



Sky Canyon Sewer Main Extension Project

Draft Initial Study/
Mitigated Negative Declaration

August 2019

Prepared for:

Eastern Municipal Water District

2270 Trumble Road

Perris, CA 92570

Prepared by:

HELIX Environmental Planning, Inc.

7578 El Cajon Boulevard

La Mesa, CA 91942

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Draft Initial Study/
Mitigated Negative Declaration

Prepared for:

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

Prepared by:

HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, CA 91942

August 2019 | EMW-17.21

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DRAFT MITIGATED NEGATIVE DECLARATION

1. Project title: Sky Canyon Sewer Main Extension Project
2. Project description: The project involves the construction and operation of approximately 6,700 linear feet of new gravity-fed 36-inch-diameter sewer main. The proposed sewer main would connect to the existing 36-inch-diameter French Valley Phase II Sewer at the intersection of Winchester Road and Hunter Road, run south through private easement(s), continue south within Sky Canyon Drive, and connect to an existing 30-inch-diameter sewer located at the intersection of Murrieta Hot Springs Road and Sky Canyon Drive.
3. Project location: The project alignment is located in southwestern Riverside County, adjacent to the eastern boundary of the city of Murrieta. The project site is east of Interstate (I-) 15 and I-215 and just east of State Route (SR) 79 (Winchester Road). The alignment would cross or be adjacent to Assessor's Parcel Numbers (APNs) 908-180-004, 957-320-011, and 957-330-037.
4. Lead Agency: Eastern Municipal Water District
P.O. Box 8300
Perris, CA 92572-8300

The Lead Agency, having reviewed the Initial Study for this project, does hereby find and declare that the project will not have a significant effect on the environment. A brief statement of the reasons supporting the Lead Agency's findings are as follows:

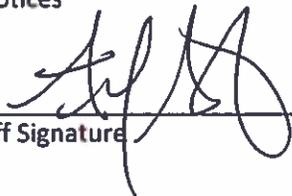
An Initial Study was conducted to evaluate the potential effects of this project upon the environment. Based upon the findings contained in the attached Initial Study, it has been determined that this project would have a less than significant impact on the environment. The Initial Study concluded that potentially significant construction-related impacts would occur with respect to biological resources (California horned lark, burrowing owl, other nesting birds and raptors, and a single unnamed drainage), and cultural resources, tribal cultural resources, and geology and soils (potential for subsurface cultural, tribal cultural, and paleontological resources to be encountered); however, impacts would be less than significant with mitigation. Potential impacts associated with biological resources would be mitigated by implementing a pre-construction nesting bird survey, installing construction fencing around the drainage, conducting pre-construction environmental training, and monitoring. Potential impacts to cultural, tribal cultural, and paleontological resources would be mitigated through monitoring during ground-disturbing activities, avoidance of resources, and proper treatment and disposition of discovered resources. The project would result in less than significant or no impacts to the following environmental issues areas: aesthetics, agriculture and forestry resources, air quality, energy, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, utilities and service systems, and wildfire. Accordingly, a Draft Mitigated Negative Declaration has been prepared.

The Lead Agency hereby finds that the Mitigated Negative Declaration reflects its independent judgment. A copy of the Initial Study is attached.

The location and custodian of the documents and other materials which constitute the record of proceedings upon which the Lead Agency based its decision to adopt this Mitigated Negative Declaration are as follows:

Eastern Municipal Water District
2270 Trumble Road
Perris, California 92572
<https://www.emwd.org/about-emwd/public-notice>

8/21/2019
Date


Staff Signature *AL JAW 162*

1.0 INTRODUCTION

The following Initial Study addresses the environmental impacts associated with the construction and operation of Eastern Municipal Water District's (herein referred to as the "District") proposed Sky Canyon Sewer Main Extension Project (herein referred to as "proposed project" or "project"). The purpose of the proposed project is to provide additional sewer capacity for planned development. This Initial Study has been prepared in accordance with the *California Environmental Quality Act of 1970* (CEQA), as amended, the *State CEQA Guidelines*, and the District's Administrative Code Resolution 5111, as amended.

1.1 INITIAL STUDY INFORMATION SHEET

1. Project title: Sky Canyon Sewer Main Extension Project
2. Lead agency name and address: Eastern Municipal Water District
P.O. Box 8300
Perris, CA 92572-8300
3. Contact person and phone number: Joseph Broadhead
(951) 928-3777 ext. 4545
4. Project location: The project is located in southwestern Riverside County, adjacent to the eastern boundary of the City of Murrieta. The project site is east of Interstate (I-) 15 and I-215 and just east of State Route (SR) 79 (Winchester Road). The sewer main extension would start at Hunter Road, just east of Winchester Road (SR 79), then run south through private easement(s), continue south on Sky Canyon Drive, and end at the intersection of Sky Canyon Drive and Murrieta Hot Springs Road, all within the unincorporated County of Riverside. The alignment would cross or be adjacent to Assessor's Parcel Numbers (APNs) 908-180-004, 957-320-011, and 957-330-037.
5. Project sponsor's name and address: Eastern Municipal Water District
P.O. Box 8300 Perris, CA 92572-8300
6. General plan designation: Light Industrial, Commercial Office, Business Park, Commercial Retail
7. Zoning: Specific Plan: Southwest Area

8. Description of project:

Project Location

The proposed project is located in southwestern Riverside County, adjacent to the eastern boundary of the City of Murrieta (Figure 1, *Regional Location*). The proposed project alignment runs east of State Route (SR) 79 (Winchester Road) from Hunter Road in the north to Murrieta Hot Springs Road in the south. The majority of the project alignment is within Township 7 South, Section 13, with small sections in Township 7 South, Range 3 West, Section 24, and Township 7 South, Range 2 West, Section 18, on the U.S. Geological Survey (USGS) 7.5-minute Murrieta Quadrangle (Figure 2, *USGS Topography*). The project alignment would cross or be adjacent to three parcels: Assessor's Parcel Numbers (APNs) 908-180-004, 957-320-011, and 957-330-037.

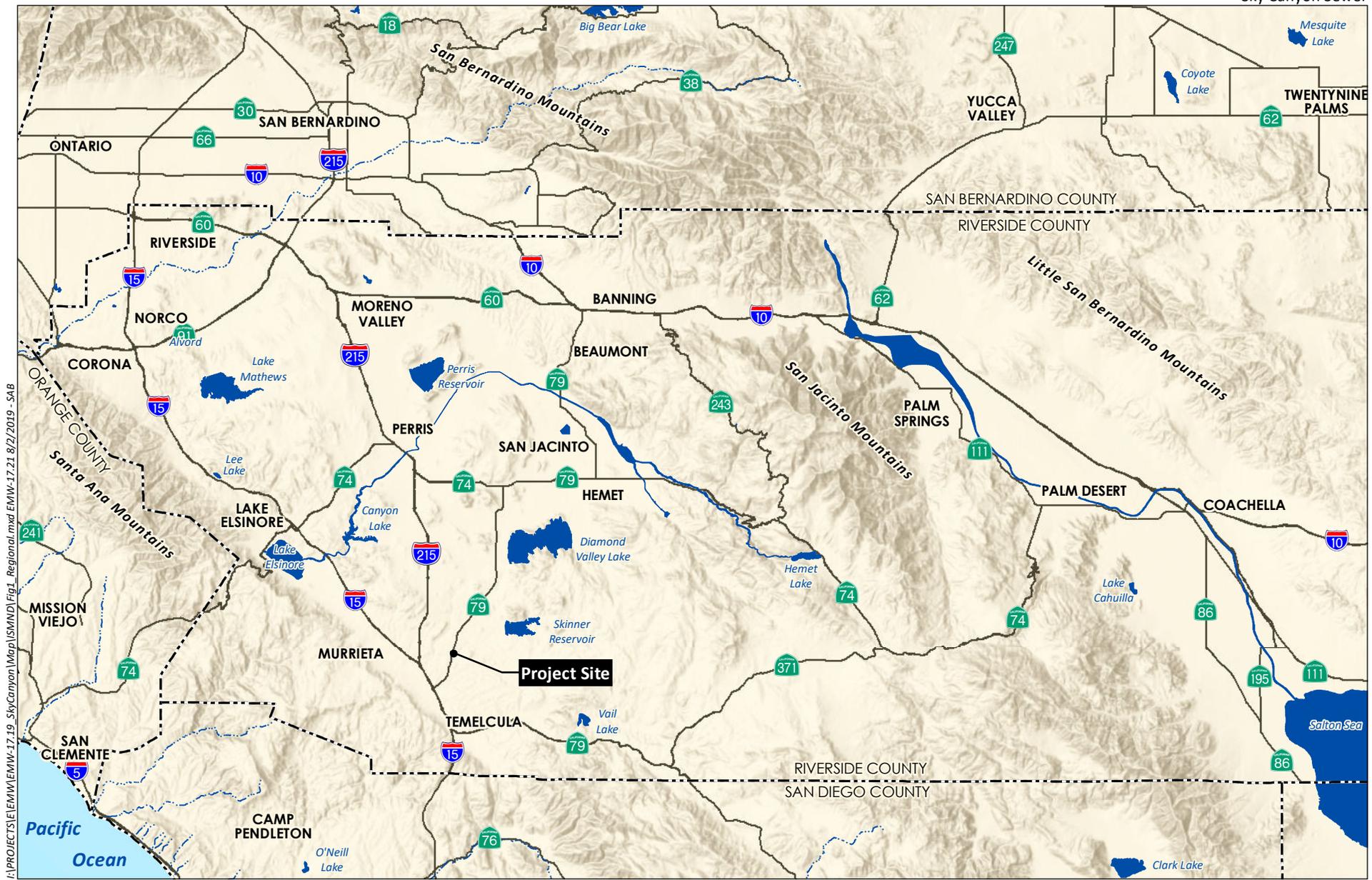
Specific staging areas have not yet been identified; staging areas would be within developed locations along Winchester Road or within a parcel that would be acquired by the District for the project and is within areas previously surveyed.

Pipeline

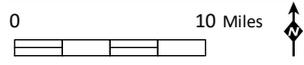
The District proposes to construct the project in order to provide additional wastewater conveyance capacity for projected build-out flows from anticipated development in the French Valley area of southwest Riverside County. The project would involve the construction of approximately 6,700 linear feet of new gravity-fed 36-inch-diameter sewer main that would be constructed of either vitrified clay pipe (VCP) or polyvinyl chloride (PVC) pipe. The proposed 36-inch-diameter sewer main would connect to the existing 36-inch-diameter French Valley Phase II Sewer at the intersection of Winchester Road and Hunter Road, run south through private easement(s), continue south within Sky Canyon Drive, and connect to an existing 30-inch-diameter sewer located at the intersection of Murrieta Hot Springs Road and Sky Canyon Drive (see Figure 3, *Aerial Photograph*). The sewer main would parallel an existing 15-inch-diameter sewer in Winchester Road and an existing 12-inch-diameter sewer in Sky Canyon Road. Manholes would be located every 400 to 500 feet along the sewer main. Manholes would have a minimum diameter of 60 inches and in non-paved areas would be surrounded by a 10-foot by 10-foot paved area, per the District's standards.

Alignments

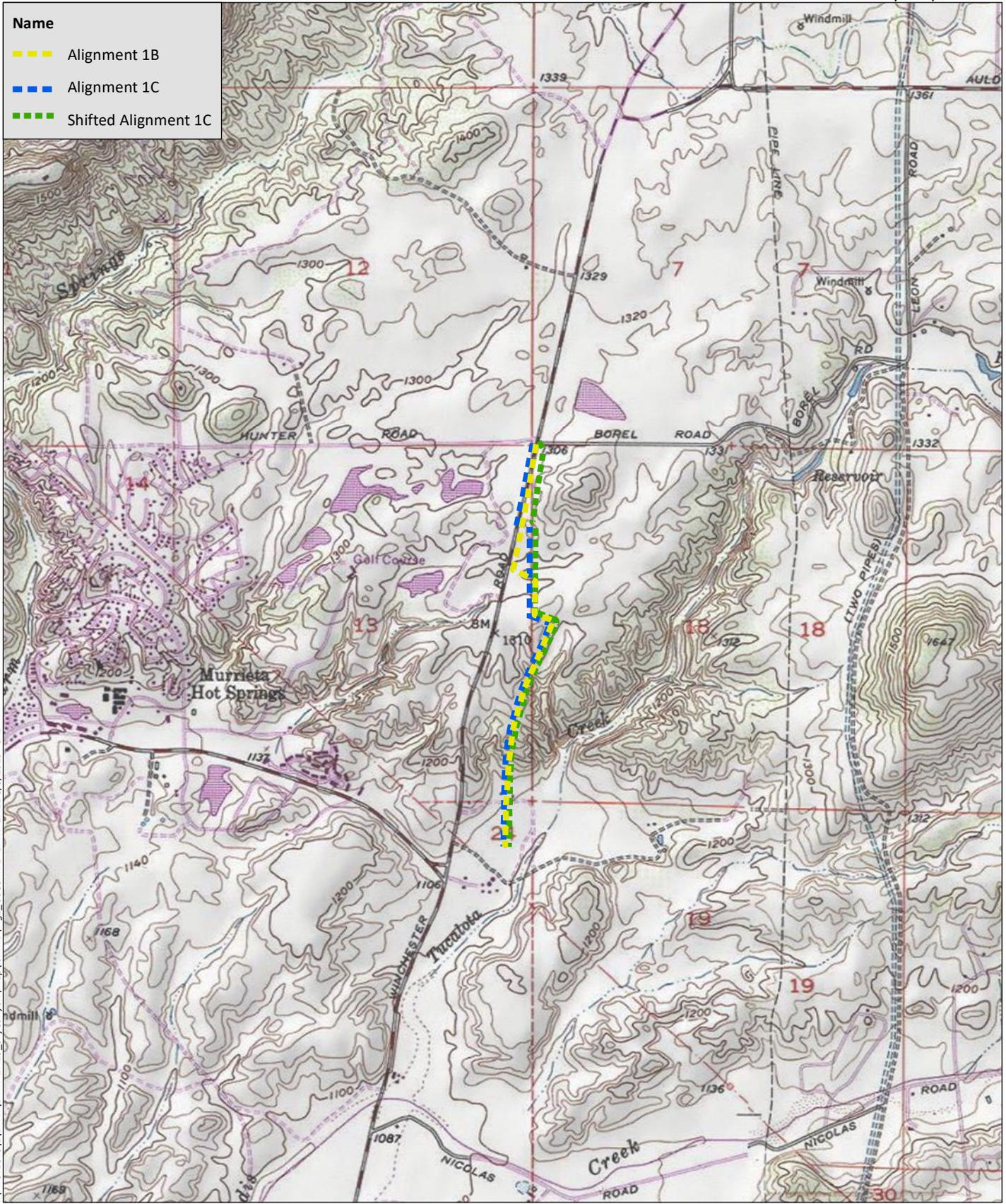
Three potential alignments (referenced in the engineering Preliminary Design Report and herein as alignments 1B, 1C, and Shifted 1C) are currently under consideration for the sewer main, with Alignment 1C preliminarily selected as the preferred alternative. The three alignments differ in location in the northern half of the project site but follow the same general route and have the same starting and ending points (see Figure 3). The Shifted 1C alignment is identical to the 1C alignment except for the northern portion that was shifted approximately 35 feet east to avoid a California Department of Transportation (Caltrans) slope easement and to provide additional room to protect an existing parallel 24-inch potable waterline. One of the three alignments would ultimately be selected and installed as the project (see Figure 4a, *Alignment 1B*; Figure 4b, *Alignment 1C*; and Figure 4c, *Shifted Alignment 1C*, for additional details on the three potential alignments).



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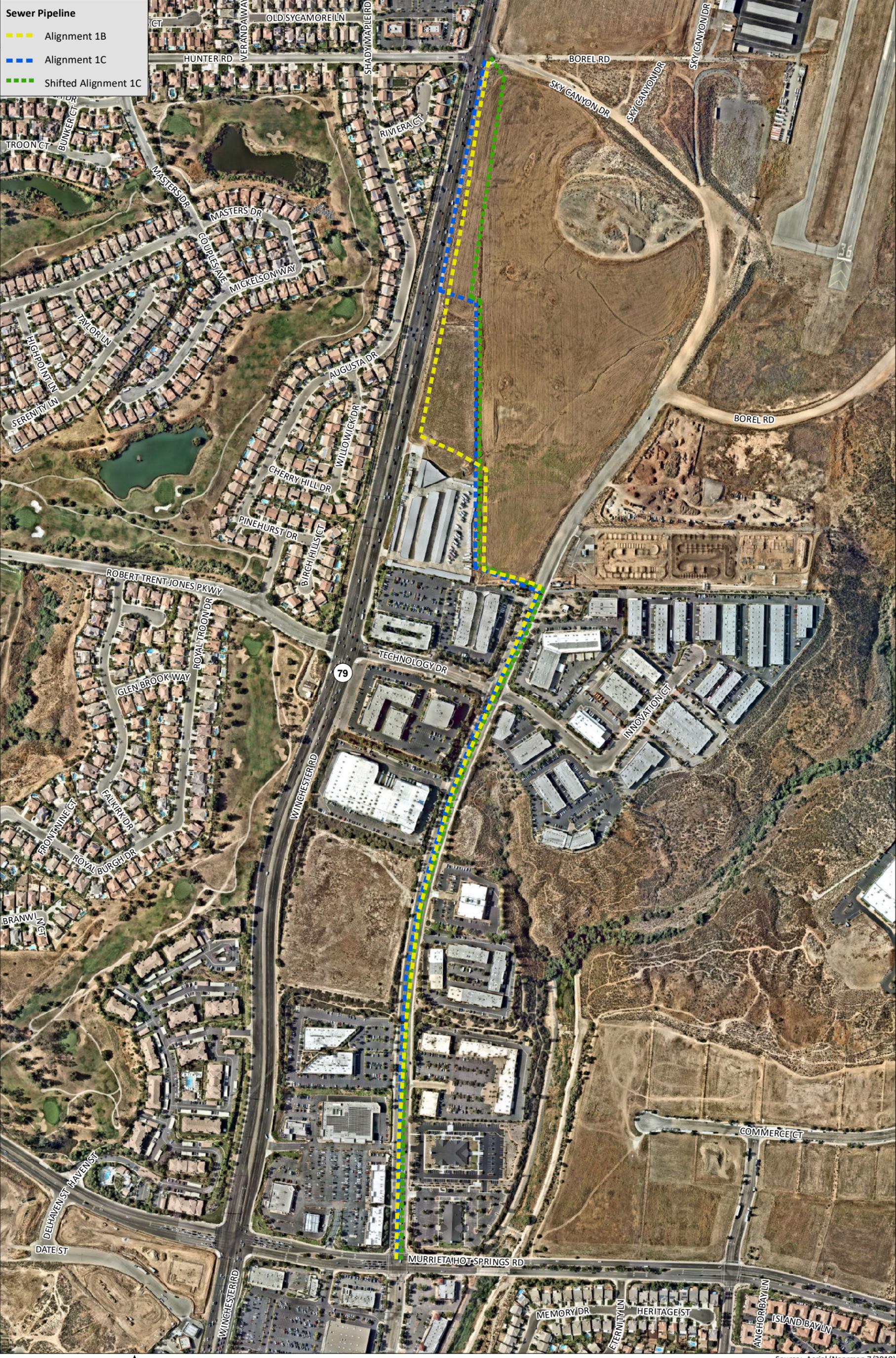


Source: Base Map Layers (ESRI, 2013)



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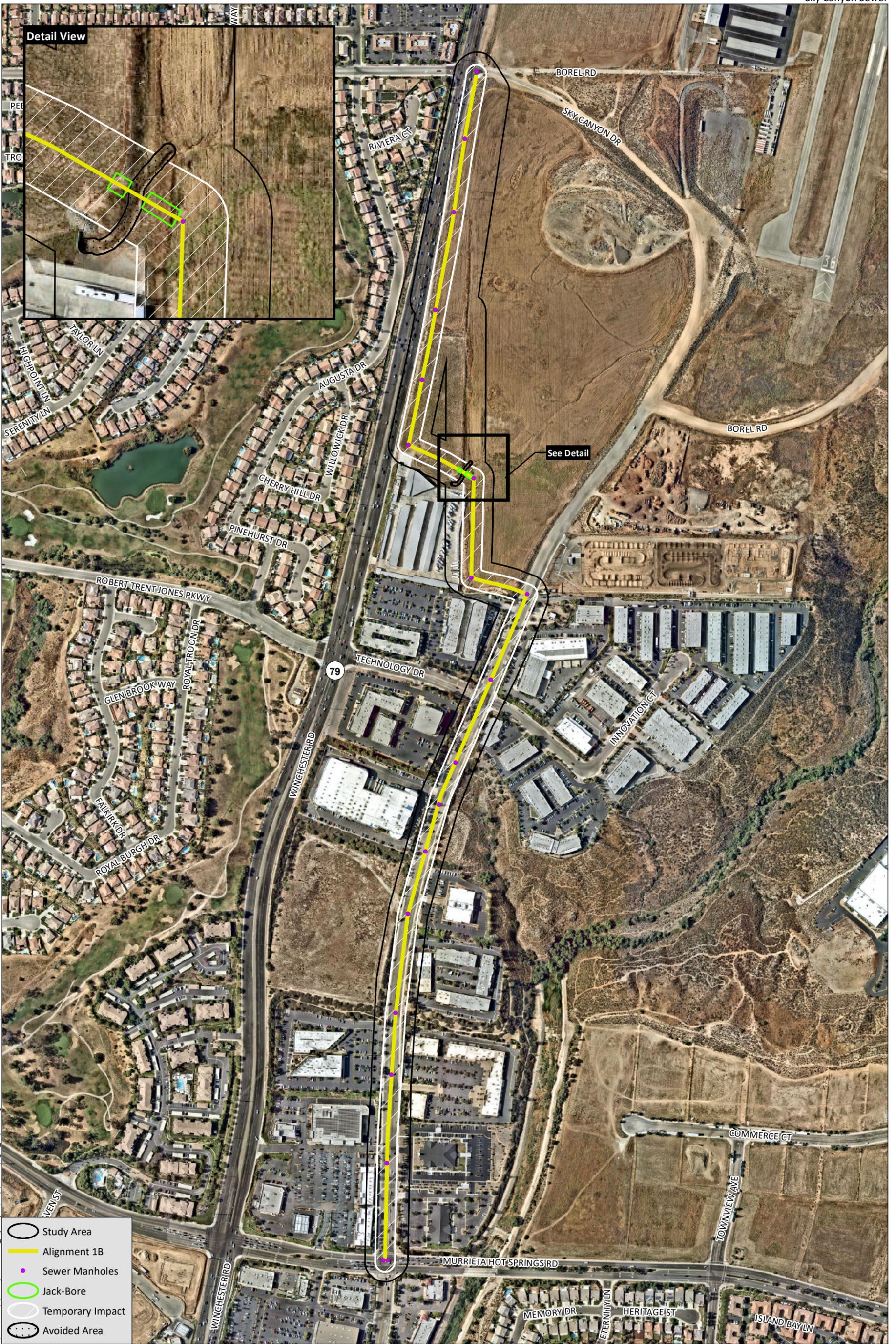
Source: Murrieta 7.5' Quad (USGS)



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Source: Aerial (Nearmap 7/2019)



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- Study Area
- Alignment 1B
- Sewer Manholes
- Jack-Bore
- Temporary Impact
- Avoided Area

0 425 Feet

Source: Aerial (Nearmap 7/2019)



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- Study Area
- Alignment 1C
- Sewer Manholes
- Jack-Bore
- Temporary Impact
- Avoided Area

0 425 Feet

Source: Aerial (Nearmap 7/2019)



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- Study Area
- Shifted Alignment 1C
- Sewer Manholes
- Jack-Bore
- Temporary Impact
- Avoided Area

0 425 Feet

Source: Aerial (Nearmap 7/2019)

Construction

The proposed pipeline would be located with a maximum cover of 38 feet. Construction and installation of the gravity-fed sewer would utilize both an open-cut-trenching method and jack-and-bore method to avoid a single ephemeral drainage feature, in the form of an earthen ditch, that is located north of Technology Drive and east of Winchester Road. Jack-and-bore methods would involve digging a shaft on each side of the drainage (an entrance and exit shaft) and boring under the drainage from the entrance shaft to the exit shaft on the other side.

Open-cut trenches in paved areas would have a minimum width of 6.5 feet. Trenches in unpaved areas, generally located in the northern portion of the alignment, would be sloped back based on the underlying earth material (refer to Figure 5, *Open Cut Field Excavation – Typical Cross Section*). Trenching would involve approximately 50,000 cubic yards of earthwork. If the contractor determines that rock breaking activities are required during construction, the project would use non-explosive demolition methods (i.e., mechanical means via a hoe ram or chemical means) to fracture the bedrock with minimal disturbance. The project would be constructed in conformance with pertinent engineering standards, including current versions of the International Code Council (ICC) *International Building Code* (IBC, formerly the Uniform Building Code) and the California Building Standards Commission *California Building Code* (CBC).

The project's total construction period, including drawing submittals, procurement, and permitting, is anticipated to last 20 months, beginning in November 2020 and ending in June 2022. On-ground physical construction activity is anticipated to last approximately 17 months, beginning in January 2021 and ending in June 2022. Construction activities would generally be limited to daylight hours; however, construction associated with tie-in of the proposed pipeline to the existing sewer located in the intersection of Murrieta Hot Springs Road and Sky Canyon Drive may require nighttime work to avoid traffic impacts and conflicts with daytime commercial operations at adjacent businesses. In undeveloped/unpaved areas, construction-related equipment and materials would be stored within the District's 100-foot-wide temporary construction easement. For construction located in developed/paved areas, equipment and materials would be stored in private easements pending agreement with private property owners.

Traffic Control Plan

A Traffic Control Plan (TCP) would be submitted to the County of Riverside for approval. Approval of the TCP by Caltrans may be required. While traffic diversion and lane closures would be necessary in Sky Canyon Drive, the project would maintain one open lane in each direction and one two-way left turn lane. Excavation areas within the ROW would be plated during non-working hours. Project-related trips would include daily construction worker trips and occasional material delivery and haul truck trips. Appropriate traffic control measures would be implemented as necessary in pertinent areas to maintain access and ensure safety. Such measures would likely include standard efforts such as the use of cones, barriers, signs, and flaggers, where applicable. Construction is not anticipated to impact sidewalk accessibility. There are three Riverside Transit Authority (RTA) bus stops within the alignment, but the District would coordinate with the RTA to maintain access or establish temporary bus stop locations.

9. Surrounding land uses and setting:

The project alignment is located within and adjacent to County land use designations that include Light Industrial, Commercial Office, Business Park, Commercial Retail, and Conservation. Land use designations across Winchester Road, within the City of Murrieta, include Single-Family Residential, Multiple-Family Residential, and Parks and Open Space.

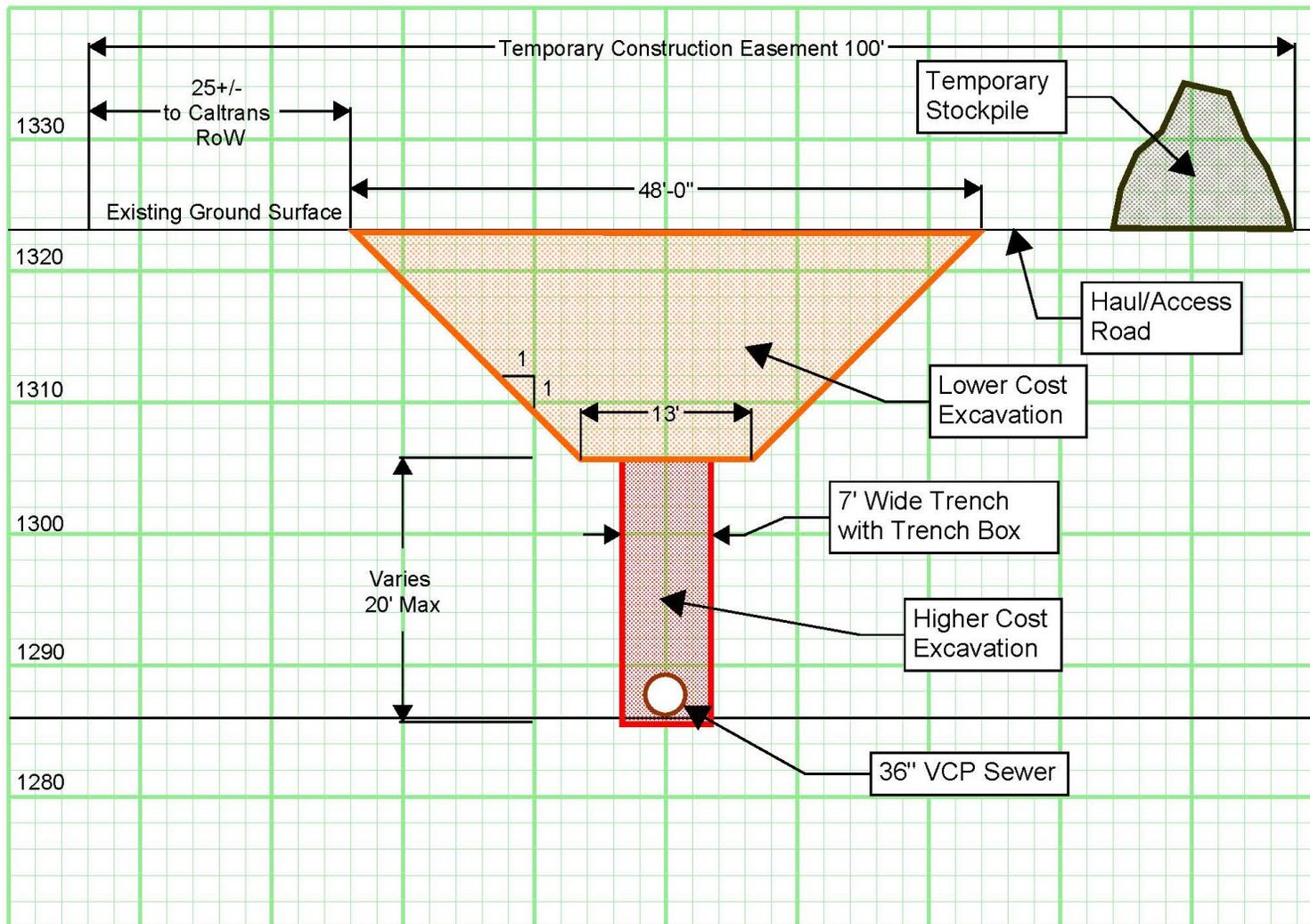
10. Other public agencies whose approval may be required (e.g., permits, financing approval, or participation agreement):

- County of Riverside Transportation Department Encroachment and Excavation Permit
- California Department of Transportation Encroachment Permit¹
- State Water Resource Control Board (SWRCB) Waiver
- SWRCB Construction General Permit
- Riverside County Flood Control and Water Conservation District Encroachment Permit
- California Occupational Safety and Health Administration (Cal-OHSA) Trenching/Shoring Permit
- Occupational Health and Safety (OSHA) Mining and Tunnel Classification
- San Diego Regional Water Quality Control Board (RWQCB) Dewatering Permit, if necessary, for the disposal of groundwater during construction

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources 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.?

The District has consulted with applicable Native American tribal representatives through written correspondence, based on a contact list of tribes who indicated to the District that they are interested in receiving notification. Additionally, District staff has undertaken consultation with representatives from Pechanga Band of Luiseño Mission Indians, Soboba Band of Luiseño Indians, Morongo Band of Mission Indians, and the Rincon Band of Luiseño Indians to discuss the project and potential effects to significant cultural resources. The Agua Caliente Band of Cahuilla Indians deferred to other tribes closer to the project area, as the project is located outside their Traditional Use Area.

¹ A California Department of Transportation Encroachment Permit would not be required if Shifted Alignment 1C is chosen for the project, as it would avoid the existing Caltrans slope easement located along Winchester Road.



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1.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

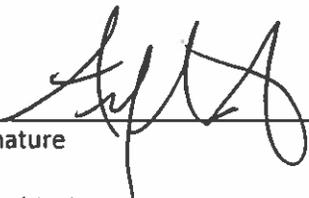
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

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

1.3 DETERMINATION

On the basis of this initial evaluation:

<input type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	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.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



 Signature
 Alfred Javier

 Printed Name

8/21/2019

 Date
 Director of Environmental and Regulatory Compliance
 For Eastern Municipal Water District

2.0 ENVIRONMENTAL INITIAL STUDY CHECKLIST

The lead agency has defined the column headings in the environmental checklist as follows:

- A. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- B. “Less Than Significant with Mitigation Incorporated” applies where the inclusion of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” All mitigation measures are described, including a brief explanation of how the measures reduce the effect to a less than significant level. Mitigation measures from earlier analyses may be cross-referenced.
- C. “Less Than Significant Impact” applies where the project does not create an impact that exceeds a stated significance threshold.
- D. “No Impact” applies where a project does not create an impact in that category. “No Impact” answers do not require an explanation if they are adequately supported by the information sources cited by the lead agency which show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project specific screening analysis).

The explanation of each issue identifies the significance criteria or threshold used to evaluate each question; and the mitigation measure identified, if any, to reduce the impact to less than significance. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration [CEQA Guidelines Section 15063(c)(3)(D)]. Where appropriate, the discussion identifies the following:

- a) Earlier Analyses Used. Identifies where earlier analyses are available for review.
- b) Impacts Adequately Addressed. Identifies which effects from the checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and states whether such effects were addressed by mitigation measures based on the earlier analysis.
- c) Mitigation Measures. For effects that are “Less Than Significant with Mitigation Incorporated,” describes the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

The three potential alignments proposed for the sewer main are not analyzed separately in this environmental checklist as the following discussions are based on the project’s construction and operational activities, the overall project site, and/or the general region, which do not differ between the alignments.

I. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Less Than Significant Impact. The most prominent scenic resources that can be viewed from the project area are the San Jacinto Mountains located to the east. Such views could be temporarily affected during construction of the pipeline by the presence of construction equipment. Once construction is completed, however, visual impacts related to construction activities would cease. The proposed pipeline would be located below ground and would not be visible or obstruct scenic vistas. Therefore, impacts would be less than significant.

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

No Impact. State scenic highways are designated by Caltrans. According to the Southwest Area Plan of the County's General Plan, the only identified state scenic highway in the project vicinity is I-15, which is located approximately 2.5 miles southwest of the project site at its closest point and is listed as an Eligible (i.e., not officially designated) State Scenic Highway (County 2019). The project site is not visible from I-15. Additionally, there are no rock outcroppings or historic buildings located within or adjacent to the project site, and tree removal is not anticipated. Based on the described conditions, no impact would occur to scenic vistas or scenic resources.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly

accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact. The Riverside County General Plan is applicable to all unincorporated lands within Riverside County. Countywide policies that seek to preserve visual quality are located in the Land Use Element (LU), Open Space Element (OS), and Circulation Element (C) of the General Plan, and include:

- LU 13.1 “Preserve and protect outstanding scenic vistas and visual features for the enjoyment of the traveling public.”
- LU 25.5 Requires that “public facilities be designed to consider their surroundings and visually enhance, not degrade the character of the surrounding area.”
- OS 20.2 Seeks to “prevent unnecessary extension of public facilities, services, and utilities, for urban uses, into Open Space-Conservation designated areas.”
- C 25.2 “Locate new and relocated utilities underground when possible. All remaining utilities shall be located or screened in a manner that minimizes their visibility by the public.”

Construction activities associated with the project, including the presence of construction vehicles, excavated materials, and staging areas, would result in short-term visual effects to the project alignment and its surroundings. Operationally, the pipeline would not degrade the existing visual character or quality of the site and its surroundings because the pipeline would be located below ground and would not be visible. In addition, the project would not extend into Open Space-Conservation land. Therefore, the project would not conflict with applicable regulations governing scenic quality and impacts would be less than significant.

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

Less Than Significant Impact. Project construction would generally occur during daytime hours Monday through Friday; however, construction associated with tie-in of the proposed pipeline to the existing sewer located in the intersection of Murrieta Hot Springs Road and Sky Canyon Drive may occur at night to avoid conflict with daytime commercial operations at the adjacent businesses. If so, mobile construction lighting would be used. Such lighting would be used temporarily and would be localized around a relatively small area, as work would be focused around the 6.5-foot-wide trench in the roadway. In addition, the lighting would be located within an intersection that includes existing streetlights and traffic lights and that is surrounded by existing commercial developments that include lighting features. As such, construction lighting would not be a new source of substantial light that would adversely affect nighttime views where nighttime views are currently unaffected by lighting.

Construction equipment could be a minor source of glare, but its presence would be temporary. Operationally, the pipeline would be located below ground and would not result in a new source of light or glare. Therefore, impacts would be less than significant.

II. AGRICULTURE AND FORESTRY RESOURCES

	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

No Impact. According to the maps prepared pursuant to the Farmland Mapping and Monitoring Program, the project site is not designated or zoned as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (California Department of Conservation 2016a). Therefore, no impact would occur.

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

No Impact. There are no areas zoned for agriculture or designated Williamson Act Contract lands located within the project site (California Department of Conservation 2016b). As a result, no associated impacts would result from implementation of the proposed project.

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

No Impact. The project site is not designated or zoned for forest land, timberland, or timberland zoned Timberland Production. Therefore, implementation of the project would not conflict with existing zoning for such lands, and no impact would occur.

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

No Impact. As previously stated, the project site is not located within or adjacent to areas designated or zoned as forest land. It also does not support forests. As a result, project implementation would not convert forest land to non-forest use, and no impact would occur.

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

No Impact. As described above, there are no pertinent agricultural- or forestry-related uses or designations located within or adjacent to the project site. Accordingly, the proposed project would not involve changes that could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use, and no impact would occur.

III. AIR QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

No Impact. The project is located within the South Coast Air Basin (Basin) under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD develops and administers local regulations for stationary air pollutant sources within the Basin and develops plans and programs to meet attainment requirements for both federal and State Ambient Air Quality Standards (AAQS). SCAQMD and the Southern California Association of Governments (SCAG) are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the Basin (SCAQMD 2013). The AQMP is a series of plans adopted for the purpose of reaching short- and long-term goals for those pollutants that the Basin is designated as a “nonattainment” area because it does not meet federal and/or state AAQS. To determine consistency between the project and the AQMP, the project must comply with applicable SCAQMD rules and regulations; comply with proposed or adopted control measures; and be consistent with the growth forecasts utilized in preparation of the AQMP, which are based on regional population, housing, and employment projections prepared by SCAG.

The project would not result in a significant air quality impact from construction activities, as described below. Moreover, as discussed under Item XIV, *Population and Housing*, the proposed project does not include growth-generating components, but rather would accommodate existing and planned growth. As such, the project would be consistent with growth projections contained in the County’s General Plan and SCAG and AQMP forecasts. Based on these considerations and pursuant to SCAQMD guidelines, project-related emissions are accounted for in the AQMP, and no impact would occur.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact. The Basin is currently in nonattainment for 1-hour ozone, 8-hour ozone, and particulate matter (PM₁₀ and PM_{2.5}; SCAQMD 2016). The SCAQMD establishes significance thresholds to assess the regional impact of project-related air pollutant emissions in the SCAQMD. Table 1, *SCAQMD Criteria Pollutant Significant Mass Emissions Significance Thresholds*, summarizes the SCAQMD’s mass emissions thresholds, which are presented for short-term construction emissions. A project with emissions rates below these thresholds would not result in a cumulatively considerable increase of any criteria pollutant and is considered to have a less than significant impact on air quality.

Table 1 SCAQMD CRITERIA POLLUTANT SIGNIFICANT MASS EMISSIONS SIGNIFICANCE THRESHOLDS	
Criteria Pollutant	Emission Threshold (pounds per day)
	Construction
Volatile Organic Compounds (VOCs)	75
Oxides of Nitrogen (NO _x)	100
Carbon Monoxide (CO)	550
Oxides of Sulfur (SO _x)	150
Particulate Matter (PM ₁₀)	150
Particulate Matter (PM _{2.5})	55

Source: SCAQMD 2015

Regional Construction Impacts

The proposed project would result in construction emissions during grubbing and land clearing, trenching, pipe installation and backfill, and repaving. These emissions would be limited and short term. The project's construction emissions would include those associated with off-road heavy equipment operation, worker vehicle commutes, and haul truck activity for import and export of construction materials, including pipe, pipe bedding, soil, aggregate base, and pavement. Criteria pollutant and ozone precursor emissions from project construction were assessed using the Sacramento Metropolitan Air Quality Management District's (SMAQMD) Roadway Construction Emissions Model (RCEM), Version 9.0.0 (SMAQMD 2018).

Maximum daily emissions during the peak workday for each phase are shown in Table 2, *Maximum Daily Construction Emissions*. Maximum emissions would occur during the project's trenching phase. As shown in Table 2, criteria pollutant emissions, including particulate matter and ozone precursors VOC and NO_x, would not exceed the respective screening thresholds and would not be cumulatively considerable. In addition, actual emissions could be less than those forecasted due to the conservative nature of the assumptions incorporated into the RCEM regarding phasing. If construction is delayed or occurs over a longer time period, emissions could be reduced because of (1) a more modern and cleaner-burning construction equipment fleet mix and/or (2) a less intensive buildout schedule (i.e., fewer daily emissions occurring over a longer time interval). Therefore, construction-related air quality impacts would be less than significant.

Phase	Pollutant Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Grubbing/Land Clearing	5	50	31	<0.5	7	3
Trenching	6	65	38	<0.5	8	4
Pipe Installation and Backfill	4	36	29	<0.5	7	2
Repaving	4	33	27	<0.5	1	1
Maximum Daily Emissions	6	65	38	<0.5	8	4
SCAQMD Regional Thresholds	75	100	550	150	150	55
Significant Impact?	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

Source: SCAQMD 2015 (Thresholds)

RCEM outputs provided in Appendix A.

ROG = reactive organic gas; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = oxides of sulfur;

PM₁₀ = particulate matter less than 10 microns in diameter; PM_{2.5} = particulate matter less than 2.5 microns in diameter

Localized Construction Impacts

The localized effects from the on-site portion of daily emissions were evaluated at sensitive receptor locations potentially impacted by the project according to the SCAQMD's localized significance threshold (LST) methodology, which utilizes on-site mass emissions rate look-up tables and project-specific modeling, where appropriate. LSTs are applicable to the following criteria pollutants: nitrogen oxides, carbon monoxide, and particulate matter. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor. The nearest sensitive receptors in this case would be the single-family residences located as close as 150 feet west of

the northern portion of the project alignment. For particulate matter, LSTs were derived based on requirements in SCAQMD Rule 403, Fugitive Dust. The mass rate look-up tables were developed for each source receptor area and can be used to determine whether or not a project may generate significant adverse localized air quality impacts. The SCAQMD provides LST mass rate look-up tables for projects that are 1 acre, 2 acres, or 5 acres. For projects that exceed 5 acres, the 5-acre LST look-up values can be used as a screening tool to determine which pollutants require detailed analysis.

When quantifying mass emissions for localized analysis, only emissions that occur on site are considered. Consistent with the SCAQMD's LST methodology guidelines, emissions related to off-site delivery/haul truck activity and employee trips are not considered in the evaluation of localized impacts. The LSTs for a 5-acre site located in Source Receptor Area 26, Temecula Valley, with receptors at a distance of 50 meters were used. The results of the LST analysis are provided in Table 3, *Localized Construction Emissions*. As shown in Table 3, all localized criteria pollutants would be less than their respective SCAQMD LST significance thresholds. Thus, associated impacts would be less than significant.

Phase	Pollutant Emissions (pounds per day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Grubbing/Land Clearing	50	30	7	3
Trenching	60	37	8	3
Pipe Installation and Backfill	32	28	6	2
Repaving	28	26	1	1
Maximum Daily Emissions	60	37	8	3
SCAQMD LSTs	416	2,714	40	10
Significant Impact?	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

Source: SCAQMD 2009 (Thresholds)

RCEM output data provided in Appendix A.

NO_x = oxides of nitrogen; CO = carbon monoxide; PM₁₀ = particulate matter less than 10 microns in diameter; PM_{2.5} = particulate matter less than 2.5 microns in diameter

To reduce potential effects to sensitive receptors, the project would comply with SCAQMD Rule 403, which requires fugitive dust control measures, including the use of an on-site water truck to wet down active grading areas and roads at least twice daily.

Operational Emissions

Operational emissions would be limited to those generated by occasional maintenance worker vehicles. Emissions would be minimal and would not exceed SCAQMD's established emissions thresholds.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Sensitive populations (i.e., children, senior citizens, and acutely or chronically ill people) are more susceptible to the effects of air pollution than the general population. Land uses considered sensitive receptors typically include residences, schools, playgrounds, childcare centers, hospitals, convalescent homes, and retirement homes. The closest sensitive receptors would be single-family residences located west of Winchester Road in the City of Murrieta, approximately 150 feet from project construction activities. Pollutants that have the potential to affect sensitive receptors include criteria pollutants, diesel particulate matter, and carbon monoxide hotspots. Impacts to

sensitive receptors from criteria pollutants are discussed above in Item III.b, Localized Construction Impacts. Impacts from diesel particulate matter and carbon monoxide are discussed below.

Diesel Particulate Matter

During the approximately 17-month project construction period, diesel exhaust particulate matter would be generated from construction equipment and vehicles. Diesel exhaust particulate matter is known by the State of California to include carcinogenic compounds, and long-term exposure to diesel exhaust emissions has the potential to result in adverse health effects. Long-term exposure is typically equated with a lifetime of chronic exposure, which is defined in the California Air Pollution Control Officers' Association Air Toxics "Hot Spots" Program Risk Assessment Guidelines as 24 hours per day, 7 days per week, 365 days per year, for 70 years. Because the project's generation of diesel particulate matter would be limited to a 17-month construction period, it would not result in long-term exposure of sensitive receptors to diesel particulate matter, and potential impacts related to exposure of sensitive receptors to substantial pollutant concentrations (including diesel exhaust emissions) would be less than significant.

Carbon Monoxide Hotspots

Carbon monoxide hotspots are areas of localized increased carbon monoxide concentrations caused by severe vehicle congestion on major roadways, typically near intersections. The project would generate vehicle trips during construction in the form of haul trucks and worker commute vehicles; however, the number of vehicles generated would be limited and would not result in congestion on nearby roadways. Construction vehicle generation would also be temporary. Lane closures during construction may result in minor increases in vehicle congestion on affected roadways; however, through implementation of a TCP, vehicular flow would be maintained, congestion would not be substantial, and the project would not cause the generation of carbon monoxide hot spots. In addition, there are no sensitive receptors adjacent to the roadways that would be subject to project-generated traffic and lane closures. The project would not result in increased vehicle trips during operation, aside from the occasional maintenance worker vehicle trip. Therefore, the project would not result in the exposure of sensitive receptors to carbon monoxide hotspots, and impacts would be less than significant.

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

Less Than Significant Impact. During the construction period, emission-related odors from construction equipment/vehicles (particularly diesel exhaust) may occur temporarily in the immediately surrounding area. Specifically, construction equipment and vehicles could intermittently emit diesel exhaust perceptible by nearby receptors along roadways (i.e., from transport vehicles) and near the project site during construction. These odors would not affect a substantial number of people, as construction activities (including vehicle trips) would be minor in duration and extent. Diesel-powered construction equipment and vehicles would also be required to comply with the State Airborne Toxic Control Measure (ATCM) standards for diesel particulate matter emissions.

IV. BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The following discussion is based on the Biological Technical Report prepared by HELIX Environmental Planning, Inc. (HELIX 2019a), attached to this Initial Study as Appendix B. A general biological survey, rare plant survey, burrowing owl survey, and coastal California gnatcatcher (CAGN) survey, as well as reviews of U.S. Fish and Wildlife Service (USFWS) species records (USFWS 2018), the CDFW California Native Diversity Database (CDFW 2019), Calflora database (Calflora 2019), and California Native Plant Society (CNPS) inventory (CNPS 2019) were conducted to determine the potential presence of sensitive species within the project site and surrounding area.

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

Less Than Significant with Mitigation Incorporated.

Sensitive Plant Species

One special status plant species, paniculate tarplant (*Deinandra paniculata*), was observed on the project site during the general biological survey. Implementation of the project would result in direct impacts to this species during project construction.

Paniculate tarplant is a California Rare Plant Rank 4.2 species, meaning that it has been assigned to a watch list for plants of reported limited distribution and moderate degree of immediacy of threat by CNPS. However, there have been numerous recorded occurrences of paniculate tarplant within the project vicinity, indicating that the species' population is relatively stable in the region and the population within the project area does not represent a geographically significant population. Individuals that would be impacted from project implementation are not part of a population at the periphery of the species' range, located in an area where the taxon is especially uncommon, or occurring on unusual substrates. Furthermore, the species would be expected to repopulate the area following completion of construction activities, as impacts would be temporary and the species shows an affinity for disturbed areas. Therefore, impacts to paniculate tarplant would be less than significant, and no mitigation is required.

Sensitive Animal Species

Three special status animal species, California horned lark (*Eremophila alpestris actia*), CAGN (*Polioptila californica californica*), and Cooper's hawk (*Accipiter cooperii*), were observed or detected on or directly adjacent to the study area, or observed flying over the project site, during biological surveys. The project study area also contains suitable habitat for burrowing owl (*Athene cunicularia*), although the species was confirmed to be absent during the 2019 protocol-level survey.

Potential impacts to California horned lark would consist of temporary loss of foraging habitat (disturbed habitat and Riversidian sage scrub) during project construction. Direct and/or indirect impacts to California horned larks nesting within the proposed project footprint during construction would be potentially significant. Implementation of mitigation measure BIO-1 would reduce impacts to a less than significant level.

Protocol-level surveys for CAGN were conducted in 2018 and 2019. The species was not detected within the study area during this time; however, CAGN were detected outside of the study area to the east of Sky Canyon Drive during two of the nine surveys (one pair was observed on December 4, 2018 and a single female was observed on December 18, 2018). Based on the lack of suitable habitat for CAGN within the project study area, this species is presumed to be absent from project impact areas. The CAGNs observed likely occupy habitat further east of Sky Canyon Drive where more-contiguous and higher-quality sage scrub is present along Tualota Creek. Direct impacts to CAGN are, therefore, not anticipated. Indirect impacts related to construction noise could occur if CAGN are present within potentially suitable habitat adjacent to project construction activities. However, these habitat areas are subject to relatively high noise levels from roadway traffic, and if CAGN were to nest within the adjacent habitat, they would be habituated to current traffic and noise levels and would not be significantly impacted by temporary construction activities.

The proposed project would not remove potential nesting habitat for Cooper's hawk but could temporarily disturb potential foraging habitat located in the northern portion of the study area during

project construction. These impacts would not be significant as they would be temporary and would not reduce the amount of the suitable nesting habitat for the species.

Implementation of the proposed project would impact potential burrowing owl habitat consisting primarily of disturbed habitat which would not be significant given the absence of burrowing owl from the study area and the temporary nature of the impact. The project would not result in permanent loss of potential burrowing owl habitat, as the general conditions would be returned to pre-project conditions (i.e., disced uplands) upon completion of the project. If burrowing owl individuals were to move into the project impact areas prior to project construction, impacts to nesting owls would be significant. Potential impacts to burrowing owl that may move into the study area prior to project construction would be mitigated to a less than significant level through implementation of mitigation measure BIO-2.

The study area also contains shrubs and other vegetation that provide suitable nesting habitat for common birds, including raptors, protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game (CFG) Code. Significant impacts could occur to nesting birds and raptors if suitable nesting habitat is removed during the general bird breeding season (January 15 to August 31). Implementation of mitigation measure BIO-1 would reduce potential impacts to a less than significant level.

BIO-1 Nesting Bird and Raptor Avoidance. Trimming, grubbing, and clearing of vegetation shall be avoided during the general avian breeding season (January 15 to July 15 for raptors; February 15 to August 31 for other avian species) to the extent feasible. If trimming, grubbing, or clearing of vegetation is proposed to occur during the general avian breeding season, a pre-construction survey shall be conducted by a qualified biologist no more than 7 days prior to vegetation clearing to determine if active bird nests are present in the affected areas. If there are no nesting birds (includes nest building or other breeding/nesting behavior) within this area, trimming, grubbing, and clearing of vegetation shall be allowed to proceed. If active bird nests are confirmed to be present during the pre-construction survey, a buffer zone will be established by the biologist. Construction activities shall avoid any active nests until a qualified biologist has verified that the young have fledged, or the nest has otherwise become inactive.

BIO-2 Burrowing Owl Pre-Construction Survey. Prior to construction, the District shall retain a qualified biologist to conduct required pre-construction take avoidance surveys for the burrowing owl in accordance with the protocol described in the California Department of Fish and Wildlife (CDFW) Staff Report on Burrowing Owl Mitigation (CDFW 2012). The initial take avoidance survey shall occur no less than 14 days prior to initiating ground disturbing activities, with a final survey conducted within 24 hours prior to initiating ground disturbing activities. If, after the initial take avoidance survey, no suitable burrowing owl habitat including burrows is present, the second survey 24 hours prior to ground disturbance shall not be required.

The project shall avoid disturbing active burrowing owl burrows (nesting sites) and burrowing owl individuals. Buffers shall be established around occupied burrows in accordance with guidance provided in the CDFW's Staff Report on Burrowing Owl Mitigation (2012) based on the proposed level of disturbance. For low disturbance projects, initial setback distances for avoidance of active burrows shall be 200 meters from April 1 to October 15 and 50 meters from October 16 to March 31. Exceptions can be made to the avoidance distance for areas with natural (hills, trees) or artificial (buildings, walls) barriers in place. The final avoidance buffer

shall be at the discretion of the biologist. If, after consideration of a reduced buffer, an adequate avoidance buffer cannot be provided between an occupied burrow and required ground-disturbing activities, then passive relocation activities during the non-breeding season (September 1 through January 31) may be authorized in consultation with CDFW, which would include preparation, approval, and implementation of a Burrowing Owl Exclusion Plan in accordance with protocol described in the CDFW Staff Report on Burrowing Owl Mitigation. No impacts shall occur to active burrowing owl nests or individuals.

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

Less Than Significant Impact. The project study area supports three vegetation communities/land cover types, including Riverside sage scrub, disturbed habitat, and developed land. CDFW evaluates the rarity of natural communities using the NatureServe's Heritage Methodology (Faber-Langendoen et al. 2012) in which communities are given a G (global) and S (State) rank based on their degree of imperilment (as measured by rarity, trends, and threats). Communities are assigned an overall rank of 1 through 5, with 1 being considered very rare and threatened and 5 being considered demonstrably secure. Communities with a Rarity Ranking of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable) are considered sensitive by CDFW. Riverside sage scrub on site is dominated by buckwheat and has a ranking of S5; it is therefore not considered sensitive. Disturbed habitat and developed land are not considered sensitive. As such, impacts to these vegetation communities from implementation of the proposed project would be less than significant.

- c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant with Mitigation Incorporated. A single, unnamed drainage feature occurs in the northern portion of the study area, north of Technology Drive and east of Winchester Road. The drainage qualifies as a non-wetland water of the U.S./water of the State subject to U.S. Army Corps of Engineers (USACE) and RWQCB jurisdiction and as streambed habitat subject to CDFW jurisdiction. The drainage lacks wetland-dependent vegetation. The project has been designed to avoid impacts to this feature through use of trenchless installation methods (jack and bore), to install the new pipeline under the existing drainage feature. The launching and receiving pits would be located within upland areas at least 5 feet on each side of the existing drainage. Jack-and-bore technologies are different from horizontal directional drilling in that they do not involve the use of a directional drill auger or fluid that could inadvertently release during operation and cause a potential frac-out event. The proposed jack-and-bore activities would have no potential to cause an inadvertent drill fluid release or frac-out and no associated impacts are anticipated. Therefore, no direct impacts on the avoided drainage feature would occur.

Potential indirect impacts to the drainage feature would be prevented during construction through implementation of standard Best Management Practices (BMPs) as part of the project's Storm Water Pollution Prevention Plan (SWPPP). Implementation of a SWPPP and associated BMPs are a regulatory requirement for the proposed project. Specific BMPs may include but would not necessarily be limited to: maintaining the project work areas free of trash and debris; employing appropriate standard spill prevention practices and clean-up materials; installing and maintaining sediment and erosion control

measures; maintaining effective control of fugitive dust; and properly storing, handling, and disposing of toxins and pollutants, including waste materials. If temporary construction fencing and other BMPs aren't properly implemented during construction, then equipment and personnel could inadvertently encroach into environmentally sensitive areas that are planned to be avoided, which could result in a significant impact. As such, mitigation measures BIO-3 and BIO-4 would be implemented to ensure impacts are less than significant.

BIO-3 Construction Fencing. Prior to construction, to help ensure inadvertent impacts to jurisdictional areas outside of the approved impact footprint are avoided during construction, temporary construction fencing, including silt fencing, as appropriate and where determined necessary by the SWPPP, shall be installed at the edges of the approved impact limits for the project. A qualified biologist shall be retained to monitor the installation of the temporary construction fencing wherever it would abut environmentally sensitive areas. Construction activities shall be restricted to areas within the approved impact limits at all times during construction.

BIO-4 Biological Construction Monitoring. A qualified biologist will conduct a pre-construction environmental training session for construction personnel to inform them of the sensitive biological resources on site and avoidance measures to remain in compliance with project approvals. The biologist will monitor initial vegetation clearing, grubbing, and grading activities to ensure that activities occur within the approved limits of work and avoid impacts to nesting birds. The biologist will periodically monitor the limits of construction where work activities occur outside public road rights-of-way to ensure that avoidance areas are delineated with temporary fencing and that fencing remains intact.

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

No Impact. The project is bound by residential and commercial development to the north, west, and south. Though undeveloped and conserved lands, mostly in association with Tualota Creek, occur to the east, they are generally bound by residential development. As such, the project site does not contribute to wildlife corridors or linkages, or native wildlife nursery sites. The project would not impede the movement of native, resident, or migratory fish or wildlife species; interfere with established native, resident, or migratory wildlife corridors, including regional corridors or linkages identified in the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP); or impede the use of native wildlife nursery sites. No impacts would occur.

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

No Impact. The proposed project is located within the Southwest Area Plan of the County's General Plan. Implementation of the project does not conflict with policies or conservation measures for biological resources. The proposed project site does not support sensitive natural communities, oak woodlands, or riparian habitat. Impacts to the disturbed drainage ditch that flows through the northern portion of the study area would be avoided. Riversidean sage scrub within the project footprint consists of small, scattered patches of habitat adjacent to roadways with heavy traffic, and was found to not support CAGN. Impacts to Riversidean sage scrub would be less than 1.1 acres and would not result in detrimental effects to CAGN or dispersal of the species within the area. CAGN adjacent to the project

were found to be utilizing habitat off site along Tualota Creek, which provides higher quality habitat for the species and serves as a dispersal corridor to Lake Skinner and larger blocks of habitat to the northeast. The project does not occur within a wildlife movement corridor and does not contain habitat or other resources to facilitate movement of wildlife within the region. The project would primarily occur within the existing disturbed areas and public road rights-of-way that would be returned to pre-project conditions. As such, no impacts would occur.

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

Less Than Significant Impact. The project is located within the boundaries of the adopted Western Riverside MSHCP; however, the District is not a signatory to the MSHCP, and as such is not subject to the requirements of the MSHCP. Nevertheless, the project would not conflict with the conservation goals and objectives of the MSHCP for the local area. The site occurs within portions of Criteria Cell 6071, but is situated primarily within disturbed habitat and existing developed lands, with limited portions intersecting smaller remnant stands of Riversidean sage scrub. Conservation is generally targeted further to the northwest, northeast, and east amongst the more-rugged terrain and expansive hills connecting the Lake Mathews and Estelle Mountain areas to the southeast via Sedco Hills, Wildomar and into the Antelope Valley/French Valley area. As stated above, however, the project could result in potential significant impacts to special status species and nesting birds, including species covered under the MSHCP. Additionally, protocol-level surveys for burrowing owl were completed in accordance with Section 6.3.2 of the MSHCP. The species was confirmed to be absent from the study area, although suitable burrowing owl habitat remains present. Compliance with existing regulations, including the MBTA and CFG Code, and implementation of measures BIO-1 and BIO-2 would ensure avoidance of burrowing owl impacts and project consistency with the MSHCP. Furthermore, avoidance of the existing drainage feature with the implementation of required BMPs and mitigation measure BIO-3 would ensure that unauthorized impacts to riverine resources do not occur and the project would be consistent with Section 6.1.2 of the MSHCP.

The project is also located within the Stephens' kangaroo rat Habitat Conservation Plan (HCP), but not within any of the core reserves. Stephens' kangaroo rat biological surveys are not required under the HCP for activities occurring on lands outside of core reserves. The study area is disturbed and lacks sufficient shrub and herbaceous cover to support the species. Reported occurrences of the species within the project vicinity are from the 1980s and the species is believed extirpated from the area due to previous disturbances and development activities. More recent observations of the species occur 4 miles east of the project near Lake Skinner.

The project is exempt from the Stephen's kangaroo rat Mitigation Fee in accordance with Section 10(f) of County Ordinance No. 663. The proposed project would involve the construction of a public sewer main where ground disturbance is minimal, and the majority of the area would be restored to its original condition, excluding the proposed sewer manhole locations.

No other adopted HCP, Resource Management Plan, Special Area Management Plan, Watershed Plan, or other regional planning efforts are applicable to the project.

V. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The following discussion is based on the Cultural Survey Report prepared by HELIX (HELIX 2019b), attached to this Initial Study as Appendix C. The results and conclusions of the cultural resources assessment are summarized herein.

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

No Impact. The cultural resources study conducted for the project’s Area of Potential Effect (APE) included a records search at the Eastern Information Center (EIC), a Sacred Lands File search, Native American outreach, a review of historic aerial photographs and maps, and a pedestrian survey. The records search indicated that 54 previous cultural resources studies have been conducted within one mile of the project APE, 10 of which were adjacent to or included portions of the project APE. The records search results also indicated that a total of 36 cultural resources have been previously recorded within one mile of the project, of which two sites are recorded partially within the project APE. Both of the previously recorded resources are historic roads; neither retains the integrity to qualify as a historic property under the National Historic Preservation Act (NHPA) or historical resources under CEQA. The field investigations included intensive pedestrian survey of the APE by HELIX. The survey did not result in the identification of cultural material within the project APE. As such, no impacts to historical resources are anticipated.

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

Less Than Significant with Mitigation Incorporated. The cultural resources study assessed the potential for the presence of archaeological resources in and around the project site as described in the preceding discussion. Despite the lack of recorded cultural resources within and immediately adjacent to the project site, the area is sensitive for cultural resources. The Pechanga, Soboba, and Rincon Bands of Luiseño Indians indicated that there is a potential for subsurface cultural resources to be encountered during trenching, excavation, and other ground-disturbing activities. Therefore, impacts are considered potentially significant. Based on this, the report concluded that an archaeological and Native American monitoring program must be implemented. The monitoring program is detailed below. With the inclusion of mitigation measures CR-1 through CR-5, impacts would be less than significant.

- CR-1 Cultural Resources Treatment and Monitoring Agreement.** At least 30 days prior to the start of any ground-disturbing activities, the District shall contact a traditionally culturally affiliated (TCA) tribe to develop a Cultural Resources Treatment and Monitoring Agreement (“Agreement”). The Agreement shall address the treatment and final disposition of any tribal cultural resources, sacred sites, human remains or archaeological 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 reimbursements.
- CR-2 Develop a Cultural Resources Monitoring Plan.** A qualified archaeologist and TCA tribal monitor shall attend a pre-grade meeting with 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.
- CR-3 Tribal Monitoring Agreements.** A qualified archaeological monitor and a TCA tribal monitor shall be present for ground-disturbing activities in areas with a potential for encountering cultural material; monitoring will not be required in areas that have been previously graded/cut to below cultural levels (e.g., formational material). At least seven business days prior to project grading, the District shall contact the tribal monitors to notify the Tribe of grading/excavation and the monitoring program/schedule, and to coordinate with the Tribe on the monitoring work schedule. Both the archaeologist and the 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 APE. Such evaluation shall include culturally appropriate temporary and permanent treatment pursuant to the Cultural Resources Treatment and Monitoring Agreement, which may include avoidance of 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 predetermined between the District and the TCA tribe, details of which shall be addressed in the Cultural Resources Treatment and Monitoring Agreement in MM CR-1. Treatment may also include curation of the cultural resources at a tribal curation facility, as determined in discussion among the District, the project archaeologist, and the tribal representatives and addressed in the Cultural Resources Treatment and Monitoring Agreement referenced in MM CR-1.
- CR-4 Evaluation of Discovered Artifacts.** All 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 any cultural material encountered. If no cultural material is encountered, a brief letter report will be sufficient to document monitoring activities.
- CR-5 Cultural Resources Ownership.** The District shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts that are found within the project area for proper treatment and disposition pursuant to the Agreement required in MM CR-1.

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

Less Than Significant with Mitigated Incorporated. No cultural resources (including human remains) were observed within or immediately adjacent to the project site during the pedestrian survey. Although not anticipated, the potential exists to encounter human remains during project implementation. If human remains are discovered, impacts would be potentially significant. As such, mitigation measure CR-6 below is required, and would reduce impacts related to disturbance of human remains to a less than significant level.

CR-6 Human Remains. If human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), 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 may then make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

VI. ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact. Energy used for construction would primarily consist of fuels in the form of diesel and gasoline. Heavy-duty construction equipment associated with construction activities, haul trucks involved in the delivery and removal of construction materials, and smaller support equipment (such as lighting, air compressors, and pumps) would consume petroleum-based fuel. Construction workers would travel to and from the project site throughout the duration of construction, presumably in gasoline-powered vehicles. While construction activities would consume petroleum-based fuels, project-related consumption of such resources would be temporary and would cease upon the completion of construction. In addition, mobile equipment energy usage during construction would be minimized as the project would comply with the California Air Resources Board’s (CARB’s) idling regulations, which restrict idling diesel vehicles and equipment to five minutes. The petroleum

consumed during project construction would also be typical of similar construction projects and would not require the use of new petroleum resources beyond what are typically consumed in California. Based on these considerations, construction of the project would not result in wasteful, inefficient, or unnecessary consumption of energy resources.

Operational energy usage would be minimal and would consist of occasional maintenance worker vehicle trips. The proposed pipeline would be gravity fed and would not require the use of energy for its operation. The project would therefore not use energy in a wasteful, inefficient, or unnecessary manner. Implementation of the project would not result in a substantial increase in demand of local or regional energy supplies compared to existing conditions, and impacts would be less than significant.

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

No Impact. The project would be built and operated in accordance with existing, applicable regulations, which include, but are not limited to, the California Green Building Standards Code and CARB regulations (as mentioned in Item VI.a). Construction equipment would be maintained to allow for continuous energy-efficient operations. The gravity-fed sewer would not require the on-going or regular use of energy and the project would therefore not conflict with the goals of the County’s Climate Action Plan (County 2018a). Accordingly, no impacts would occur.

VII. 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?

Less Than Significant Impact. The project site is located in the highly seismic southern California region within the influence of several fault systems that are considered to be active or potentially active. According to the California Geological Survey (CGS), the site is not located within a State-designated Alquist-Priolo Earthquake Fault Zone (Kleinfelder, Inc. [Kleinfelder] 2018). However, the site is in close proximity to several active faults which could generate earthquakes. The active Elsinore fault zone is located approximately 3.5 miles southwest of the site and San Jacinto fault is located approximately 16.5 miles northeast of the site (Kleinfelder 2018). In addition, the Murrieta Hot Springs fault crosses the southern portion of the alignment on Sky Canyon Drive. The Murrieta Hot Springs fault is not included within a State-designated Alquist-Priolo Earthquake Fault Zone and is not listed within the Southern California Earthquake Data Center database. Although not listed as active by the State of California, the Murrieta Hot Springs fault is classified by Riverside County as active (Kleinfelder 2018). A large magnitude earthquake along local segments of these faults could potentially result in local ground rupture effects which could damage the proposed sewer main. While the probability of such an occurrence is considered low, the associated potential effects could be substantial due to the location of the proposed facilities and the active nature and seismicity potential of the Elsinore fault zone. The potential impacts related to the proximity of the proposed project to local and regional fault zones would be addressed through conformance with associated regulatory and industry standards, including applicable elements of the California Building Code (CBC), as indicated within the seismic design parameter recommendations of the Geotechnical Report prepared for the project (Kleinfelder 2018). Furthermore, installation of a pipeline in this location would not increase the likelihood or severity of fault rupture. Therefore, impacts would be less than significant.

ii. Strong seismic ground shaking?

Less Than Significant Impact. As noted above, the proposed project is located near the Elsinore fault zone, which is a seismically active region subject to ground shaking effects from earthquake events along associated faults. While the project site and proposed facilities could potentially be subject to moderate or severe ground shaking effects from earthquakes, they would be designed and constructed in conformance with applicable elements of the CBC, as indicated within the seismic design parameter recommendations of the Geotechnical Report prepared for the project (Kleinfelder 2018). Specifically, these standards typically involve incorporating seismic factors into facility design, through efforts such as remedial grading (e.g., removal and/or reconditioning unsuitable soils), appropriate slope design and drainage, and use of properly engineered fill. Compliance with the CBC would reduce the potential effects of seismic ground shaking on the proposed facilities to less than significant.

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction and related effects such as dynamic settlement can be caused by seismic ground shaking. Loose (cohesionless), saturated, and granular (low clay/silt content) soils with relative densities of less than approximately 70 percent are the most susceptible to these effects. Liquefaction results in a rapid pore-water pressure increase and a corresponding loss of shear strength, with affected soils behaving as a viscous liquid. Surface and subsurface manifestations from these events can include loss of support for structures, excessive (dynamic) settlement, the occurrence of sand boils (i.e., sand and water ejected at the surface), and other effects such as lateral spreading (horizontal displacement on sloped surfaces as a result of underlying liquefaction).

Liquefaction potential along the proposed alignments is considered low (Kleinfelder 2018). Furthermore, the effects of liquefaction would be reduced through standard design and construction techniques similar to those described above under the discussion of seismic ground shaking. As previously noted, the proposed project would be designed and constructed in conformance with associated regulatory and industry standards, including applicable elements of the CBC, as indicated within the seismic design parameter recommendations of the Geotechnical Report prepared for the project (Kleinfelder 2018). Based on these considerations, potential impacts associated with liquefaction and related hazards from implementation of the proposed project would be less than significant.

iv. Landslides?

Less Than Significant Impact. The occurrence of landslides and other types of slope failures (e.g., rock falls and mudflows) is influenced by a number of factors, including slope grade, geologic and soil characteristics, moisture levels, and vegetation cover. Landslides can be triggered by a variety of potentially destabilizing conditions or events, such as gravity, fires, precipitation, grading, and seismic activity. The project site and surrounding areas are relatively flat; therefore, the occurrence of landslides is not likely. The proposed project would be designed and constructed in conformance with associated regulatory and industry standards as previously described, including applicable elements of the CBC, as indicated within the seismic design parameter recommendations of the Geotechnical Report prepared for the project (Kleinfelder 2018). Based on these considerations and general site conditions, potential impacts related to landslide hazards from implementation of the proposed project would be less than significant.

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

Less Than Significant Impact. Potential construction-related erosion/topsoil impacts would be avoided or reduced below a level of significance through conformance with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit and related requirements. Specifically, this would entail implementing a SWPPP and related BMPs in conformance with applicable regulatory requirements. Stormwater BMPs would limit erosion and control stormwater runoff during construction activities. The project site would be returned to existing conditions upon completion of the project. During operation, the sewer main would not result in substantial soil erosion or the loss of topsoil as it would be located below ground. Therefore, impacts would be less than significant.

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

Less Than Significant Impact. Refer to Item VII.a.iii-iv for discussion of impacts related to liquefaction and landslides. The potential for subsidence and collapse are related to groundwater withdrawal and the presence of less stable materials, such as alluvium and topsoil. Although shallow groundwater and potentially unstable materials may be encountered during project construction activities, conformance with applicable regulatory standards would result in less than significant impacts related to subsidence and collapse.

Geologic stability and the safety of construction workers during rock breaking and trenching activities is an area of potential concern. If the contractor determines that rock breaking activities are required during construction, the project would either use a hoe ram to mechanically fracture the bedrock or use Soundless Chemical Demolition Agents (SCDAs) to chemically fracture the bedrock. A hoe ram is generally mounted on an excavator and is used for precise rock breaking operations. SCDAs consist of powdery substances, generally quicklime, which create a cementitious slurry when mixed with water. This mixture is then poured into pre-drilled holes where the hydration reaction creates sufficient heat and expansive pressure to swell and fracture the surrounding rock mass. This method of rock demolition can easily split and fracture rock without producing noise, vibration, toxic gases, or flying debris. Whether by mechanical means or chemical means, rock breaking would be done in a controlled and relatively unimpactful manner, when compared to other potential rock breaking methods (e.g., drilling and blasting), and would not result in geologic instability.

Trench excavations typically involve vertical or near-vertical walls, and can exhibit instability and the potential for collapse as a result of loose or unstable soil and geologic materials. The project's trenches in paved areas, however, would have low potential for instability because of the securing pavement that would be located on either side of the trench. In unpaved areas, the upper portion of the trench would be sloped back at a 1:1 ratio to reduce verticality (see Figure 5). Potential trench instability hazards would further be addressed through required conformance with applicable U.S. Occupational Safety and Health Administration (OSHA) and California Occupational Safety and Health Administration (Cal-OSHA) requirements. These standards include criteria related to factors such as trench slope limitations and dimensions; use of appropriate shoring, shielding, and benching to provide trench stability; and restrictions on adjacent uses (e.g., heavy equipment use). Conformance with these regulatory standards, as well as the project's proposed construction methods, would avoid or reduce potential impacts related to trench stability below a level of significance.

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

Less Than Significant Impact. Expansive soils are attributable to the water holding capacity of clay materials. Such behavior can adversely affect structural integrity (including underground facilities) through shifting of support materials during the shrink-swell process. If expansive soils are present/encountered during project implementation, associated potential impacts would be addressed through conformance with regulatory/industry standards, including applicable elements of the CBC. Specifically, this may include efforts such as removal of expansive soils and replacement with engineered fill. Conformance with the described regulatory standards would reduce potential impacts related to expansive soils from project implementation to less than significant levels.

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

No Impact. The proposed project does not include the implementation of septic tanks or alternative wastewater disposal systems, and no associated impacts would occur.

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

Less Than Significant with Mitigation Incorporated. According to the Riverside County GIS website, the majority of the project site is within an area of high paleontological sensitivity (County 2018b). The project’s ground disturbing construction activities could affect a paleontological resource or geologic feature, in which case impacts would be potentially significant. As such, mitigation measure GEO-1 is required, and would reduce impacts to a less than significant level.

GEO-1 Paleontological Discovery. In the event that potentially significant paleontological materials (e.g., fossils) are encountered during construction of the project, work shall be halted in the vicinity of the paleontological discovery until a qualified paleontologist can visit the site of discovery, assess the significance of the paleontological resource, and provide proper management recommendations. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted. The treatment and disposition of paleontological materials that might be discovered during excavation shall be in accordance with applicable laws and regulations.

VIII. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

Less Than Significant Impact. Global climate change refers to changes in average climatic conditions, including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by naturally occurring atmospheric gases, including water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), ozone, and certain hydro-fluorocarbons. These gases, known as greenhouse gases (GHGs), allow solar radiation (sunlight) into the Earth’s atmosphere, but prevent radiative heat from escaping, thus warming the Earth’s atmosphere. GHGs are emitted by both natural processes and human activities. The accumulation of GHGs in the atmosphere regulates the Earth’s temperature. Emissions of GHGs in excess of natural ambient concentrations are thought to be responsible for the enhancement of the greenhouse effect and contributing to what is termed “global warming,” the trend of warming of the Earth’s climate from anthropogenic activities. Global climate change impacts are by nature cumulative, as direct impacts cannot be evaluated due to the fact that the impacts themselves are global rather than localized impacts.

California Health and Safety Code Section 38505(g) defines GHGs to include the following compounds: CO₂, CH₄, N₂O, ozone, chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). As individual GHGs have varying heat-trapping properties and atmospheric lifetimes, GHG emissions are converted to carbon dioxide equivalent (CO₂e) units for comparison. The CO₂e is a consistent methodology for comparing GHG emissions because it normalizes various GHG emissions to a consistent measure.² The most common GHGs related to the project are those primarily related to energy usage: CO₂, CH₄, and N₂O.

There are no established federal, state, or local quantitative thresholds applicable to the project to determine the quantity of GHG emissions that may have a significant effect on the environment. The CARB, SCAQMD, and various cities and agencies have proposed, or adopted on an interim basis, thresholds of significance that require the implementation of GHG emission reduction measures. For the proposed project, the most appropriate screening threshold for determining GHG emissions is the SCAQMD proposed Tier 3 screening threshold (SCAQMD 2010); therefore, a significant impact would occur if the proposed project would exceed the SCAQMD proposed Tier 3 screening threshold of 3,000 metric tons (MT) CO₂e per year.

² The effect each GHG has on climate change is measured as a combination of the volume of its emissions, and its global warming potential. The global warming potential is the potential of a gas or aerosol to trap heat in the atmosphere, and is expressed as a function of how much warming would be caused by the same mass of CO₂. For instance, CH₄ has a global warming potential of 21, meaning that 1 gram of CH₄ traps the same amount of heat as 21 grams of CO₂. N₂O has a global warming potential of 310.

GHG emissions associated with the project would result primarily from construction activities, and would involve emissions from construction equipment and vehicle trips associated with construction workers. Total GHG emissions from the project's 17-month construction period are presented in Table 4, *Total Estimated Construction GHG Emissions*. As shown in Table 4, the proposed construction activities would contribute a total of 1,528 MT of CO₂e. Construction-related GHG emissions, however, are amortized over the life of the project (defined as 30 years by the SCAQMD), which would result in approximately 51 MT CO₂e per year. This would be well below the 3,000 MT CO₂e per year screening threshold.

Phase	Emissions (MT CO ₂ e)
Grubbing/Land Clearing	29
Trenching	246
Pipe Installation and Backfill	1,154
Repaving	99
Total Construction Emissions	1,528
<i>Amortized Construction Emissions</i>	51

RCEM outputs provided in Appendix A.

MT = metric tons; CO₂e = carbon dioxide equivalent

Operation of the project would result in emissions related to minor vehicle/equipment use associated with routine inspection and maintenance; however, these operational emissions would be negligible. Therefore, impacts from construction and operation of the project would be less than significant.

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

No Impact. As discussed in Item VIII.a, the proposed project would result in construction GHG emissions below the SCAQMD proposed Tier 3 screening threshold of 3,000 MT CO₂e per year and negligible operational GHG emissions. The proposed project would not result in emissions that would adversely affect state-wide attainment of GHG emission reduction goals as described in Assembly Bill (AB) 32, Executive Order S-21-09, and Senate Bill 32. Project emissions would therefore have a less than cumulatively considerable contribution to global climate change impacts, and the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. No impact would occur.

IX. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

Less Than Significant Impact. During the project construction period, hazardous substances used to maintain and operate construction equipment (such as fuel, lubricants, adhesives, solvents, etc.), as well as potential chemicals needed to break rock, would be present. The use or generation of such construction-related hazardous materials could potentially result in significant impacts through accidental discharge associated with use, storage, operation, and maintenance activities. The transport, use, and disposal of hazardous materials would be temporary and would be conducted in accordance with applicable federal and state laws. In addition, implementation of the proposed project would require conformance with the NPDES Construction General Permit. Such conformance would entail implementation of a SWPPP to address the discharge of contaminants (including construction-related

hazardous materials) through appropriate BMPs. While specific BMPs would be determined during the SWPPP process based on site-specific characteristics (equipment types, etc.), they would include standard industry measures and guidelines contained in the NPDES Construction General Permit text. Based on implementation of appropriate BMPs to provide conformance with the NPDES Construction General Permit, potential impacts associated with construction-related hazardous materials would be less than significant.

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

Less Than Significant Impact. As discussed above in Item IX.a, project construction would require the use of hazardous materials, which could be at risk of release through upset and/or accident conditions. The potential for release would be minimized through implementation of a Cal-OSHA Construction Safety Plan and a hazard communication program during construction, as required under Section 5194 of the California Code of Regulations. The hazard communication program would include disclosure of the hazardous materials present on site, labels for hazardous materials containers, safety data sheets (with information on the health effects of hazardous materials), and employee training on hazardous materials handling. In the event of an accidental release of hazardous substances, the project would comply with Code of Federal Regulations Section 1910.120, which outlines protocol for hazardous waste clean-up operations and emergency response. Through compliance with these regulations and procedures, the project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials, and impacts would be less than significant.

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

Less Than Significant Impact. The Heritage Classical Charter School is located within one-quarter mile of the project alignment. As discussed in Items IX.a, hazardous materials would be present during project construction. However, hazardous materials would be transported, used, stored, and disposed of in accordance with applicable federal and state laws. Additionally, the risk of exposure to potentially present hazardous materials in exposed soil would be minimized through the implementation of project design features. As a below-ground sewer main, the project would not present operational risks associated with hazardous materials. Therefore, impacts related to the handling of hazardous materials within one-quarter mile of a school would be less than significant.

- 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?

Less Than Significant Impact. Pursuant to Government Code Section 65962.5 (Cortese List) requirements, the State Water Resources Control Board (SWRCB) GeoTracker database (2019) and the California Department of Toxic Substances Control (DTSC) EnviroStor database (2019) were searched for hazardous materials sites in the project alignment and vicinity. The results of these searches indicated that there is one listed hazardous material site approximately 0.25 mile southwest of the pipeline alignment. The site was a minor diesel spill at a local agency warehouse; it is a closed case, as cleanup activities have been completed. Therefore, impacts would be less than significant.

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

Less Than Significant Impact. The project is located directly southwest of the French Valley Airport, which is a public-use airport owned by the County of Riverside. The French Valley Airport Land Use Compatibility Plan (ALUCP) includes restrictions on the uses, concentrations of population, and height of proposed development in within the Airport Influence Area (AIA), in order to protect the airport and maintain public safety the airport's vicinity. The proposed project is located within the Approach/Departure Zone (Zone B1) of the ALUCP (see Map FV-1 of Riverside County Airport Land Use Commission [RCALUC] 2010). To ensure compliance with the ALUCP, temporary construction equipment would not exceed 35 feet in height. Operation of the sewer main would not conflict with the ALUCP because it would be located underground. According to ALUCP, there would be minimal risk to the temporary construction and maintenance workers present at the project alignment because noise levels within Zone B1 are not to exceed a 60-decibel (dB) Community Noise Equivalent Level (CNEL). Therefore, impacts would be less than significant.

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

Less Than Significant Impact. Construction and installation of the proposed project would occur within various rights-of-way and would result in lane closures. Full road closures are not anticipated, and the rights-of-way would remain open to traffic in both directions during construction. However, traffic diversions and detours may result from temporary lane closures. Therefore, implementation of a TCP for the project would allow for maintained access to hospitals, emergency response centers, school locations, communication facilities, highways and bridges, or airports. As such, the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.

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

No Impact. The proposed project is not located in a "Very High Fire Hazard Severity Zone" (VHFHSZ; see Figure 11 of the Southwest Area Plan of the County of Riverside General Plan; County 2019). In addition, as a below-ground pipeline, the project does not include habitable structures that could expose people to a significant risk of loss, injury, or death involving wildland fires. The presence of employees at the project alignment would be limited to temporary construction and periodic maintenance. Therefore, no impacts associated with the exposure of people or structures to significant risk of loss, injury, or death would occur.

X. HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off- site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional resources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Less Than Significant Impact. Potential water quality impacts from the proposed project would be limited primarily to construction-related concerns, including erosion/sedimentation and the use and storage of hazardous substances such as construction vehicle fuels and lubricants. Long-term project operations would generally be limited to routine inspection and maintenance, and would not involve activities or materials that could result in significant water quality impacts. Potential construction-related erosion/sedimentation impacts would be avoided or reduced below a level of significance through conformance with the NPDES Construction General Permit and related requirements. Specifically, this would entail implementing a SWPPP and related BMPs in conformance with applicable regulatory requirements. Stormwater BMPs would limit erosion, minimize sedimentation, and control

stormwater runoff water quality during construction activities. The SWPPP would also address project-related use and storage of construction-related hazardous materials, through the use of appropriate BMPs in accordance with applicable regulatory standards. During project operations, stormwater runoff would not change substantially from the existing condition as there would be negligible change to impervious surfaces. Therefore, potential impacts related to water quality from proposed project construction would be less than significant.

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

Less Than Significant Impact. The proposed project would not require the use of, or otherwise substantially interfere with, groundwater supplies. While dewatering would be required if groundwater is encountered during construction of the proposed project, the volume of extracted groundwater would be negligible. For construction-related dewatering, the project would be required to obtain a NPDES groundwater extraction and waste discharge permit and conform to requirements therein. Conformance with applicable requirements under the NPDES groundwater permit would ensure that associated regulatory standards are met.

As described in Item VII.d, if the contractor determines that bedrock breaking activities are required during construction, and mechanical means (i.e., use of a hoe ram) are not a viable option, the project would use SCDA's to fracture the bedrock. Standard excavation-related construction BMPs would be implemented during rock breaking activities to ensure groundwater supplies would not be impacted by the use of rock breaking chemicals. Therefore, the project would not substantially decrease groundwater supplies or interfere with groundwater recharge such that the project would impede sustainable groundwater management. Impacts would be less than significant.

- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river 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. Potential construction-related erosion/siltation impacts would be avoided or reduced below a level of significance through conformance with the NPDES Construction General Permit and related requirements. Specifically, this would entail implementing a SWPPP and stormwater BMPs to limit erosion, minimize sedimentation, and control stormwater runoff water quality during construction activities. During project operations, stormwater runoff would not change substantially as there would be negligible change to impervious surfaces. Therefore, the project would not result in substantial erosion or siltation 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 off- site?

Less Than Significant Impact. As previously discussed in Item X.a, the project must implement a SWPPP and stormwater BMPs to control stormwater runoff during construction activities. During project operations, surface runoff would not change substantially as there would be negligible change to impervious surfaces. Therefore, impacts would be less than significant.

- iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional resources of polluted runoff?

Less Than Significant Impact. Based on the discussions provided above in Items X.a, X.ci, and X.cii, the proposed project would not increase the rate or amount of surface runoff, with no associated effects to the capacity of existing or planned storm water drainage systems. Additionally, potential project-related water quality impacts would be avoided or reduced below a level of significance through required conformance with applicable NPDES and associated regulatory standards. As a result, potential impacts related to drainage system capacity and the generation of polluted runoff from project implementation would be less than significant.

- iv. Impede or redirect flood flows?

Less Than Significant Impact. The proposed pipeline would be located below ground and would not impede or redirect flood flows. During construction, compliance with the applicable NPDES and associated regulatory standards would reduce impacts associated with flood flows to less than significant.

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

No Impact. The project site is not located within a special flood hazard area (see Figure 10 of the Southwest Area Plan of the County of Riverside General Plan; County 2019). Based on the distance from Skinner Reservoir (approximately 4 miles) and the Pacific Ocean (approximately 27 miles), risk of inundation by seiche or tsunami is minimal. In addition, upon completion of construction, the proposed pipeline would be located below ground and would not release pollutants in the instance of a flood. Therefore, no impacts would occur.

- e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. Refer to Items X.a through X.d. The project would comply with applicable storm water quality standards during construction and operation, and appropriate BMPs would be implemented to address potential water quality impacts. Impacts would be less than significant.

XI. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Physically divide an established community?

Less Than Significant Impact. Construction of the pipeline within the existing right-of-way would involve temporary lane closures. Implementation of a Traffic Control Plan, however, which would require three lanes to stay open (one in each direction and one two-way left turn lane) would maintain access to the community. Operationally, the proposed pipeline would be located below ground and would not limit access. Therefore, the proposed project would not physically divide an established community, and impacts would be less than significant.

b) Cause significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. Based on the nature and location of the proposed project and on-site land use/zoning designations (refer to the Project Description), project implementation would not conflict with applicable land use plans, policies, or land use/zoning designation standards. As discussed in Item IV.f, the project would not conflict with the Western Riverside MSHCP. Therefore, no impact would occur.

XII. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

No Impact. No areas within or in the vicinity of the project area are designated for mineral resource extraction (see Figure 3 of the Southwest Area Plan of the County of Riverside General Plan; County 2019). The project site is not currently used for mineral extraction and is not planned to be used for mineral extraction in the future. As such, the proposed project would not result in the loss of availability of mineral resources, and no impact would occur.

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

No Impact. Refer to item XII.a above.

XIII. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact. Noise can be defined as unwanted sound. Sound (and therefore noise) consists of energy waves that people receive and interpret, while noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Sound intensity or acoustic energy is measured in dB that are A-weighted to correct for the relative frequency response of the human ear (dBA). Decibels are measured on a logarithmic scale, with a 3-dBA change in sound generally considered the minimum level that is “barely perceptible” to humans, and a 5-dBA change generally considered “readily perceptible.”

The predominant rating scales for human communities are the Noise Equivalent (L_{EQ}), and the CNEL, both of which are based on dBA. The L_{EQ} is the total sound energy of time-varying noise over a sample period. The CNEL is the average equivalent A-weighted sound level during a 24-hour day, obtained after addition of 5 decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and after addition of 10 dBA to sound levels in the night from 10:00 p.m. to 7:00 a.m. CNEL is utilized for describing ambient noise levels because they account for all noise sources over an extended period of time and account for the heightened sensitivity of people to noise during the night.

The entirety of the project alignment is within the unincorporated County. The northern portion of the alignment along Winchester Road is also adjacent to the City of Murrieta. The project would result in elevated noise levels in both the County and City of Murrieta; therefore, the project is subject to the noise regulations of both jurisdictions.

County of Riverside Ordinance No. 847 establishes countywide standards for regulating noise, including general standards for exterior noise levels based on land use type. Section 2 of Ordinance No. 847 provides exemptions from the established exterior noise level standards. For projects located within one-quarter of a mile from an inhabited dwelling, construction noise is exempt as long as construction occurs outside the hours of 6:00 p.m. and 6:00 a.m. from June to September and 6:00 p.m. and 7:00 a.m. from October to May. Projects located one-quarter of a mile or more from an inhabited dwelling are exempt with no hour restrictions. In addition, capital improvement projects undertaken by a governmental agency³ are exempt from the exterior noise level standards.

Chapter 16.30.130 of the City of Murrieta Municipal Code sets limits for construction noise generation. The operation of construction tools and equipment is not allowed between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, or at any time on Sunday or holidays. In addition, construction noise levels are not allowed to exceed the limits shown in Table 5, *City of Murrieta Construction Noise Limits*.

Table 5 CITY OF MURRIETA CONSTRUCTION NOISE LIMITS			
	Single-Family Residential	Multi-Family Residential	Commercial
Maximum noise levels for nonscheduled, intermittent, short-term operation (less than 10 days) of mobile equipment:			
Daily, except Sundays and Legal Holidays, 7:00 a.m. to 8:00 p.m.	75 dBA	80 dBA	85 dBA
Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and Legal Holidays	60 dBA	64 dBA	70 dBA
Maximum noise levels for repetitively scheduled and relatively long-term operation (period of three days or more) of stationary equipment:			
Daily, except Sundays and Legal Holidays, 7:00 a.m. to 8:00 p.m.	60 dBA	65 dBA	70 dBA
Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and Legal Holidays	50 dBA	55 dBA	60 dBA

Operational Noise

The proposed below ground gravity-fed sewer extension would not include operational components that would generate noise. Therefore, the project would not result in a permanent increase in ambient noise levels.

Construction Noise

Construction of the pipeline would require the use of mobile equipment, the operation of which would generate noise. The type of equipment would vary based on location and construction method (trenching vs. jack-and-bore). Most portions of the pipeline construction would be considered short-term construction and would not occur at any one location for a period lasting 10 or more days.

³ Per County of Riverside Ordinance No. 847, a governmental agency is defined as the United States, the State of California, Riverside County, any city within Riverside County, any special district within Riverside County or any combination of these agencies. The District is a special district within Riverside County.

Although the trench would be open along the alignment longer than 10 days, the actual work adjacent to an individual receptor would not exceed a consecutive 10-day period.

Trenching activities would involve the simultaneous use of an excavator, loader, and dump truck. In the northern portion of the project alignment, trenching would occur approximately 150 feet from the single-family residences located west of Winchester Road in the City of Murrieta. At 150 feet, an excavator, loader, and dump truck operating simultaneously for 40 percent of a given construction hour would generate a noise level of 72.9 dBA L_{EQ} (1-hour). This would be below the 75-dBA construction noise limit for single-family residences within the City of Murrieta.

Due to the presence of granite bedrock underlying the majority of the project site (Kleinfelder 2018), construction of the project may require the use of a hoe ram to break up the rock. The hoe ram may be used as close as 150 feet from the single-family residences located west of Winchester Road in the City of Murrieta. At 150 feet, a hoe ram operating for 10 percent of a given construction hour would generate a noise level of 70.5 dBA L_{EQ} (1-hour). This would be below the 75-dBA construction noise limit for single-family residences within the City of Murrieta.

Trenching along the southern portion of the alignment would also involve the simultaneous use of an excavator, loader, and dump truck and would occur within Sky Canyon Drive, adjacent to commercial land uses. At 50 feet, an excavator, loader, and dump truck operating simultaneously for 40 percent of a given construction hour would generate a noise level of 82.5 dBA L_{EQ} (1-hour). The majority of construction along this portion of the alignment would occur within one-quarter of a mile of an inhabited dwelling, and would occur between the hours of 6:00 a.m. to 6:00 p.m. from June to September and 7:00 a.m. to 6:00 p.m. from October to May, which would allow construction to be exempt from the County's exterior noise level standards.

Construction associated with tie-in of the proposed pipeline to the existing sewer located in the intersection of Murrieta Hot Springs Road and Sky Canyon Drive would also involve trenching activities and the use of an excavator, loader, and dump truck. This may occur during nighttime hours and thus outside of the exempt hours mentioned above; however, these activities would still be exempt from the County's exterior noise standards as the District is a governmental agency and is constructing a capital improvements project.

Jack-and-bore methods would be used to install the pipeline where the alignment crosses a jurisdictional drainage in the northern portion of the project alignment. The typical noise level of an engine used for the jack-and-bore power head is between 75 and 80 dBA at a distance of 50 feet. This unit would operate in a pit, which would attenuate noise by at least 5 dBA. Because the nearest residences (located across Winchester Road in the City of Murrieta) would be 500 feet from the jack-and-bore activities, noise levels at the residences would be below the applicable 75-dBA limit. Therefore, construction of the proposed project would not generate noise levels in excess of applicable standards, and impacts would be less than significant.

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

Less Than Significant Impact. The project would not include operational components that would generate vibration. An on-site source of vibration during project construction would be a vibratory roller, which would be used for soil compaction following backfill activities where trenching is to occur. A vibratory roller creates approximately 0.210 inch per second peak particle velocity (PPV) at a distance of 25 feet. At a distance of 150 feet (the distance to the nearest off-site residences), a vibratory roller

would create a PPV of 0.03 inch per second. This would be below the “strongly perceptible” vibration annoyance potential criteria for human receptors of 0.1 inch per second PPV, as specified by Caltrans (2013). Therefore, impacts associated with vibration would be less than significant.

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

Less Than Significant Impact. The northern portion of the project alignment is adjacent to French Valley Airport. The project proposes the installation of an underground pipeline, and no housing or permanent workers would result from the project. Temporary construction workers would not be exposed to substantial noise levels as the entire project alignment is outside of the airport’s 60 CNEL contour (Coffman Associates, Inc. 2010). Therefore, impacts associated with airport noise would be less than significant.

XIV. 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- 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)?

Less Than Significant Impact. The proposed project involves the expansion of the existing sewer system to maintain local wastewater service. The project is designed to meet the local service needs of existing and planned residential developments in the County. Because the project would help accommodate existing and planned growth, it would not induce growth, and impacts would be less than significant.

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

No Impact. Implementation of the proposed project would not require the removal of existing people or housing or the associated construction of replacement housing, and no associated impacts would result.

XV. PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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:				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Fire protection?

No Impact. The construction and operation of the proposed project would not result in increases in the need for fire protection services. During construction, fire protection may be required, but these would be short-term demands and would not require permanent increases in the level of public service offered or affect response times associated with fire protection services. Because of the low probability and short-term nature of potential fire protection needs during construction, the proposed project would not impact fire protection services.

b) Police protection?

No Impact. Similar to the low probability and short-term nature of police protection needs described above, there are no significant impacts related to police protection or service anticipated with implementation of the proposed project.

c) Schools?

No Impact. The proposed project would not result in new housing or population growth that would generate increased demand for school services. Accordingly, project implementation would not result in the need for construction of additional school facilities and no associated impacts would occur.

d) Parks?

No Impact. Implementation of the proposed project would not affect existing park facilities or increase the demand for additional recreational facilities. As a result, no impacts related to parks would result from the proposed project.

e) Other public facilities?

No Impact. No impacts to other public facilities are anticipated to occur with project implementation, for similar reasons as noted in the above public services responses.

XVI. RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

No Impact. The proposed project involves construction of a subsurface sewer main. Implementation of the proposed project would not generate an increase in demand for existing parks or other recreational facilities that would result in or increase physical deterioration of these facilities. As a result, no associated impacts would result from project implementation.

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. Implementation of the proposed project would not include recreational facilities or require the construction or expansion of recreational facilities. No associated impacts would result.

XVII. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Less Than Significant Impact. Project construction activities would generate a temporary contribution of additional vehicle trips to the local circulation system. Specifically, project construction traffic would be associated with one-time ingress/egress for applicable construction equipment (e.g., backhoes/trenchers), daily trips for construction workers and support vehicles (pickups and water/haul trucks), and material/equipment deliveries. Additionally, minor congestion may occur due to the partial road closure; however, three lanes (one lane in each direction and one two-way left turn lane) would remain open during the duration of construction. Construction vehicles would likely use Winchester Road to access various points of the alignment. Winchester Road is an arterial that supports high levels of traffic. The addition of project construction trips to this roadway would not disrupt the circulation system. After exiting Winchester Road, not all construction trips would be concentrated in one area or along one of the smaller roadways in the project area, due to the linear layout of the project. In addition, most construction days would not involve the maximum number of vehicles. As such, the project’s construction traffic and partial road closure would not substantially impact the performance of the circulation system or associated plans, ordinances, or policies.

The proposed project would not result in long-term traffic generation, with operational traffic to be limited to minimal trips related to periodic sewer main inspection and maintenance. Based on the described considerations, traffic-related impacts during the construction and operation of the proposed project would be less than significant, and the project would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.

The proposed project would not substantially affect existing public transit, bicycle, or pedestrian facilities. Sidewalks are present along Winchester Road (SR 79) and Sky Canyon Road; the project alignment does not intersect the sidewalk, and construction would not impact the sidewalk or limit its accessibility. Trenched areas would be fenced off so as to allow for continued safety of the sidewalks. There are three bus stops located adjacent to the alignment. However, the contractor would coordinate with the RTA to maintain access to these bus stops, or establish a temporary bus stop with pre-coordination and approval by the RTA. Roadways would be restored to pre-existing conditions following completion of construction. As such, the project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities, and impacts would be less than significant.

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

No Impact. Refer to Item XVII.a, above. CEQA Guidelines Section 15064.3 subdivision (b) sets forth specific criteria for determining the significance of transportation impacts. Subdivision (b) pertains to land use projects and describes factors that may indicate whether the amount of a land use project’s vehicle miles traveled may be significant or not. Project-related traffic would be limited predominantly to a relatively small number of trips during the construction period and an occasional trip for maintenance purposes. Because the project is not a land use project and would not generate substantial vehicle miles traveled, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) and no related impacts would result.

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

No Impact. The proposed project would not include the construction of hazards (e.g., sharp curves or dangerous intersections), and would not result in incompatible uses with the surrounding developed area. Implementation of a TCP would minimize potential traffic hazards during construction. Accordingly, no impacts regarding design features or incompatible uses would occur.

d) Result in inadequate emergency access?

Less Than Significant Impact. Construction of the proposed project would result in lane closures; however, three lanes would remain open (one lane in each direction and one two-way left turn lane) during the duration of the project (SB&O, Inc. 2018). Implementation of a TCP for the project would allow for maintained access to hospitals, emergency response centers, school locations, communication facilities, highways and bridges, or airports. As such, the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.

XVIII. 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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)?

No Impact. No properties or resources currently listed on the National Register of Historic Places or the California Register of Historic Resources are located within or immediately adjacent to the project alignment. As discussed in Item V.a, no potentially significant Tribal Cultural Resources (TCRs) were observed within or immediately adjacent the project alignment during the pedestrian survey conducted by HELIX, and no significant TCRs were identified by Tribes during consultation. Therefore, no substantial adverse changes to the significance of TCRs within the project vicinity are anticipated and no impact would occur.

- 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less Than Significant with Mitigation Incorporated. The records search at the EIC and pedestrian survey conducted as part of the cultural resources report prepared for the project indicated that no cultural resources are present on site. Despite the lack of recorded cultural resources within and immediately adjacent to the project site, the area is sensitive for cultural resources. The Pechanga, Soboba, and Rincon Bands of Luiseño Indians indicated that there is a potential for subsurface cultural resources to be encountered during trenching, excavation, and other ground-disturbing activities. As discussed in Item V.b, impacts are therefore considered potentially significant and an archaeological and Native American monitoring program must be implemented. Implementation of mitigation measures CR-1 to CR-5 would reduce potential impacts to less than significant.

XIX. UTILITIES AND SERVICE SYSTEMS

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

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

Less Than Significant Impact. The proposed project would consist predominantly of short-term construction activities, with no generation of additional population. Existing wastewater treatment plant capacity is adequate for the flows that would be conveyed by the proposed pipeline. The nature and scope of the proposed project would therefore not require or result in the relocation or construction of new utility facilities. As a result, impacts would be less than significant.

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

No Impact. Water requirements associated with the proposed project would be limited to short-term (construction-related) uses such as dust suppression and employee consumption. Based on the minor nature of such uses, it is anticipated that project water requirements would be met through existing entitlements and no associated impacts would result.

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

No Impact. The proposed project would consist predominantly of short-term construction activities with no generation of additional population. Accordingly, project-related wastewater generation would be limited to that associated with the small number of employees during the construction period, and would not exceed the District's wastewater treatment requirements. Existing wastewater treatment plant capacity is adequate for the flows that would be conveyed by the proposed pipeline. As a result, no associated impacts related to wastewater treatment requirement would occur.

- d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact. Waste generation and disposal requirements associated with the proposed project would be limited to minor quantities derived from construction activities (e.g., material packaging) and employees (e.g., food-related trash). Solid waste from the project would likely be disposed of at either the Badlands Sanitary Landfill, located in Moreno Valley, or the El Sobrante Landfill, located in Corona. The Badlands Landfill has a remaining capacity of 15,748,799 cubic yards and a maximum permitted throughput of 4,800 tons per day and the El Sobrante Landfill has a remaining capacity of 143,977,170 cubic yards and a maximum permitted throughput of 16,054 tons per day (California Department of Resources Recycling and Recovery [CalRecycle] 2019). Both of these landfills have sufficient capacity to accommodate the minimal amount of project-related waste. Associated potential impacts from project implementation would be less than significant.

- e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. Construction and operation of the proposed project would generate minimal solid waste and would not affect landfill capacity. During construction of the project, construction debris (e.g., excavated soil, asphalt) would be generated. Solid waste debris would be disposed of at a permitted landfill. Moreover, AB 939, also known as the Integrated Waste Management Act, mandates the reduction of solid waste disposal in landfills by requiring a minimum of 50 percent diversion rate. Accordingly, at least half of the potential construction waste would be diverted from a landfill. The remaining quantity is reasonably anticipated to be within the permitted capacity of the permitted landfills serving the project area. Therefore, no impacts related to solid waste would occur.

XX. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. Construction and installation of the proposed project would occur within various rights-of-way and would result in lane closures. Full road closures are not anticipated, and the rights-of-way would remain open to traffic in both directions during construction. Implementation of a TCP for the project would allow for maintained access to hospitals, emergency response centers, school locations, communication facilities, highways and bridges, airports, and evacuation routes in the event of an emergency. As such, the proposed project would not impair an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact. Because the project involves a below-ground pipeline, it would not, in combination with environmental factors such as slope or prevailing winds, exacerbate fire risks. In addition, aside from temporary construction and maintenance workers, there would be no occupants on site. Therefore, no impact would occur.

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

No Impact. Implementation of the proposed project would include construction activities to install a subsurface sewer main, which would not require infrastructure beyond what is already planned for the area. The proposed project would not require the installation or maintenance of infrastructure that could exacerbate fire risk or result in temporary or ongoing impacts to the environment; no impacts would occur.

- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. After construction of the proposed project, the surface would be returned predominantly to existing conditions, except for the small concrete pads around each manhole. No significant impacts related to drainage alteration would result from the proposed project. The relatively small project area would be stabilized through efforts such as paving/repaving. In addition, the project area is generally flat, and there are no residences down slope of the project. Therefore, implementation of the proposed project would not expose people or structures to significant risks from runoff, post-fire slope instability, or drainage changes, and no impact would occur.

XXI. 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of past, present and probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- 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. As described in Item IV.a, the project site supports one special status plant species and three sensitive animal species, and contains suitable habitat for burrowing owl. Impacts to paniculate tarplant would be less than significant based on the stability of the species' population in the area and the fact that project impacts would be temporary. Potential impacts to California horned lark, CAGN, Cooper's hawk, burrowing owl, and nesting birds would be reduced to a less than significant level through implementation of mitigation measures BIO-1 and BIO-2. The project would avoid direct impacts to the on-site ephemeral drainage through use of trenchless construction methods and would avoid indirect impacts through implementation of BMPs included as part of the SWPPP and through implementation of mitigation measure BIO-3.

As described in Item V.a, no substantial adverse change in the significance of historical resources is anticipated to occur as a result of project implementation; thus, it would not eliminate important examples of the major periods of California history. The project has the potential to encounter archaeological resources, paleontological resources, and human remains during excavation activities, which could result in significant impacts to important examples in California prehistory; implementation of mitigation measures CR-1 through CR-6 and GEO-1 would ensure that potential impacts would be reduced to less than significant levels.

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

Less Than Significant Impact. Cumulative impacts are defined as two or more individual project effects that, when considered together or in concert with other projects, combine to result in a significant impact (CEQA Guidelines Section 15355). The majority of impacts associated with the proposed project would be localized and short-term, and there are currently no planned projects along the proposed pipeline's alignment (SB&O 2018). In addition, as discussed in Item III.b, the project would not result in a cumulatively considerable increase of any criteria air pollutant for which the region is in non-attainment, which includes ozone and particulate matter. Based on a review of the anticipated impacts of the proposed project and lack of other current projects, implementation of the proposed project would not result in impacts that are individually limited, but cumulatively considerable. The project adheres to all other land use plans and policies with jurisdiction in the project area. Therefore, cumulative impacts would be less than significant.

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

Less Than Significant Impact. With adherence to regulatory codes, ordinances, regulations, standards, and guidelines, in conjunction with the discussed mitigation measures, construction and operation of the proposed project would not present a substantial adverse effect on human beings either directly or indirectly. In addition, all resource topics associated with the project have been analyzed in accordance with State CEQA Guidelines and found to pose no impact, less than significant impact, or less than significant impact with mitigation. Further environmental analysis is not required. Impacts would be less than significant.

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