regulations or policies governing biological resources. For example, policies may include tree preservation, locally designated species survey areas, local species of interest, and significant ecological areas.

The project will not conflict with local policies or ordinances applicable to biological resources.

Indirect Effects

Indirect impacts to surrounding areas as a result of the project may include, but are not limited to, increased dust, noise, lighting, traffic, and stormwater runoff. These potential impacts would be substantively minimized or avoided through the implementation of construction best management practices (BMPs). Therefore, the proposed project would not result in indirect effects to special-status biological resources.

IMPACTS AND RECOMMENDATIONS

The following is a discussion of potential disturbances and recommendations for avoidance, minimization, and mitigation measures per applicable local, State, and federal policy.

Vegetation and Habitat Impacts

The project would not result in any direct impacts to native habitats or sensitive natural communities. Temporary and permanent direct impacts to disturbed land cover, consisting primarily of developed land cover, would occur with project implementation. Avoidance or minimization measures for sensitive natural communities are not warranted. The following BMPs originating from Appendix C of the MSHCP will help in avoiding and minimizing impacts to vegetation and habitat (RCTLMA 2003)[7].

1. A condition shall be placed on grading permits requiring a qualified biologist to conduct a training session for project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) and the MSHCP, the need to adhere to the provisions of this Act and the MSHCP, the penalties associated with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the project, and the access routes to and project site boundaries within which the project activities must be accomplished.

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7 Riverside County Transportation and Land Management Agency (RCTLMA). 2003. Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Volume I Appendix C: Standard Best Management Practices. Retrieved from Riverside County Transportation and Land Management Agency: Website: https://rctlma.org/multiple-species-habitat-conservation-plan-mshcp-volume-1-appendix-c (accessed July 2023).

2. Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.
3. The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.
4. The upstream and downstream limits of projects disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work.
5. Projects should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.
6. Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season of riparian identified in MSHCP Global Species Objective No. 7.
7. When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing of other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.
8. Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to the applicable jurisdictional city, USFWS, CDFW, and RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.
9. Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.
10. The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint.
11. The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.
12. Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.
13. To avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).

14. Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.

Special-Status Species

No special-status plant or animal species were observed during the site survey and suitable habitat for some special-status species is present within the proposed project study area, but not within the project site itself. Table B presents those special-status plant and animal species known to occur or that potentially occur in the vicinity of the project site, and includes each species' probability of occurrence within the proposed construction footprint. Burrowing owl, their sign, or suitable burrows were not observed on site. The species is not expected to occur within the project site based on the absence of suitable habitat within the entire project site. Although burrowing owl is not expected to occur within the undeveloped lands adjacent to the site due to its being small and isolated from larger habitat, there is prevalence of the species in the region and it may be adversely affected, if present. The site consists of a paved roadway that is devoid of vegetation. Within the site's 200 ft buffer exist areas with low vegetative cover that are mostly devoid of trees. Burrowing owls are found in open, dry grasslands, agricultural and range lands, and desert habitats often associated with burrowing animals. They can also inhabit grass, forb, and shrub stages of pinyon and ponderosa pine habitats. They nest in abandoned burrows of ground squirrels or other animals, in pipes, under piles of rock or debris, and in other similar features. To assure avoidance of burrowing owls, implementation of the measure described below is required.

Nesting birds protected by the MBTA and California Fish and Game Code may occur on site and may be directly affected without avoidance and minimization measures. With successful implementation of the measures described below, impacts to nesting birds would be avoided, and no additional avoidance or minimization measures are warranted. No other special-status species are anticipated to be adversely affected by the project.

Least Bell's Vireo

In order to avoid impacts to the least Bell's vireo, focused least Bell's vireo breeding season surveys (April through July) are required in accordance with the *Least Bell's Vireo Survey Guidelines* (U.S. Fish and Wildlife Service, 2001)[8], if construction activities are expected to take place during the breeding season. Survey visits should be at least 10 days apart and spaced in order to maximize the detection of late and early arrivals, females, territorial males, "non-vocal" birds of both sexes, and nesting pairs. The eight focused surveys should start on or about April 10 and end by July 31, 2020.

During the surveys, a qualified biologist familiar with the songs, whisper songs, calls, scolds, and plumage characteristics of adult and juvenile vireos, will survey the project area and adjacent potentially suitable least Bell's vireo habitat. Each survey should be conducted between dawn and

[8] U.S. Fish and Wildlife Service (USFWS). 2001. Least Bell's Vireo Survey Guidelines. Ecological Services, Carlsbad Fish and Wildlife Service, California.

11:00 a.m. and avoided periods of excessive or abnormal cold, heat, wind, rain, or other inclement weather conditions. If LBVI is found to be present, consultation with the wildlife agencies (USFWS and CDFW) would be required to acquire take authorization due to EMWD not pursuing a PSE designation for the project site.

Burrowing Owl

In order to avoid potential indirect impacts to burrowing owl, a preconstruction survey for BUOW will also be required within 14 days prior to any ground-disturbing activities in accordance with the 2012 CDFW *Staff Report on Burrowing Owl Mitigation*. The preconstruction survey would be required in the undeveloped lots containing non-native grassland located adjacent to the site, using the CDFW accepted protocols.

During the survey, a qualified biologist will survey a 500 ft buffer, or to the edge of the property if less than 500 ft, for burrows that could be used by burrowing owl. If a burrow is located, the biologist will determine whether an owl is present in the burrow. If the burrow is determined to be occupied, consultation with CDFW would be required to acquire take authorization and mitigate accordingly due to EMWD not pursuing a PSE designation for the project site.

Nesting Birds

In order to avoid impacts to the loggerhead shrike and other nesting birds, during the nesting season (January 15 through August 31), prior to the start of construction activities, surveys will be conducted by an experienced biologist on the project site and within 500 ft of the project site, or to the property boundary if less than 500 ft. If nesting loggerhead shrike are found, a 500 ft non-disturbance buffer, or to the property boundary if less than 500 ft, will be established around the nest site. The buffer area will be staked and flagged. No construction will be permitted within the buffer during the breeding season of January 15 through June 15 or until the young have fledged or the nest becomes inactive.

Cumulative Effects

According to Section 15130 of the *State CEQA Guidelines*, "cumulative impacts" refers to incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects.

The project is proposing to install a 1.21-mile-long, 18-inch diameter water pipeline within the public road right-of-way within Washington Street between Fields Drive and Abelia Street. The vicinity of the project includes residential development, and undisturbed lands are largely absent. Project construction will not contribute to the incremental loss of any habitat in the region, including potential habitat for some special-status species. Cumulative impacts to habitat fragmentation and edge effects are not anticipated as the project site is currently experiencing a high level of both due to existing development. Impacts could potentially include reduced habitat quality and indirect disturbance to wildlife located adjacent to the project site. The project is not expected to result in substantial cumulative effects due to the following factors:

- Project boundaries existing within public road right-of-way;

- Existing residential development that borders the project site on the east and west sides of Washington Street and within the general vicinity of the project;
- The project's proximity to existing well-traveled, paved roads;
- Temporary impacts would be mitigated by BMPs and restored to the greatest extent possible;
- The project activities would not permanently limit wildlife movement; and
- The study area's existing highly disturbed state, as evidenced by disking and impacts from regulated fire suppression/weed removal activities occurring on adjacent non-native grasslands.

The project site is entirely developed and is entirely devoid of native vegetation and is surrounded by existing development, with the exception of Drainage B that will not be impacted. No sensitive biological resources occur on the project site. Therefore, the project would not result in substantial cumulative effects to biological resources.

If you require additional information or wish to discuss the information provided above, please contact me by email at carla.cervantes@lsa.net or by phone at (909) 678-1357.

Sincerely,

LSA ASSOCIATES, INC.

Carla Cervantes
Assistant Biologist

Attachments: A: Tables
Table A: Plant and Animal Species Observed
Table B: Special-Status Species Occurrence Probability
B: Figures
Figure 1: Project Location and Vicinity
Figure 2: Soils
Figure 3: Criteria Cell #5279, 5372, 5471 and Adjacent Criteria Cells/Groups
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Figure 5: Site Photographs
Figure 6: Potential Jurisdictional Features

ATTACHMENT A

TABLES

Table A: Plant and Animal Species Observed
Table B: Special-Status Species Occurrence Probability

Table A: Plant and Animal Species Observed

Scientific Name	Common Name
MAGNOLIOPHYTA: MAGNOLIOPSIDA	**DICOT FLOWERING PLANTS**
Anacardiaceae	**Sumac family**
Schinus molle (non-native species)	Peruvian peppertree
Asteraceae	**Sunflower family**
Baccharis salicifolia	Mule fat
Lactuca serriola (non-native species)	Prickly lettuce
Brassicaceae	**Mustard family**
Hirschfeldia incana (non-native species)	Shortpod mustard
Sisymbrium irio (non-native species)	London rocket
Chenopodiaceae	**Saltbush family**
Chenopodium murale (non-native species)	Nettleleaf goosefoot
Salsola tragus (non-native species)	Russian thistle
Fabaceae	**Pea family**
Medicago sativa (non-native species)	Alfalfa
Fagaceae	**Beech family**
Quercus agrifolia	coast live oak
Geraniaceae	**Geranium family**
Erodium cicutarium (non-native species)	Red-stemmed filaree
Lythraceae	**Loosestrife family**
Lagerstroemia indica (non-native species)	Crape myrtle
Malvaceae	**Mallow family**
Malva parviflora (non-native species)	Cheeseweed
Platanaceae	**Sycamore family**
Platanus racemosa	California sycamore
Polygonaceae	**Buckwheat family**
Eriogonum fasciculatum	California buckwheat
Solanaceae	**Nightshade family**
Datura wrightii	Sacred thorn-apple
Tamaricaceae	**Tamarisk family**
Tamarix sp.(non-native species)	Tamarisk
MAGNOLIOPHYTA: LILIOPSIDA	**MONOCOT FLOWERING PLANTS**
Poaceae	**Grass family**
Bromus sp.	Brome grass
Cynodon dactylon (non-native species)	Bermuda grass
Hordeum murinum (non-native species)	Mouse barley
Schismus barbatus (non-native species)	Common Mediterranean grass

Table A: Plant and Animal Species Observed

Scientific Name	Common Name
BIRDS	
Columbidae	**Pigeons and Doves**
Zenaida macroura	Mourning dove
Corvidae	**Crows and Jays**
Corvus brachyrhynchos	American crow
Fringillidae	**Finches, Euphonias, and Allies**
Haemorhous mexicanus	House finch
Spinus psaltria	Lesser goldfinch
Icteridae	**Blackbirds, Orioles and Allies**
Sturnella neglecta	Western meadowlark
Agelaius phoeniceus	Red-winged blackbird
Euphagus cyanocephalus	Brewer's blackbird
Mimidae	**Mockingbirds and Thrashers**
Mimus polyglottos	Northern mockingbird
Passeridae	**Old World Sparrows**
Passer domesticus	House sparrow
Trochilidae	**Hummingbirds**
Calypte anna	Anna's hummingbird
Turdidae	**Thrushes**
Turdus migratorius	American robin
Tyrannidae	**Tyrant Flycatchers**
Sayornis nigricans	Black phoebe
MAMMALS	
Geomyidae	**Pocket Gophers**
Thomomys bottae	Botta's pocket gopher
Sciuridae	**Squirrels**
Spermophilus beecheyi	California ground squirrel

Table B: Special-Status Species Occurrence Probability

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
PLANTS				
Allium munzii **Munz's onion**	US: FE CA: ST/1B.1	Seasonally moist sites on clay soils (generally) or within rocky outcrops (pyroxenite) on rocky-sandy loams (such as Cajalco, Las Posas, and Vallecitos) with clay subsoils, in openings within coastal sage scrub, pinyon juniper woodland, and grassland, at 300 to 1,070 meters (1,000 to 3,500 ft) elevation. Known only from western Riverside County in the greater Perris Basin (Temescal Canyon-Gavilan Hills/Plateau, Murrieta-Hot Springs areas) and within the Elsinore Peak (Santa Ana Mountains) and Domenigoni Hills regions.	Blooms March to May	**Not expected to occur.** While Figure 2: Soil Map indicates the presence of clay soils within the project study area, the study area has seen heavy disturbance and development. Clay soils are no longer present in areas indicated; instead sandy loam soil appeared to be present within a majority of undeveloped areas. Therefore, no moist sites on clay soils or within rocky outcrops on rocky-sandy loams are present within the project site.
Centromadia pungens ssp. laevis **smooth tarplant**	US: – CA: 1B.1	Generally alkaline areas in chenopod scrub, meadows, playas, riparian woodland, valley and foothill grassland below 480 meters (1,600 ft) elevation. Known from Riverside and San Bernardino Counties, extirpated from San Diego County.	Blooms April through September	**Not expected to occur.** Suitable alkaline areas are not present within the project site. Furthermore, the project site is entirely developed.
Chorizanthe parryi var. parryi **Parry's spineflower**	US: – CA:1B.1	Sandy or rocky soils in chaparral, coastal scrub, oak woodlands, and grassland at 40 to 1,705 meters (100 to 5,600 ft) elevation. Known only from Los Angeles, Riverside, and San Bernardino Counties.	Blooms April through June	**Low potential to occur.** Marginally suitable soils and habitat exist within the 200 ft buffer of the project site (sandy soils in grassland). Project site is entirely developed and within an urban environment.

Table B: Special-Status Species Occurrence Probability

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Chorizanthe polygonoides var. longispina **long-spined spineflower**	US: – CA:1B.2	Generally clay soils in chaparral, coastal sage scrub, and grassland at 30 to 1,530 meters (100 to 5,000 ft) elevation. In California, known only from Orange, Riverside, Santa Barbara, and San Diego Counties. Also occurs in Mexico.	Blooms April through July	**Not expected to occur.** Areas containing clay soils have been entirely developed. Remaining undeveloped land found within the 200 ft buffer does not contain suitable clay soils. The project site lacks suitable habitat as it is a paved road.
Harpagonella palmeri **Palmer's grapplinghook**	US: – CA: 4.2	Clay soils in openings in coastal sage scrub, juniper woodland, and grassland below 830 meters (2,700 ft) elevation. In California, known only from Orange, Riverside, and San Diego Counties and the Channel Islands. Also occurs in Arizona and Mexico.	Blooms March through May	**Not expected to occur.** Areas containing clay soils have been entirely developed. Remaining undeveloped land found within the 200 ft buffer does not contain suitable clay soils. The project site lacks suitable habitat as it is a paved road.
Lasthenia glabrata ssp. coulteri **Coulter's goldfields**	US: – CA: 1B.1	Vernal pools and alkaline soils in marshes, playas, and similar habitats below 1,220 meters (4,000 ft) elevation. Known from Colusa, Merced, Tulare, Orange, Riverside, Santa Barbara, San Diego, San Luis Obispo, Tehama, Ventura, and Yolo Counties. Believed extirpated from Kern, Los Angeles, and San Bernardino Counties, and possibly also from Tulare County. Also occurs in Mexico.	Blooms February through June	**Not expected to occur.** No suitable habitat present on site within 200 ft buffer (vernal pools and alkaline soils in marshes, playas, and similar habitats).
Lepidium virginicum var. robinsonii **Robinson's pepper-grass**	US: – CA: 4.3	Dry soils in coastal sage scrub and chaparral below 885 meters (2,900 ft) elevation. In California, known only from Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino and San Diego Counties, and Santa Cruz Island. Also occurs in Mexico.	Blooms January through July	**Not Expected to occur.** No suitable habitat present on site or within 200 ft buffer (coastal sage scrub and chaparral).

Table B: Special-Status Species Occurrence Probability

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Invertebrates				
Bombus crotchii **Crotch bumble bee**	US: – CA: SCE	Inhabits open scrub and grassland from coastal California to crest of Sierra-Cascade and in desert edge areas, south into Mexico. Primarily nests underground. Suitable bumble bee habitat requires the continuous availability of flowers on which to forage throughout the duration of the colony (spring through fall), colony nest sites, and overwintering sites for the queens. Nectars on *Antirrhinum*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Eriogonum* in coastal California east to the Sierra-Cascade crest and south into Mexico.	Spring and summer	**Not expected to occur.** Disturbed non-native grasslands present within the 200 ft buffer are isolated and do not offer a continuous availability of flowers.
Branchinecta lynchi **vernal pool fairy shrimp**	US: FT CA: SA	Vernal pools and similar features in unplowed grassland areas. Pools must contain water continuously for at least 18 days in all but the driest years to allow for reproduction. Known from the Central Valley and adjacent foothill areas, the central coast and south coast ranges, from the transverse ranges near Santa Clarita, from the Santa Rosa Plateau, Skunk Hollow, and the Stowe Road vernal pool west of Hemet in Riverside County, and from northwest San Diego County. May also occur in Orange County. Occurs at up to about 2,300 ft elevation in areas north of Kern County and at up to 5,600 ft elevation in areas to the south.	Seasonally following rains; typically January through April	**Not expected to occur.** Suitable habitat is not present within the project site or the 200 ft buffer (vernal pools, unplowed grasslands).
Euphydryas editha quino **quino checkerspot butterfly**	US: FE CA: SA	Meadows or openings within coastal sage scrub or chaparral below about 5,000 ft where food plants (Plantago erecta and/or Orthocarpus purpurascens) are present. Historically known from Santa Monica Mountains to northwest Baja California; currently known only from southwestern Riverside County, southern San Diego County, and northern Baja California.	January through late April	**Not expected to occur.** Suitable habitat is not present within the project site or the 200 ft buffer (Meadows or openings within coastal sage scrub or chaparral).

Table B: Special-Status Species Occurrence Probability

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Streptocephalus woottoni **Riverside fairy shrimp**	US: FE CA: SA	Warm-water vernal pools (i.e., large, deep pools that retain water into the warm season) with low to moderate dissolved solids, in annual grassland areas interspersed through chaparral or coastal sage scrub vegetation. Suitable habitat includes some artificially created or enhanced pools, such as some stock ponds, that have vernal pool like hydrology and vegetation. Known from areas within about 50 miles of the coast from Ventura County south to San Diego County and Baja California.	Seasonally following rains; typically January through April	**Not expected to occur.** Suitable habitat is not present within the project site or the 200 ft buffer (vernal pools).
Reptiles				
Anniella stebbinsi **Southern California legless lizard**	US: – CA: SSC	Inhabits sandy or loose loamy soils with high moisture content under sparse vegetation in Southern California.	Nearly year round, at least in southern areas	**Not expected to occur.** Suitable soil exists within the 200 ft buffer but high soil moisture content is absent from these areas. The project site lacks suitable habitat as it is a paved road.
Aspidoscelis hyperythra **orange-throated whiptail**	US: – CA: SA	Prefers washes and other sandy areas with patches of brush and rocks, in chaparral, coastal sage scrub, juniper woodland, and oak woodland from sea level to 915 meters (3,000 ft) elevation. Perennial plants required. Occurs in Riverside, Orange, San Diego Counties west of the crest of the Peninsular Ranges, in extreme southern San Bernardino County near Colton, and in Baja California.	Year-round	**Not expected to occur.** Suitable habitat is not present within the project site or the 200 ft buffer (patches of brush and rocks, in chaparral, coastal sage scrub, juniper woodland, and oak woodland).
Emys marmorata **western pond turtle**	US: – CA: SSC	Inhabits permanent or nearly permanent water. Absent from desert regions, except in the Mojave Desert along the Mojave River and its tributaries. Requires basking sites such as partially submerged logs, rocks, or open mud banks.	Year-round	**Not Expected to Occur.** No suitable wet areas on site.

Table B: Special-Status Species Occurrence Probability

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Phrynosoma blainvillii coronatum **coast horned lizard**	US: – CA: SSC	Primarily in sandy soil in open areas, especially washes and floodplains, in many plant communities. Requires open areas for sunning, bushes for cover, patches of loose soil for burial, and an abundant supply of ants or other insects. Occurs west of the deserts from northern Baja California north to Shasta County below 2,400 meters (8,000 ft) elevation.	April through July with reduced activity August through October	**Low potential to occur.** Site is a paved road that lacks suitable cover for this species. However, a suitable wash, described as Feature 2 in this report, is present within the 200 ft buffer. Site is within an urban environment with associated predators, and isolated from better habitat.
Amphibians				
Spea hammondii **western spadefoot**	US: – CA: SSC	Grasslands and occasionally hardwood woodlands; largely terrestrial but requires rain pools or other ponded water persisting at least three weeks for breeding; burrows in loose soils during dry season. Occurs in the Central Valley and adjacent foothills, the non-desert areas of southern California, and Baja California.	Year-round; nocturnal	**Not Expected to Occur.** No suitable wet areas on site.
Birds				
Agelaius tricolor **tricolored blackbird**	US: – CA: ST/SSC	Open country. Forages in grassland and cropland habitats. Nests in large groups near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, or tall herbs. Seeks cover for roosting in emergent wetland vegetation, especially cattails and tules, and also in trees and shrubs. Occurs in western Oregon, California, and northwestern Baja California.	Year-round	**Not expected to occur.** Marginally suitable grassland habitat is present within the 200 ft buffer. However, non-native grassland habitat is isolated and small in size.
Aimophila ruficeps canescens **southern California rufous-crowned sparrow**	US: – CA: SA	Steep, rocky coastal sage scrub and open chaparral habitats, particularly scrubby areas mixed with grasslands. From Santa Barbara County to northwestern Baja California.	Year-round	**Not expected to occur.** Suitable habitat is not present within the project site or the 200 ft buffer (rocky coastal sage scrub, chaparral, scrubby areas mixed with grasslands).

Table B: Special-Status Species Occurrence Probability

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Artemisiospiza belli belli **Bell's sparrow**	US: – CA: SA	Occupies chaparral and coastal sage scrub from west central California to northwestern Baja California.		**Not expected to occur.** Suitable habitat is not present within the project site or the 200 ft buffer (chaparral and coastal sage scrub).
Athene cunicularia **burrowing owl** (nesting)	US: – CA: SSC	Open country in much of North and South America. Usually occupies ground squirrel burrows in open, dry grasslands, agricultural and range lands, railroad rights-of-way, and margins of highways, golf courses, and airports. Often utilizes man-made structures, such as earthen berms, cement culverts, cement, asphalt, rock, or wood debris piles. They avoid thick, tall vegetation, brush, and trees, but may occur in areas where brush or tree cover is less than 30 percent.	Year-round	**Not expected to occur.** The location of the project is within an urban environment that sees a high level of disturbance and suitable areas for burrowing owl are small in size and isolated. Closest occurrence is in a now developed area just 0.7 miles southwest of the project site from 2004 (CNDDB).
Haliaeetus leucocephalus **bald eagle**	US: – CA: SE/CFP	Winters locally at deep lakes and reservoirs feeding on fish and waterfowl. Locally rare throughout North America.	November through February	**Not expected to occur.** Suitable habitat is not present within the project site or the 200 ft buffer (deep lakes and reservoirs).
Lanius ludovicianus **loggerhead shrike** (nesting)	US: – CA: SSC	Prefers open habitats with scattered small trees and with fences, utility lines, or other perches. Inhabits open country with short vegetation, pastures, old orchards, cemeteries, golf courses, riparian areas, and open woodlands. Highest density occurs in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua tree habitats. Occurs only rarely in heavily urbanized areas, but often found in open cropland. Found in open country in much of North America.	Year-round	**Low potential to occur.** Marginally **s**uitable habitat is present within the project site's 200 ft buffer (riparian areas). However, the location of the project is within an urban environment and suitable areas are small in size and isolated. Closest occurrence 2.5 miles southeast of the site observed in 2008 (CNDDB).
Polioptila californica californica **coastal California gnatcatcher**	US: FT CA: SSC	Inhabits coastal sage scrub in low-lying foothills and valleys up to about 500 meters (1,640 ft) elevation in cismontane southwestern California and Baja California.	Year-round	**Not expected to occur.** Suitable habitat is not present within the project site or the 200 ft buffer (coastal sage scrub in low-lying foothills and valleys).

Table B: Special-Status Species Occurrence Probability

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Vireo bellii pusillus **least Bell's vireo**	US: FE CA: SE	Riparian forests and willow thickets. The most critical structural component of least Bell's Vireo habitat in California is a dense shrub layer 2 to 10 ft (0.6–3.0 meters) above ground. Willows usually dominant. Nests from central California to northern Baja California. Winters in southern Baja California.	April through September	**Moderate potential to occur.** Suitable habitat (riparian scrub) is present within the project site's 200 ft buffer. However, the project site is a paved road and least Bell's vireo may pass through the project site to access suitable foraging/nesting grounds. CNDDB documents the closest occurrence 3.2 miles southeast of the site, observed in 2008. While eBird documents the closest occurrence 0.5 miles east of the project site near Fields Drive, observed in 2022.[9]
Mammals				
Chaetodipus fallax fallax **northwestern San Diego pocket mouse**	US: – CA: SSC	Found in sandy herbaceous areas, usually associated with rocks or coarse gravel in coastal scrub, chaparral, grasslands, and sagebrush, from Los Angeles County through southwestern San Bernardino, western Riverside, and San Diego Counties to northern Baja California.	Year-round	**Low potential to occur.** Marginally **s**uitable habitat is present within the project site's 200 ft buffer (sandy herbaceous areas in grassland). However, the location of the project is within an urban environment and suitable areas are small in size and isolated. Closest occurrence 2 miles southeast of the site observed in 2004 (CNDDB).

[9] eBird. 2021. eBird: An online database of bird distribution and abundance. Species occurrence records for least Bell's vireo (*Vireo bellii pusillus*). eBird, Cornell Lab of Ornithology, Ithaca, New York. Website: http://www.ebird.org (accessed July 27, 2023).

Table B: Special-Status Species Occurrence Probability

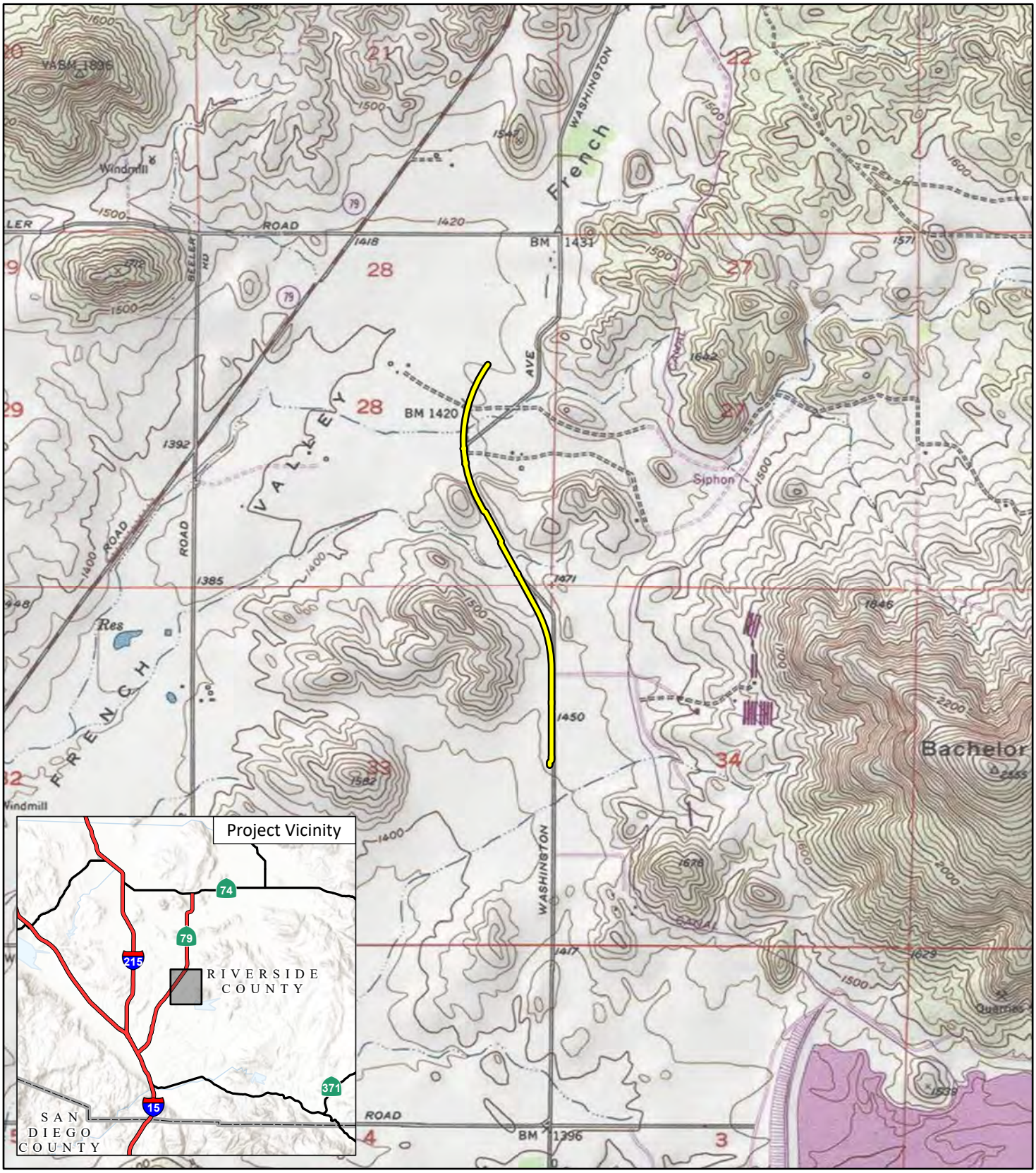
Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Dipodomys stephensi **Stephens' kangaroo rat**	US: FE CA: ST	Found in plant communities transitional between grassland and coastal sage scrub, with perennial vegetation cover of less than 50%. Most commonly associated with Artemisia tridentata, Eriogonum fasciculatum, and Erodium. Requires well-drained soils with compaction characteristics suitable for burrow construction (neither sandy nor too hard). Not found in soils that are highly rocky or sandy, less than 20 inches deep, or heavily alkaline or clay, or in areas exceeding 25% slope. Occurs only in western Riverside County, northern San Diego County, and extreme southern San Bernardino County, below 915 meters (3,000 ft) elevation. In northwestern Riverside County, known only from east of Interstate 15. Reaches its northwest limit in south Norco, southeast Riverside, and in the Reche Canyon area of Riverside and extreme southern San Bernardino Counties.	Year-round, nocturnal	**Low potential to occur.** The project site is within the SKR HCP. Marginally **s**uitable habitat is present within the project site's 200 ft buffer (grassland). However, the location of the project is within an urban environment and suitable areas are small in size and isolated. Multiple occurrences recorded within 1 mile of the site. Closest occurrence 0.4 miles east of the site observed in 1990 (CNDDB). Most recent occurrence 2.3 miles northeast from 1994 (CNDDB). Furthermore, no suitable transitional areas between grassland and buckwheat scrub occurs on site or within the 200 ft buffer.
Lepus californicus bennettii **San Diego black-tailed jackrabbit**	US: – CA: SA	Variety of habitats including herbaceous and desert scrub areas, early stages of open forest and chaparral. Most common in relatively open habitats. Restricted to the cismontane areas of Southern California, extending from the coast to the Santa Monica, San Gabriel, San Bernardino, and Santa Rosa Mountain ranges.	Year-round	**Not expected to occur.** Suitable habitat is not present within the project site or the 200 ft buffer (desert scrub areas, early stages of open forest and chaparral, open habitats).

US: Federal Classifications
– No applicable classification.
FE Taxa federally listed as Endangered.
FT Taxa federally listed as Threatened.

CA: State Classifications
– No applicable classification
CFP California fully protected
SE Taxa State listed as Endangered.
ST Taxa State listed as Threatened
SFP Taxa State listed as fully protected
SSC California Species of Special Concern. Refers to animals with vulnerable or seriously declining populations.
SA Special Animal. Refers to any other animal monitored by the Natural Diversity Database, regardless of its legal or protection status.
1B California Rare Plant Rank 1B: Rare, threatened, or endangered in California and elsewhere.
2B California Rare Plant Rank 2B: Rare, threatened or endangered in California, but more common elsewhere.
4 California Rare Plant Rank 4: A watch list of plants of limited distribution.

ATTACHMENT B

FIGURES



LSA

FIGURE 1

N

0 1000 2000
FEET

Washington Street Transmission Main Project

Project Location and Vicinity

SOURCE: USGS 7.5' Quad - *Bachelor Mtn (1978)* and *Winchester (1979)*, CA

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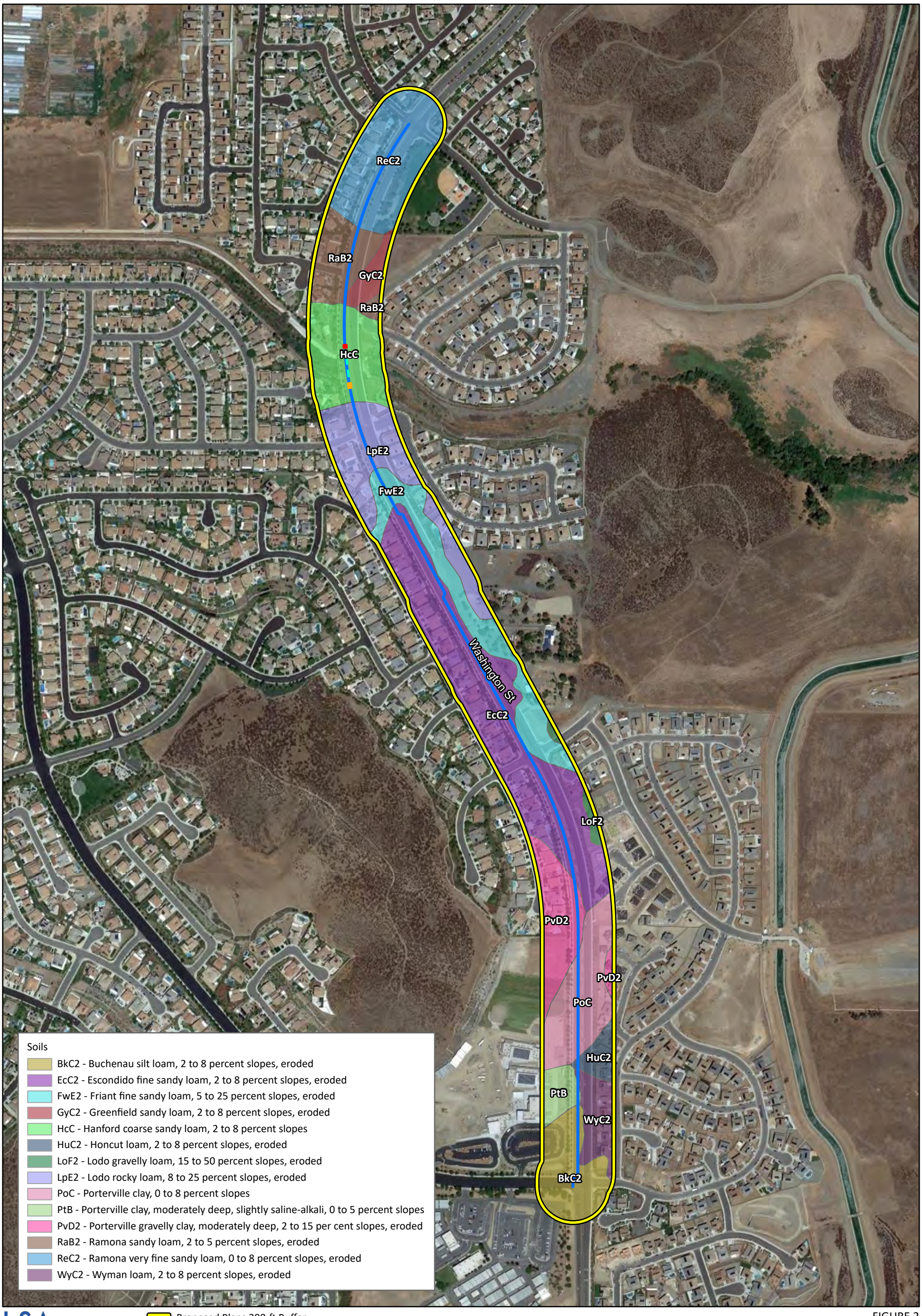

LSA

Proposed Plans 200-ft Buffer

Proposed Project

- Water Line
- Jack and Bore Line
- Jacking Pit Location
- Receiving Pit Location

0 250 500

FEET

FIGURE 2

Washington Street Transmission Main Project

Soils

SOURCE: Google (2020)

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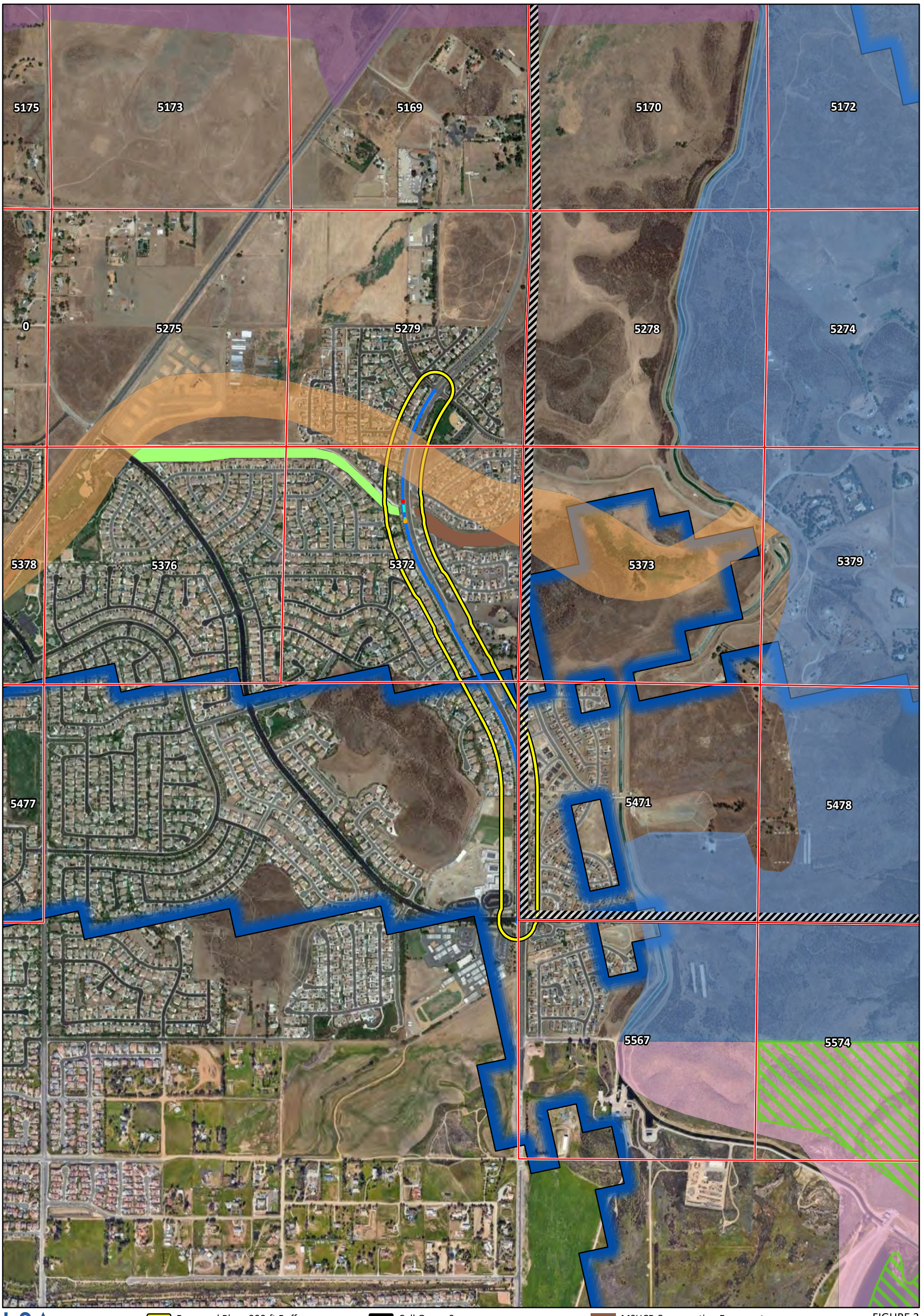

Proposed Plans 200-ft Buffer

Proposed Project

- Water Line
- Jack and Bore Line
- Jacking Pit Location
- Receiving Pit Location

- Cell Group S
- Criteria Cells
- PQP Conserved Lands
- Existing Core J
- Proposed Constrained Linkage 17
- Proposed Constrained Linkage 18
- Proposed Extension of Existing Core 7

- MSHCP Conservation Easement
- USACE SPL Compensatroy Mitigation Site
- Natural Landscape Blocks - California Essential Habitat Connectivity

0 500 1000

FEET

SOURCE: Google (2020)

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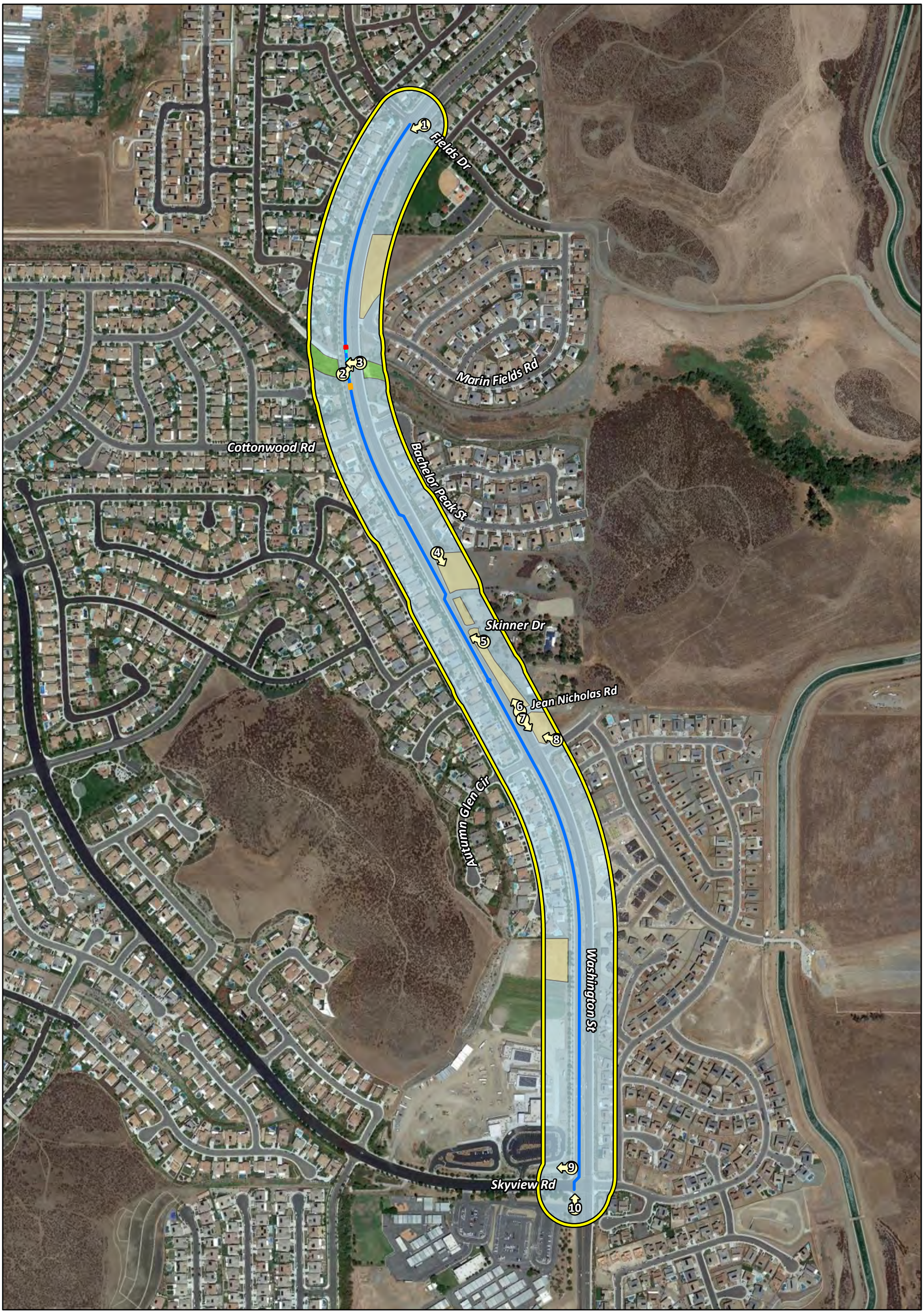
LSA

FIGURE 3

Washington Street Transmission Main Project

Criteria Cell #5279, 5372, 5471 and Adjacent Criteria Cells/Groups



LSA

Proposed Plans 200-ft Buffer

Proposed Project

- Water Line
- Jack and Bore Line
- Jacking Pit Location
- Receiving Pit Location

Vegetation and Land Use

- Developed/Disturbed (56.07 acres)
- Nonnative Grassland (4.06 acres)
- Riparian Scrub (0.66 acres)

Photo Locations

N

0 250 500

FEET

SOURCE: Google (2020)

J:\EWD2101.03\GIS\Pro\Washington Street Pipeline Project\Washington Street Pipeline Project.aprx (8/10/2023)

FIGURE 4

Washington Street Transmission Main Project

Vegetation, Land Use, and Photo Locations

Photo 1: View of the northern project boundary looking southwest at the Fields Drive and Washington Street intersection.

Photo 2: View looking northeast at Washington Street from the edge of Drainage B.

Photo 3: View looking west at Washington Street from the edge of Drainage B.

Photo 4: View looking south at nonnative grassland located along the eastern side of Washington Street.

Photo 5: View looking northeast at Drainage C located along the eastern side of Washington Street.

Photo 6: View looking north along Washington Street and Jean Nicholas Road.

Photo 7: View looking south along Washington Street and Jean Nicholas Road.

Photo 8: View looking west at Drainage D located on the northeastern corner of Autumn Glen Circle and Washington Street.

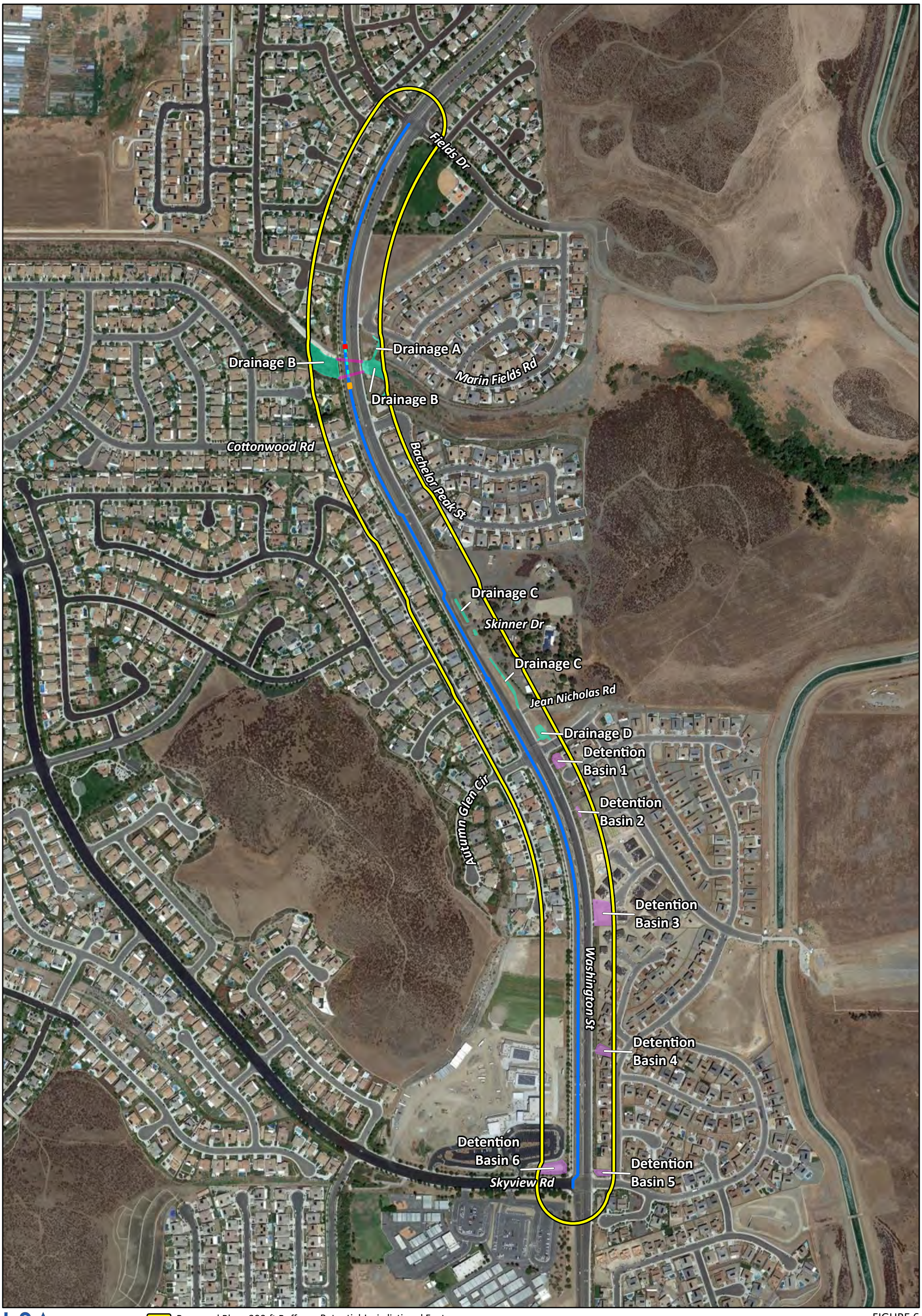
Photo 9: View looking west at Detention Basin 6 located on the northwestern corner of Skyview Road and Washington Street.

Photo 10: View of the southern project boundary looking north at the Skyview Road and Washington Street intersection.

LSA

FIGURE 5

Washington Street Transmission Main Project
Site Photographs



LSA

Proposed Plans 200-ft Buffer

Proposed Project

- Water Line
- Jack and Bore Line
- Jacking Pit Location
- Receiving Pit Location

Potential Jurisdictional Features

- Drainage
- Detention Basin
- Drainage B flow under Washington Street

0 250 500 FEET

SOURCE: Google (2020)

FIGURE 6

Washington Street Transmission Main Project

Potential Jurisdictional Features

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APPENDIX C

NOISE MONITORING AND MODELING SHEETS

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Noise Measurement Survey – 24 HR

Project Number: EWD2101.03
Project Name: Washington St Pipeline

Test Personnel: Kevin Nguyendo
Equipment: Spark 706RC (SN:119)

Site Number: LT-1 Date: 7/27/23

Time: From 12:00 p.m. To 12:00 p.m.

Site Location: Located along the southwestern border of the Washington Park, Valley-Wide Recreation and Park District on a fence.

Primary Noise Sources: Vehicle traffic noise on Washington Street.

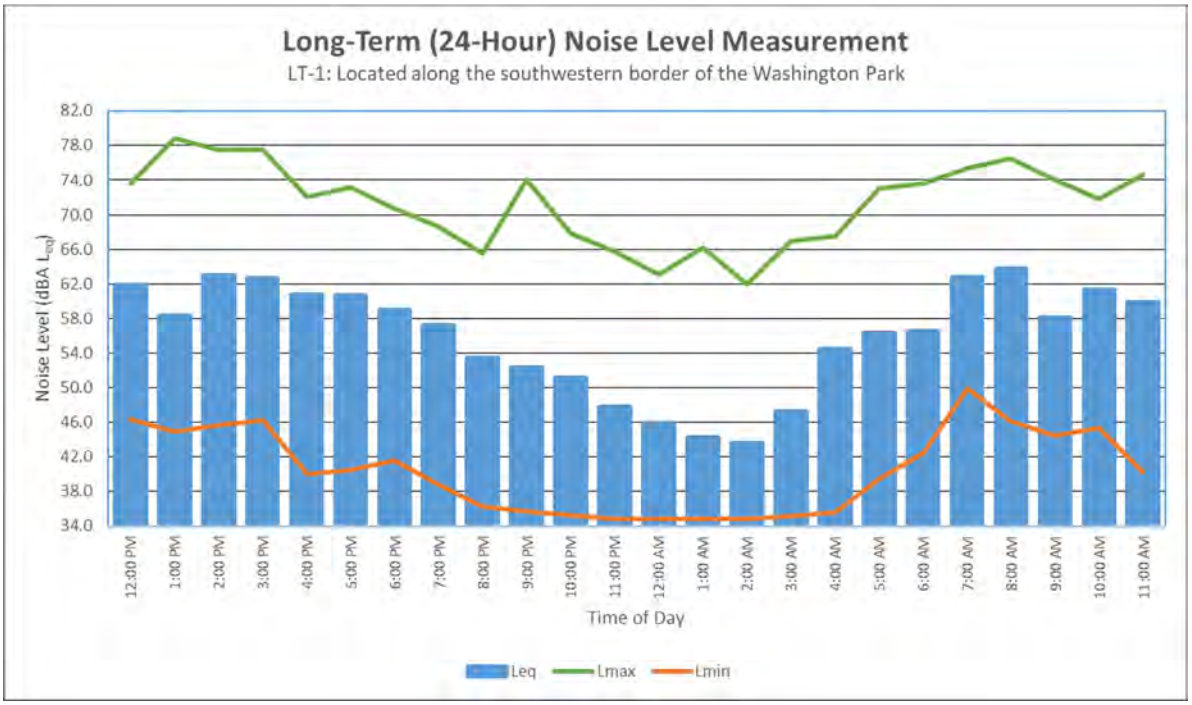
Comments:

Photo:

Long-Term (24-Hour) Noise Level Measurement Results at LT-1

Start Time	Date	Noise Level (dBA)		
		L_{eq}	L_{max}	L_{min}
12:00 PM	7/27/23	61.8	73.6	46.3
1:00 PM	7/27/23	58.3	78.8	44.9
2:00 PM	7/27/23	63.0	77.5	45.7
3:00 PM	7/27/23	62.6	77.5	46.2
4:00 PM	7/27/23	60.7	72.0	40.0
5:00 PM	7/27/23	60.7	73.2	40.4
6:00 PM	7/27/23	58.9	70.7	41.6
7:00 PM	7/27/23	57.1	68.6	38.8
8:00 PM	7/27/23	53.5	65.5	36.2
9:00 PM	7/27/23	52.4	74.1	35.7
10:00 PM	7/27/23	51.1	67.8	35.2
11:00 PM	7/27/23	47.7	65.7	34.8
12:00 AM	7/28/23	45.8	63.1	34.8
1:00 AM	7/28/23	44.2	66.2	34.8
2:00 AM	7/28/23	43.6	62.0	34.8
3:00 AM	7/28/23	47.3	67.0	35.1
4:00 AM	7/28/23	54.4	67.5	35.5
5:00 AM	7/28/23	56.3	73.1	39.4
6:00 AM	7/28/23	56.6	73.6	42.4
7:00 AM	7/28/23	62.7	75.4	49.9
8:00 AM	7/28/23	63.7	76.5	46.1
9:00 AM	7/28/23	58.1	74.1	44.4
10:00 AM	7/28/23	61.3	71.8	45.3
11:00 AM	7/28/23	59.8	74.6	40.2

Source: Compiled by LSA Associates, Inc. (2023).
dBA = A-weighted decibel
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level
L_{min} = minimum measured sound level



Noise Measurement Survey – 24 HR

Project Number: EWD2101.03
Project Name: Washington St Pipeline
Test Personnel: Kevin Nguyendo
Equipment: Spark 706RC (SN:814)

Site Number: LT-2 Date: 7/27/23
Time: From 12:00 p.m. To 12:00 p.m.

Site Location: Located west of a single-family home at 35411 Tavel St, Winchester, CA 92596 on a utility pole along Washington Street.

Primary Noise Sources: Vehicle traffic noise on Washington Street.

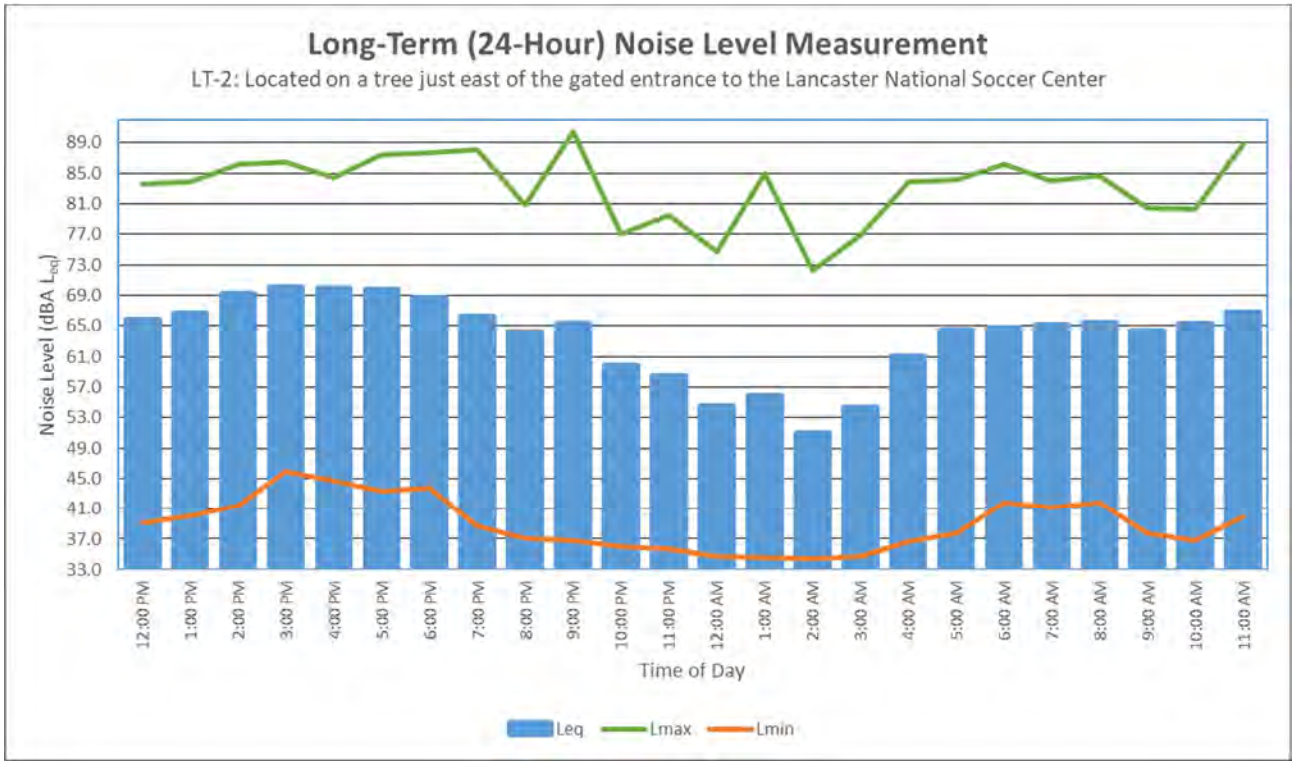
Comments:

Photo:

Long-Term (24-Hour) Noise Level Measurement Results at LT-2

Start Time	Date	Noise Level (dBA)		
		L_{eq}	L_{max}	L_{min}
12:00 PM	7/27/23	65.9	83.6	39.1
1:00 PM	7/27/23	66.6	83.8	40.1
2:00 PM	7/27/23	69.2	86.1	41.4
3:00 PM	7/27/23	70.0	86.5	46.0
4:00 PM	7/27/23	70.0	84.4	44.7
5:00 PM	7/27/23	69.8	87.4	43.3
6:00 PM	7/27/23	68.7	87.6	43.8
7:00 PM	7/27/23	66.3	88.1	38.7
8:00 PM	7/27/23	64.2	80.8	37.1
9:00 PM	7/27/23	65.2	90.4	36.8
10:00 PM	7/27/23	59.8	77.0	36.0
11:00 PM	7/27/23	58.4	79.5	35.7
12:00 AM	7/28/23	54.6	74.7	34.7
1:00 AM	7/28/23	55.9	85.0	34.6
2:00 AM	7/28/23	51.0	72.2	34.5
3:00 AM	7/28/23	54.4	76.9	34.7
4:00 AM	7/28/23	61.1	83.9	36.6
5:00 AM	7/28/23	64.5	84.1	37.7
6:00 AM	7/28/23	64.8	86.2	41.8
7:00 AM	7/28/23	65.2	84.0	41.1
8:00 AM	7/28/23	65.4	84.6	41.8
9:00 AM	7/28/23	64.4	80.4	37.7
10:00 AM	7/28/23	65.3	80.3	36.8
11:00 AM	7/28/23	66.8	88.7	39.9

Source: Compiled by LSA Associates, Inc. (2023).
dBA = A-weighted decibel
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level
L_{min} = minimum measured sound level



Noise Measurement Survey

Project Number: EWD2101.03
Project Name: Washington St Pipeline
Test Personnel: Kevin Nguyendo
Equipment: Larson Davis 824

Site Number: ST-1 Date: 7/27/23 Time: From 11:32 am To 11:52 am

Site Location: Located east of a single-family home on the sidewalk along Washington Street.

Primary Noise Sources: Vehicle traffic noise on Washington Street.

Measurement Results:

	dBA
L_{eq}	65.6
L_{max}	83.6
L_{min}	35.2
L_{peak}	97.7
L_2	74.8
L_8	70.5
L_{25}	62.2
L_{50}	53.3
SEL	

Atmospheric Conditions:

Maximum Wind Velocity (mph)	2.2
Average Wind Velocity (mph)	1.1
Temperature (F)	96.7
Relative Humidity (%)	18.9
Comments:	

Comments:

Traffic Description:

Roadway	# Lanes	Speeds	NB/EB Counts			SB/WB Counts		
			Auto	MT	HT	Auto	MT	HT

Diagram:

Location Photo:

Noise Measurement Survey

Project Number: EWD2101.03
Project Name: Washington St Pipeline
Test Personnel: Kevin Nguyendo
Equipment: Larson Davis 824

Site Number: ST-2 Date: 7/27/23 Time: From 12:00 pm To 12:20 pm

Site Location: Located west of a single-family home on 32859 Bachelor Peak St, Menifee, CA 92596 near a utility pole along Washington Street.

Primary Noise Sources: Vehicle traffic noise on Washington Street.

Measurement Results:

	dBA
L_{eq}	69.8
L_{max}	95.9
L_{min}	34.5
L_{peak}	114.7
L_2	73.8
L_8	68.2
L_{25}	64.0
L_{50}	57.4
SEL	

Atmospheric Conditions:

Maximum Wind Velocity (mph)	2.2
Average Wind Velocity (mph)	1.1
Temperature (F)	96.7
Relative Humidity (%)	18.9
Comments:	

Comments:

Traffic Description:

Roadway	# Lanes	Speeds	NB/EB Counts			SB/WB Counts		
			Auto	MT	HT	Auto	MT	HT

Diagram:

Location Photo:

Construction Calculations

Phase: Linear, Grubbing & Land Cleaning

Equipment	Quantity	Reference (dBA) 50 ft Lmax	Usage Factor[1]	Distance to Receptor (ft)	Ground Effects	Noise Level (dBA) Lmax	Noise Level (dBA) Leq
Tractor	1	84	40	50	0.5	84	80
Excavator	1	81	40	50	0.5	81	77
					Combined at 50 feet	**86**	**82**
					Combined at Receptor at 80 feet	**82**	**78**

Phase: Linear, Grading & Excavation

Equipment	Quantity	Reference (dBA) 50 ft Lmax	Usage Factor[1]	Distance to Receptor (ft)	Ground Effects	Noise Level (dBA) Lmax	Noise Level (dBA) Leq
Tractor	3	84	40	50	0.5	84	85
Excavator	3	81	40	50	0.5	81	82
Grader	1	85	40	50	0.5	85	81
Roller	2	80	20	50	0.5	80	76
Front End Loader	1	79	40	50	0.5	79	75
Scraper	2	84	40	50	0.5	84	83
					Combined at 50 feet	**91**	**89**
					Combined at Receptor at 80 feet	**86**	**85**

Phase: Linear, Drainage, Utilities & Sub-Grade

Equipment	Quantity	Reference (dBA) 50 ft Lmax	Usage Factor[1]	Distance to Receptor (ft)	Ground Effects	Noise Level (dBA) Lmax	Noise Level (dBA) Leq
Compressor (air)	1	78	40	50	0.5	78	74
Generator	1	81	50	50	0.5	81	78
Grader	1	85	40	50	0.5	85	81
Compactor (ground)	1	83	20	50	0.5	83	76
Pumps	1	81	50	50	0.5	81	78
Man Lift	1	75	20	50	0.5	75	68
Scraper	2	84	40	50	0.5	84	83
Tractor	2	84	40	50	0.5	84	83
					Combined at 50 feet	**91**	**89**
					Combined at Receptor at 80 feet	**87**	**85**

Phase: Linear, Paving

Equipment	Quantity	Reference (dBA) 50 ft Lmax	Usage Factor[1]	Distance to Receptor (ft)	Ground Effects	Noise Level (dBA) Lmax	Noise Level (dBA) Leq
Paver	1	77	50	50	0.5	77	74
All Other Equipment > 5 HP	1	85	50	50	0.5	85	82
Roller	3	80	20	50	0.5	80	78
Tractor	2	84	40	50	0.5	84	83
					Combined at 50 feet	**89**	**86**
					Combined at Receptor at 80 feet	**84**	**82**

Phase: Pipeline Construction

Equipment	Quantity	Reference (dBA) 50 ft Lmax	Usage Factor[1]	Distance to Receptor (ft)	Ground Effects	Noise Level (dBA) Lmax	Noise Level (dBA) Leq
Excavator	1	81	40	50	0.5	81	77
Tractor	2	84	40	50	0.5	84	83
Roller	1	80	20	50	0.5	80	73
					Combined at 50 feet	**87**	**84**
					Combined at Receptor at 80 feet	**83**	**80**

Sources: RCNM

[1]- Percentage of time that a piece of equipment is operating at full power.
dBA – A-weighted Decibels
Lmax- Maximum Level
Leq- Equivalent Level