

AB Pipeline Replacement Project

Initial Study/Mitigated Negative Declaration

October 2025 | 01705.00006.00

Prepared for:

Vista Irrigation District
1391 Engineer Street
Vista, CA 92081

Prepared by:

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
BMP	best management practice
CalEEMod	California Emissions Estimator Model
CAP	Climate Action Plan
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
City	City of San Marcos
CO	carbon monoxide
CO ₂ e	carbon dioxide equivalent
County	San Diego County
CY	cubic yard
dB	decibel
dBA	A-weighted decibel
District	Vista Irrigation District
DOC	California Department of Conservation
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FTA	Federal Transportation Administration
GHG	greenhouse gas
HELIX	HELIX Environmental Planning, Inc.
I-	Interstate
lbs	pounds
L _{EQ}	hourly sound level
L _{MAX}	maximum noise level
LST	Localized Significance Threshold
MBTA	Migratory Bird Treaty Act
MHCP	Multiple Habitat Conservation Program
MRZ	Mineral Resource Zone
MSCP	Multiple Species Conservation Program
MT	metric tons

ACRONYMS AND ABBREVIATIONS (continued)

NAHC	Native American Heritage Commission
NO _x	nitrogen oxides
OEHHA	Office of Environmental Health Hazard Assessment
PM ₁₀	particulate matter 10 microns or less in diameter
PM _{2.5}	particulate matter 2.5 microns or less in diameter
RAQS	Regional Air Quality Strategy
ROW	right-of-way
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Associate of Governments
SCAQMD	South Coast Air Quality Management District
SCIC	South Coastal Information Center
SDAB	San Diego Air Basin
SDAPCD	San Diego County Air Pollution Control District
SDCRAA	San Diego County Regional Airport Authority
SO ₂	sulfur dioxide
SR	State Route
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCA	Traditionally and Culturally Affiliated
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
VdB	vibration decibel
VMT	vehicle miles traveled
VOC	volatile organic compound

1.0 INTRODUCTION

1.1 INITIAL STUDY INFORMATION SHEET

1. **Project title:** AB Pipeline Replacement Project (project)
2. **Lead agency name and address:** Vista Irrigation District,
1391 Engineer Street, Vista, CA 92081
3. **Contact person and phone number:** Christina Olson, P.E.
(760) 597-3100
4. **Project location:** The project is located east of Esplendido Avenue, west of Blue Bird Canyon Road, and north of State Route 78, and would occur within City of San Marcos and unincorporated County of San Diego lands.
5. **Project sponsor's name and address:** See Lead Agency.
6. **General plan designation:** City of San Marcos: Specific Plan Area (SPA)
County of San Diego: Semi-Rural Residential (SR-10)
7. **Zoning:** Murai Specific Plan Zone: Open Space
County of San Diego Zone: Limited Agricultural (A70)
8. **Description of project:**

The project consists of the replacement of an existing 1,700-linear foot (LF) Vista Irrigation District (District) pressurized potable water pipeline constructed in the late 1930s in the City of San Marcos and unincorporated San Diego County (Figure 1, *Regional Location*). The existing 14-inch-diameter pipeline is located primarily underground with portions located aboveground. The existing pipeline would be removed or abandoned and replaced with an 18-inch-diameter pipeline to allow for increased operational flexibility within the distribution system. Although the project would replace an existing 14-inch pipe with an upsized 18-inch pipe, it would have the same water supply capacity and would maintain flows for existing and planned development in the area. The project would not substantially increase water flows in the area and would not require the expansion of associated District infrastructure. Future development proposing connections to District infrastructure would be required to undergo separate review by the District to ensure capacity to accommodate proposed water flows.

Three potential project alignment options are being considered for replacing the District's existing AB pipeline. The alignment options' locations, described herein as "study area," are described below. Figure 2, *Aerial Photograph*, depicts each alignment.

The three project alignment options being considered are the Existing Alignment, SE10 Alternative Alignment, and Road Alternative Alignment options. For the purposes of this Initial Study, all three alignments are analyzed individually for each issue area to assess the potential environmental impacts of each option; however, the Road Alternative Alignment Option is the preferred option.

Existing Alignment Option

If the Existing Alignment Option is chosen, the project would replace the existing 1,700-LF AB pipeline at its current location or abandon the pipeline and construct a new 1,700-LF pipeline adjacent to the existing alignment, within the District's existing 20-foot-wide utility easement for the AB pipeline. The existing aboveground portions of the pipeline would be removed and replaced with an entirely underground alignment. Refer to Figure 3 – *Existing Alignment Option*.

SE10 Alternative Alignment Option

The SE10 Alternative Alignment Option would abandon the existing 1,700-LF AB pipeline and construct a new 1,800-LF pipeline north of the Existing Alignment along the northern boundary of the parcel. The SE10 Alternative Alignment Option would occur partially within a previously recorded, but not utilized, District 20-foot-wide utility easement. The eastern portions of the alignment would also be located partially within the existing San Diego County Water Authority aqueduct easement. Refer to Figure 4 – *SE10 Alternative Alignment Option*.

Road Alternative Alignment Option (Preferred)

The Road Alternative Alignment Option would abandon the existing 1,700-LF AB pipeline and construct a new 1,720-LF pipeline as follows: the western 1,300-LF portion of the alignment would be within an existing dirt road immediately north and outside of any existing District utility easements, requiring the recording of a new 20-foot-wide utility easement for this reach; the eastern portion of the alignment would be located within the District's existing 20-foot-wide utility easement for the AB pipeline that crosses the San Diego County Water Authority aqueduct easement. Refer to Figure 5 – *Road Alternative Alignment Option*.

Construction Best Management Practices

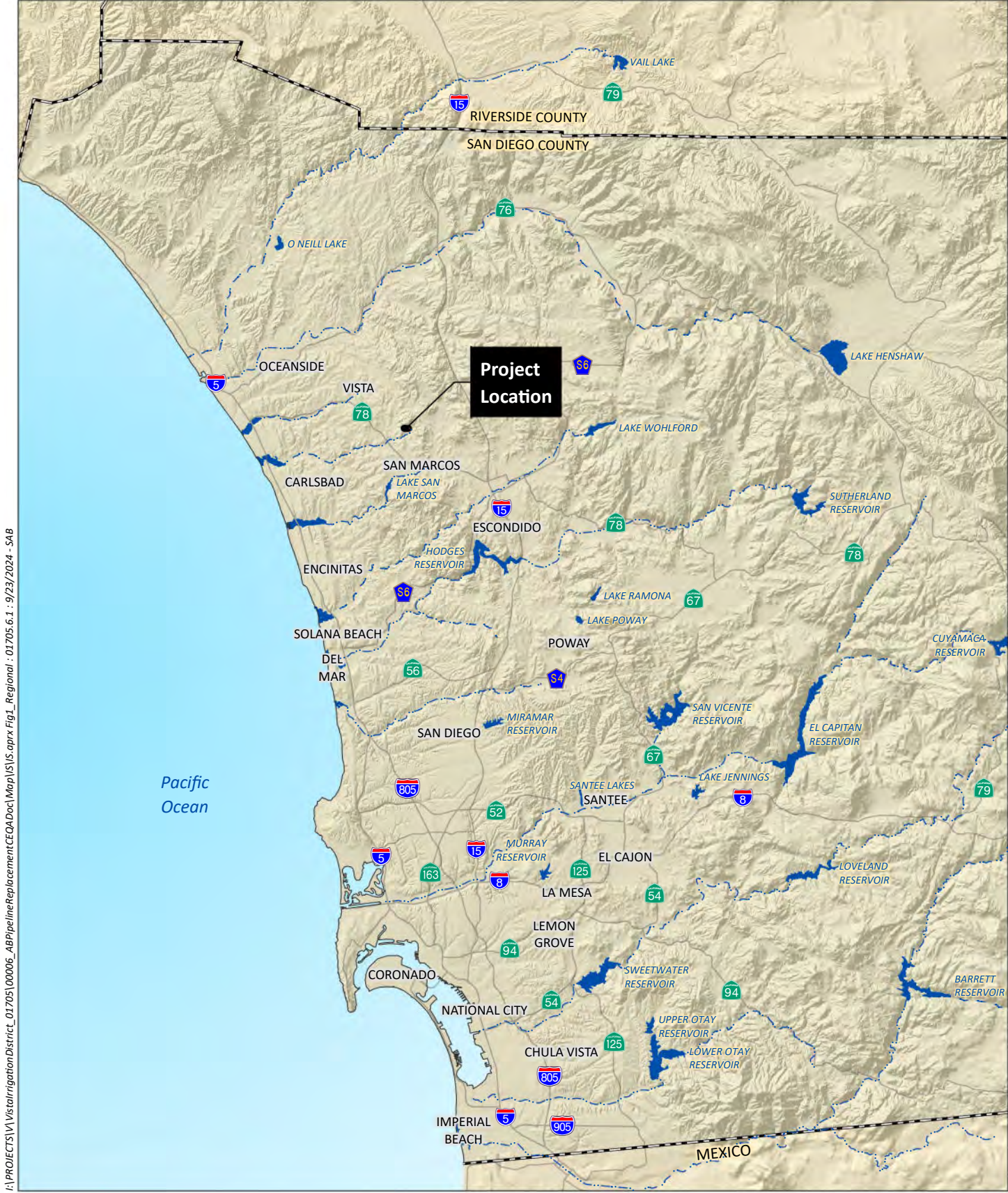
Construction methods for all three alignment options would be identical. Construction activities would include clearing, grading, excavating, trenching, and backfilling. Blasting is not required for either alignment option. For all alignment options, ongoing maintenance would involve the clearing of vegetation within the chosen alignment's 20-foot easement. The following Best Management Practices, including brush management, erosion control methods, dust control, fencing of construction areas, and trash removal would be implemented:

Air Quality

Construction would implement standard dust control measures as required by South Coast Air Quality Management District (SCAQMD) Rule 403, including watering two times daily during grading, ensuring that all exposed surfaces maintain a minimum soil moisture of 12 percent, and limiting vehicle speeds on unpaved roads to 15 miles per hour. All trucks hauling dirt, sand, soil, or other loose materials would be covered with a fabric cover and maintain a freeboard height of 12 inches.

Brush Management

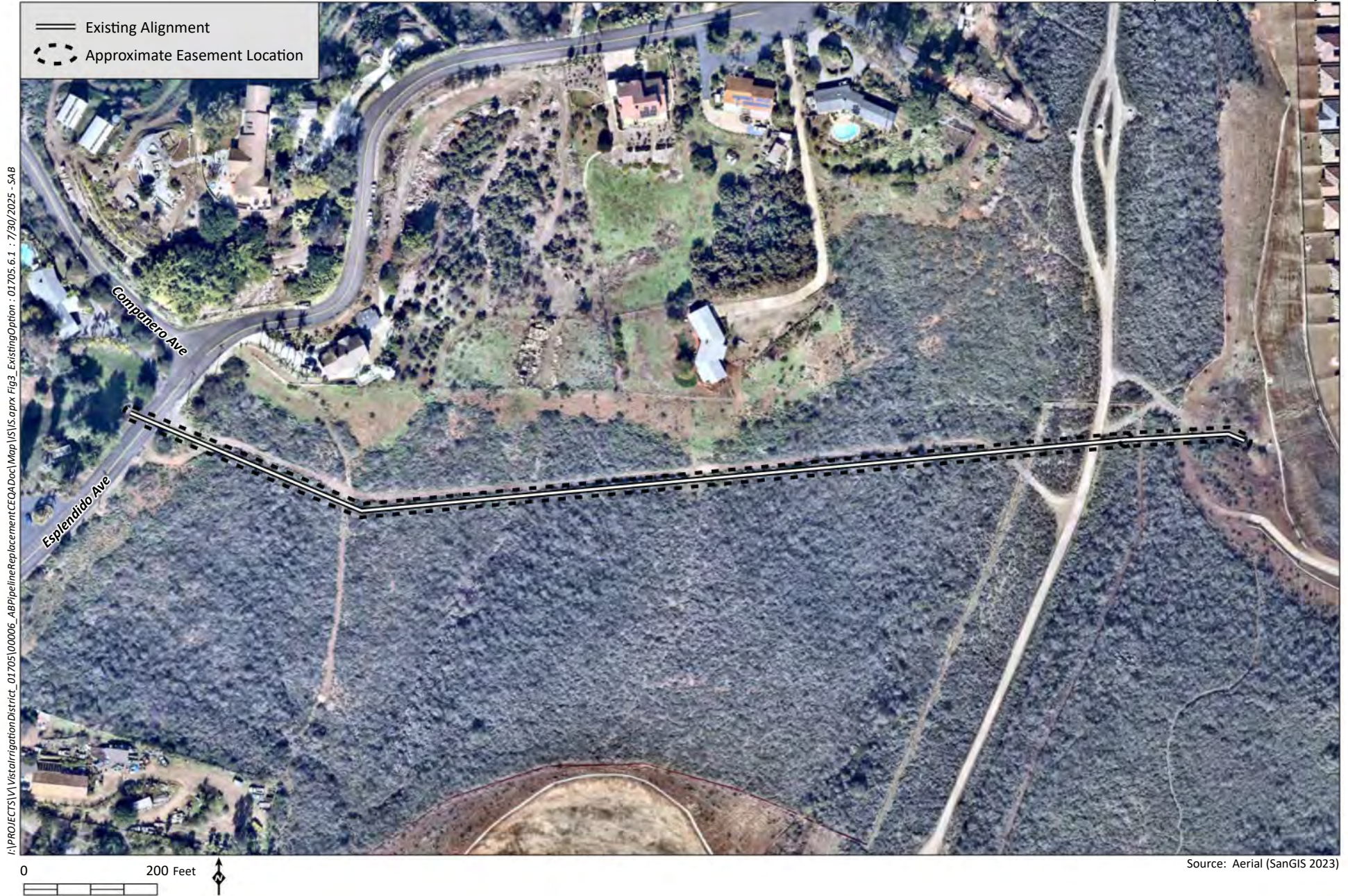
To minimize the risk of losses resulting from wildfire, the following measures would be implemented during construction of the project:



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Source: Base Map Layers (SanGIS, 2016)









- Construction adjacent to areas of dense foliage during dry conditions will be avoided, when feasible.
- In cases where avoidance is not feasible, brush fire prevention and management practices will be incorporated. Specifics of the brush management program will be incorporated into project construction documents.
- Mature trees removed within City boundaries would be replaced at a 1:1 ratio.

Water Quality

As a standard construction practice, the project would implement water quality measures required by the City and/or the San Diego Regional Quality Board, which may include:

- Covering stockpiled excavated and/or fill materials to reduce potential off-site sediment transport;
- Employing appropriate standard spill prevention practices and clean-up materials;
- Maintaining the project area free of trash and debris;
- Properly storing, handling, and disposing of toxins and pollutants, including waste materials;
- Using erosion control devices, such as straw wattles, mulch, mats, and/or geotextiles;
- Using sediment catchment structures such as hay bales, gravel or sandbags, silt fencing, fiber rolls, matting, berms, or similar devices along grading boundaries and drainage courses to prevent off-site sediment transport;
- Daily backfilling, compaction, and/or covering of excavated trenches to minimize erosion potential; and/or
- Regularly inspecting and maintaining all erosion control and sediment catchment facilities to ensure proper function and effectiveness.

Traffic Control

To minimize interruptions to traffic flow and emergency access, a traffic control plan would be implemented. The plan would be implemented in coordination with the County and City using the appropriate standards, and would include the following:

- Provide an access lane for Esplendido Avenue and Companero Avenue throughout construction.
- Provide notice to residents of Esplendido Avenue and Companero Avenue within at least 300 feet of the construction area, and all residents of Esplendido Avenue north of the intersection with Companero Avenue and all residents of Companero Avenue.

9. Surrounding land uses and setting:

The proposed project would occur within the City of San Marcos (City) and unincorporated County of San Diego (County) lands, as shown on Figure 2. Portions of all proposed alignment options are located within private property, which was recently approved for the Murai Residential Housing Subdivision Project (Murai) by the City (City 2018). Surrounding land uses include single-family residential and open space land uses within the Murai Specific Plan Area in the City, and semi-rural residential land uses within the County.

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

- County of San Diego (County)
- City of San Marcos (City)
- State Water Resource Control Board (SWRCB) and/or San Diego Regional Water Quality Control Board (RWQCB)
- California Department of Fish and Wildlife (CDFW)

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 sent AB 52 letters to the tribal representatives provided by the Native American Heritage Commission (NAHC) on March 26, 2025. One response was received from the Rincon Band of Luiseño Indians (Rincon) on June 19, 2025, requesting that a cultural resources study be completed, including a records search and a pedestrian survey of the project area. They requested that a Rincon tribal monitor participate in the survey. In addition, Rincon requested direct government-to-government consultation. This consultation was enacted through a meeting between the District and Rincon on May 16, 2025, at which time Rincon requested to review the technical reports. The reports were sent on May 21, 2025. Rincon agreed with the recommendation to include an archaeological and a Luiseño Native American monitor during ground-disturbing activities. This measure is discussed in Section V, mitigation measure CUL-1.

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.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☐ Geology and Soils	☐ 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	☒ Tribal Cultural Resources
☐ Utilities and Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance

1.3 DETERMINATION

On the basis of this initial evaluation:

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



Signature

Christina Olson

Printed name

10/20/2025

Date

Vista Irrigation District

For

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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 an applicable 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.

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

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

Less Than Significant Impact. The City of San Marcos' General Plan does not identify any designated scenic vistas but more generally aims to protect the City's scenic resources such as undeveloped hillsides; prominent landforms such as the San Marcos Mountains, Merriam Mountains, Mount Whitney, Cerro de La Posas, Double Peak, Owens Peak, and Franks Peak; creek corridors; eucalyptus stands; rock outcroppings; landmarks or historic buildings; and ocean views (City 2012). Similarly, the County General Plan does not identify designated scenic resources and instead identifies general policies to preserve scenic resources, such as requiring new development to place utilities underground and protecting undeveloped ridgelines and steep hillsides by maintaining semi-rural or rural designations (County 2011a).

Low-lying development surrounds the proposed alignment option locations but does not obstruct the overall scenic resources. During construction, equipment would be used within the project area but would not be of a height to obstruct vistas of surrounding scenic resources. Further, construction equipment would be located on-site temporarily and removed upon completion of construction. After the completion of construction, the proposed project would consist of water pipeline infrastructure located entirely underground. Although the proposed project would be located on an undeveloped hillside and therefore defined as a scenic resource in the City General Plan and County General Plan, implementation of the project would not result in substantial adverse effects to this scenic resource. Therefore, no permanent changes to scenic vistas would occur due to the project. 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?

Less Than Significant Impact. The nearest designated state scenic highway to the study area is a portion of State Route (SR) 52 within the City of San Diego, beginning approximately 23 miles south of the study area (California Department of Transportation 2019). The study area would not be visible from this designated state scenic highway. The nearest eligible state scenic highway is Interstate (I-)5, which is located approximately 8.5 miles west of the study area and does not provide visibility of the study area due to distance. SR 78 is located approximately 1.3 miles southwest of the study area; however, the section of SR 78 proximate to the study area is not designated as a scenic highway and the project would not be visible from the roadway.

Although the study area is not located within a viewshed of a state scenic highway, the City has designated SR 78 as a view corridor to surrounding ridgelines, as stated in the Conservation and Open Space Element of the General Plan (City 2012). However, views of the study area from SR 78 are obstructed by adjacent slopes and existing development, and the project would not limit views of the surrounding hillsides and ridgelines visible from SR 78. As discussed in item I.a, permanent project components associated with the three proposed alignment options would be located underground and construction activities that would occur above ground would be temporary in nature. Thus, the project would not result in damage to scenic resources in a state scenic highway and no impact would occur.

- 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 City is considered an urbanized area pursuant to California Public Resources Code Section 21071. Therefore, the potential impact of the project is assessed in relation to conflicts with applicable zoning and other regulations governing scenic quality.

The study area and surrounding area is characterized by semi-rural privately-owned residential land uses that have been implemented according to the General Plan and the Murai Specific Plan. Development surrounding the study area currently includes single-family residential developments. The portion of the study area within the City is zoned Open Space and the portion of the study area within the County is zoned Limited Agricultural (A70); the proposed project use is consistent with both of these designations. Zoning requirements set by the City and County related to scenic quality would not apply as the project would consist of water pipeline infrastructure located entirely underground and does not propose any visible structures. Therefore, the project would be consistent with the planned site uses and would not conflict with applicable zoning or other regulations governing scenic quality. 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?

No Impact. Existing lighting in the project vicinity is associated with roadway lighting and exterior building lighting associated with the residential uses that surround the study area. Construction of the proposed project would occur during daytime hours when no lighting is required for construction activities. No nighttime construction, which would require lighting, is proposed to occur. Once

operational, project components would be located underground and would not be a source of light or glare. No impact would occur.

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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

- a) 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. The study area for the three proposed alignment options consists of Open Space land within the Murai Specific Plan Area. According to the California Important Farmland Finder, land surrounding the study area is designated as Other Land, which includes low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres (California Department of Conservation [DOC] 2018). The project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use. No impact would occur.

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

Less Than Significant Impact. As discussed above, the western portion of the proposed project alignment options are within the County and are zoned Limited Agriculture (A70). The County Zoning Ordinance states that the A70 Use Regulations are intended to create and preserve areas intended

primarily for agricultural crop production and is typically applied to areas throughout the County to protect moderate to high quality agricultural land (County 2000). However, as discussed in item II.a above, the proposed study area is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Further, the project proposes the installation of water pipeline infrastructure and would not alter the existing land use of the area. The eastern portion of the proposed project alignment options within the City are zoned as Open Space within the Murai Specific Plan, and no Williamson Act contract exists with the City or County for the proposed study area. Implementation of the project would not conflict with existing zoning for agricultural use, or a Williamson Act contract and impacts would be less than significant.

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

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

No Impact (II.c and II.d). The proposed study area consists of Open Space land and developed roadways, which are not zoned for or used as forest land, timberland, or timberland zoned for Timberland Production. Therefore, the project would not result in rezoning of these uses or the conversion of forest land to a non-forest use. 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 discussed in items II.a through II.d above, the study area does not contain agricultural or forest land uses. The project would not result in conversion of these uses 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?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

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

Less Than Significant Impact. The study area is located within the San Diego Air Basin (SDAB) where air quality is regulated by the U.S. Environmental Protection Agency (USEPA) at the federal level, by the California Air Resources Board (CARB) at the state level, and by the San Diego County Air Pollution Control District (SDAPCD) at the regional level. The SDAPCD and San Diego Association of Governments (SANDAG) are responsible for developing and implementing plans for attainment and maintenance of the ambient air quality standards in the SDAB. The SDAB is a federal non-attainment area for ozone (8-hour standard) and a state non-attainment area for ozone (1-hour and 8-hour), particulate matter 10 microns or less in diameter (PM₁₀), and particulate matter 2.5 microns or less in diameter (PM_{2.5}; SDAPCD 2024).

The applicable air quality plans for the project are the 2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County (Attainment Plan; SDAPCD 2020) and Regional Air Quality Strategy (RAQS; SDAPCD 2023). The Attainment Plan includes the SDAPCD's plans and control measures for attaining the federal ozone standard. The RAQS outlines SDAPCD's plans and control measures designed to attain the state standards for ozone. These plans regulate emissions from all sources, including natural sources, through implementation of control measures, where feasible, on stationary sources to attain the standards. By contrast, mobile sources are regulated by the USEPA and CARB, and the emissions and reduction strategies related to mobile sources are considered in the RAQS, Attainment Plan, and State Implementation Plan (SIP).

The RAQS and Attainment Plan rely on information from CARB and SANDAG, including projected growth in the County (including the City of San Marcos), mobile, area and all other source emissions to project future emissions and determine from that the strategies necessary for the reduction of stationary source emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population, vehicle trends and land use plans developed by individual cities and by the County. As such, projects that propose development that is consistent with the growth anticipated by the applicable general plan would be consistent with the RAQS and Attainment Plan. If a project proposes development which is less dense than anticipated within the General Plan, the project would likewise be consistent with the RAQS and Attainment Plan. If a project proposes development that is greater than that anticipated in the applicable general plan and SANDAG's growth projections upon which the Attainment Plan is based, the project may conflict with the RAQS, Attainment Plan, and SIP and may have a potentially significant impact on air quality.

The project proposes installation of a water pipeline, which would not result in population or employment increases and would not exceed the growth projection assumptions in the RAQS or Attainment Plan. The proposed pipeline would serve existing and planned development in the project area and would not induce unanticipated population growth. Construction workers would be recruited from the local pool of labor. Project construction would not exceed growth estimates for the area and

would therefore be consistent with the growth projections in the City's General Plan and the growth projections used to develop the SDAPCD's RAQS and Attainment Plan.

In addition, and as discussed further under item III.b below, quantitative thresholds are established to assist in determining whether a project may have a significant air quality impact. A project with emissions lower than the thresholds would not conflict with or obstruct implementation of the plans for attainment of the applicable federal and State air quality standards. The project would not exceed the temporary construction-related thresholds of significance for criteria pollutants and precursor emissions. In addition, the project proposes the installation of a water pipeline, which would be sealed underground after installation and would not produce criteria pollutants or precursor emissions during operation of the pipeline.

Because implementation the project would not result in criteria pollutant emissions in excess of applicable thresholds and the project would be consistent with regional growth projections, the project would not conflict with or obstruct implementation of the SDAPCD's RAQS and Attainment Plan. Impacts related to air quality plans would be less than significant.

- 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. Air pollution is largely a cumulative impact, and the non-attainment status of regional pollutants is a result of past and present development within the region. As described under Section III(a), above, the SDAB is a federal non-attainment area for ozone (8-hour standard) and a state non-attainment area for ozone (1-hour and 8-hour), PM₁₀, and PM_{2.5}. Ozone is a secondary pollutant formed through the reaction of the precursor pollutants VOC and nitrogen oxides (NO_x); therefore, direct emissions of VOC and NO_x are quantified in this analysis to assess potential effects related to attainment of the ozone standards.

To determine whether a project would result in cumulatively considerable emissions that would violate an air quality standard or contribute substantially to an existing or projected air quality violation, a project's emissions are evaluated in comparison with quantitative emission thresholds. While the SDAPCD has not adopted significance criteria for evaluation of emissions from typical land use development projects, Air Quality Impact Analysis trigger levels for new or modified stationary sources are established in SDAPCD Rules 20.2 and 20.3 (SDAPCD 2019; SDAPCD 2021) and may be used as screening thresholds to evaluate the increased emissions which would be discharged to the SDAB from proposed land use development projects. In the absence of a VOC threshold established in these rules, this analysis considers the South Coast Air Quality Management District (SCAQMD) screening level threshold for VOC emissions (SCAQMD 2023).

The project would generate criteria pollutants in the short-term during construction. The project's construction emissions were calculated using the California Emissions Estimator Model (CalEEMod), Version 2022.1 (California Air Pollution Control Officers Association 2022). In the model, it was assumed that construction of the project would occur over a period of one day to estimate the peak daily air quality emissions. The results of the emissions calculations for the peak daily emissions produced during construction of the project are compared to the applicable screening level thresholds in Table 1, *Maximum Daily Construction Emissions*. The complete CalEEMod output files are included in Appendix A. Because the alignment options would utilize the same number and type of construction equipment, the modeling results are applicable to all three alignment options. Once construction

activity is complete, the project components would be sealed pipelines, which would be located underground and operate passively without generating any air emissions.

Table 1
MAXIMUM DAILY CONSTRUCTION EMISSIONS (APPLICABLE FOR ALL THREE ALIGNMENT OPTIONS)

	Pollutant Emissions (pounds per day)					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Maximum Daily Emissions	1.1	8.6	12.2	<0.1	0.5	0.3
<i>Screening Threshold</i>	<i>75</i>	<i>250</i>	<i>550</i>	<i>250</i>	<i>100</i>	<i>67</i>
Significant Impact?	No	No	No	No	No	No

Source: CalEEMod (output data is provided in Appendix A); Thresholds SDAPCD 2019, SDAPCD 2021, SCAQMD 2023

VOC = volatile organic compounds; NO_x = nitrogen oxides; CO = carbon monoxide; SO_x = sulfur oxides;

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

As shown in Table 1, the project's short-term, construction-related emissions are not anticipated to exceed the screening level thresholds for emissions of any criteria pollutant or precursor. In addition, the project proposes the installation of a water pipeline, which would be sealed underground after installation and would not produce criteria pollutants or precursor emissions during the long-term operation of the pipeline. Accordingly, construction activities associated with development of the proposed project and long-term operation of the project would not substantially contribute to the SDAB's non-attainment status for ozone, PM₁₀, or PM_{2.5}. The project would not result in a cumulatively considerable net increase of pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard. Impacts would be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. The closest existing sensitive receptor locations to the project's three alignment options are single-family residences adjacent to the study area to the north and west. The Alternative Alignment Option would be located approximately 20 feet south of the single-family residences, while the Existing Alignment and SE10 Alignment options would be located approximately 120 feet south of the single-family residences. The closest school to the study area is Paloma Elementary School, which is located approximately 0.75 miles south of the two southernmost project alignment options.

During construction, the project would generate fugitive dust and diesel particulate matter (DPM) emissions. As the project would not result in PM₁₀ or PM_{2.5} emissions in excess of the screening thresholds during construction and would implement fugitive dust control measures in compliance with SDAPCD Rule 55, sensitive receptors would not be exposed to substantial concentrations of particulate matter.

Diesel engines emit a complex mixture of air pollutants referred to as DPM, which is classified as a toxic air contaminant (TAC). The use of heavy-duty construction equipment, haul trucks, on-site generators, and construction worker vehicles could generate the TAC DPM. Generation of DPM from construction projects typically occurs in a localized area (e.g., at the study area) for a short period of time. Because construction activities and subsequent emissions vary depending on the phase of construction (e.g., grading, building construction), the construction-related emissions to which nearby receptors are exposed to would also vary throughout the construction period. During some equipment-intensive

phases, such as grading, construction-related emissions would be higher than other less equipment-intensive phases such as building construction.

The dosage of TAC to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance in the environment and the extent of exposure a person has with the substance; a longer exposure period to a fixed quantity of emissions would result in higher health risks. Current models and methodologies for conducting cancer health risk assessments are associated with longer-term exposure periods (typically 30 years for individual residents based on guidance from the Office of Environmental Health Hazard Assessment [OEHHA]) and are best suited for evaluation of long duration TAC emissions with predictable schedules and locations. These assessment models and methodologies do not correlate well with the temporary and highly variable nature of construction activities. Cancer potency factors are based on animal lifetime studies or worker studies where there is long-term exposure to the carcinogenic agent. There is considerable uncertainty in trying to evaluate the cancer risk from projects that will only last a small fraction of a lifetime (OEHHA 2015).

Considering this information, the short duration of construction activity, the highly dispersive nature of DPM, and the fact that construction activities would occur at various locations throughout the study area, construction of the project would not expose off-site sensitive receptors to substantial DPM concentrations. In addition, the project proposes the installation of a water pipeline, which would be sealed underground and operate passively after installation and would not result in impacts to sensitive receptors during operation. Impacts to sensitive receptors during construction and operation of the project 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. The project could produce odors during proposed construction activities resulting from heavy diesel equipment exhaust; however, standard construction practices and regulations would minimize the odor emissions and their associated impacts. Any odors emitted during construction would be temporary, short-term, and intermittent in nature, as construction equipment would progress along either of the three proposed project alignment options. Therefore, odor impacts from construction of the project would be less than significant due to the short duration of exposure.

The project proposes the installation of a water pipeline, which would be sealed underground after installation and would not result in the emission of odors. Therefore, long-term operation of the project would not result in a change to existing odors in the project vicinity, and there would be no impact.

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?	☐	☒	☐	☐
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?	☐	☒	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

The discussion below is based on the Biological Technical Report prepared by HELIX Environmental Planning, Inc. (HELIX; 2025a), attached to this Initial Study as Appendix B. The Biological Technical Report included a general biological resources survey and literature review. The study area described throughout this analysis includes a 100-foot buffer around each project alignment option.

- 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?

None of the three proposed alternative alignment options would have an impact on federal or state-listed plant species. A search of United States Fish and Wildlife Service (USFWS), the California Natural Diversity Database, and SanBIOS records was used to develop a matrix of sensitive plant species that may have the potential to occur on-site due to the presence of suitable habitat. The matrix is included as

Appendix C to the Biological Technical Report (HELIX 2025a; Appendix B). No sensitive plant species have been recorded on-site, and none were observed within the project study area during the 2024 rare plant surveys for the project. Therefore, implementation of either of the three proposed alignment options would not result in impacts to federally or state-listed plant species.

However, all three proposed alignment options could result in significant direct and/or indirect impacts on special status animal species during construction. Minimal direct impacts to suitable habitat for the federally threatened coastal California gnatcatcher (*Polioptila californica californica*), state watch list species Belding's orange-throated whiptail (*Aspidoscelis hyperythrus beldingi*), and state candidate species Crotch's bumble bee (*Bombus crotchii*) could occur during project implementation. Therefore, mitigation would be required as further described below. For all three alignment options, mitigation measures BIO-1 and BIO-2 would require the installation of temporary construction fencing and biological monitoring where work limits occur adjacent to suitable habitat. Mitigation measure BIO-3 would mitigate for impacts to these species' habitat. If take authorization is required, mitigation measure BIO-4 would require authorization, and the corresponding mitigation requirements shall be obtained by consultation with USFWS through the Federal Endangered Species Act (FESA) Section 10 process for coastal California gnatcatcher, or the California Department of Fish and Wildlife (CDFW) in accordance with the California Endangered Species Act Section 2081 for Crotch's bumble bee.

Although the alignment options' impact footprints have been specifically designed to primarily occur within non-native vegetation and disturbed areas to the maximum extent practicable, minimal project impacts would occur in suitable habitats for these species. Additional suitable habitat is located immediately off-site. Coastal California gnatcatchers have the potential to breed in on- and off-site habitat areas. If construction is scheduled to occur during the breeding season (March 1 through August 30) for this species, such activities could result in inadvertent and adverse direct and/or indirect impacts on this species, if found breeding in the area. These impacts would be significant. Thus, mitigation measure BIO-5 would require pre-construction surveys in accordance with the applicable USFWS protocols to ensure that the appropriate avoidance measures are implemented prior to and during construction to avoid any impacts on these species.

Crotch's bumble bee also has potential to form colonies in on- and off-site habitat areas. If construction of any alignment option is scheduled to occur during the colony active season (April 1 through August 31) for this species, such activities could result in inadvertent and adverse direct and/or indirect impacts on this species, if found in the area. These impacts would be significant. Mitigation measure BIO-6 would require pre-construction surveys in accordance with the applicable CDFW protocols to ensure that the appropriate avoidance measures are implemented prior to and during construction to avoid any impacts on these species.

Potential impacts on Belding's orange-throated whiptail would be limited to the temporary displacement of individuals during project construction of any alignment option; in addition, based on the quality and size of the habitat that could be impacted, the areas are not expected to support locally or regionally significant populations of these non-listed sensitive species.

All three proposed alignment options would require the removal of vegetation and other potential nesting habitat for common birds and raptors protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFG Code). Impacts on active nests belonging to bird species protected under the MBTA and CFG Code would be significant. Mitigation measure BIO-7 would ensure that the appropriate pre-construction survey and avoidance measures are implemented prior to and

during construction to avoid any impacts on nesting birds and raptors. With the implementation of mitigation measure BIO-7, no impacts would occur.

Existing Alignment Option

Less Than Significant with Mitigation Incorporated. The Existing Alignment could result in significant direct impacts to coastal California gnatcatcher and Crotch's bumble bee if construction activities occur during the coastal California gnatcatcher breeding season (March 1 through August 30) or Crotch's bumble bee active colony seasons (April 1 through August 31). The implementation of mitigation measures BIO-1 through BIO-7 would prevent or reduce impacts on special-status animal species to less than significant. Therefore, with the implementation of required mitigation measures, impacts on special-status animal species would be reduced to less than significant. Potential impacts to Belding's orange-throated whiptail would be limited to temporary displacement and would be considered less than significant. Refer to Figure 6a, *Proposed Project Impacts – Existing Alignment*.

SE10 Alternative Alignment Option

Less Than Significant with Mitigation Incorporated. As with the Existing Alignment, the SE10 Alternative Alignment Option could result in significant direct impacts to coastal California gnatcatcher and Crotch's bumble bee if construction activities occur during the coastal California gnatcatcher breeding season (March 1 through August 30) or Crotch's bumble bee active colony seasons (April 1 through August 31). The implementation of mitigation measures BIO-1 through BIO-7 would prevent or reduce impacts on special-status animal species to less than significant. Therefore, with the implementation of required mitigation measures, impacts on special-status animal species would be reduced to less than significant. As discussed above, potential impacts to Belding's orange-throated whiptail would be limited to temporary displacement and would be considered less than significant. Refer to Figure 6b, *Proposed Project Impacts – SE10 Alternative Alignment*.

Road Alternative Alignment Option

Less Than Significant with Mitigation Incorporated. As with the other alignments, the Road Alternative Alignment Option could result in significant direct impacts to coastal California gnatcatcher and Crotch's bumble bee if construction activities occur during the coastal California gnatcatcher breeding season (March 1 through August 30) or Crotch's bumble bee active colony seasons (April 1 through August 31). The implementation of mitigation measures BIO-1 through BIO-7 would prevent or reduce impacts on special-status animal species to less than significant. Therefore, with the implementation of required mitigation measures, impacts on special-status animal species would be reduced to less than significant. As discussed above, potential impacts to Belding's orange-throated whiptail would be limited to temporary displacement and would be considered less than significant. Refer to Figure 6c, *Proposed Project Impacts – Road Alternative Alignment*.

- 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?

The project has been planned to site components outside of sensitive natural communities and other sensitive biological resources to the extent feasible. All three proposed alignment options would result in direct impacts to Diegan coastal sage scrub (including disturbed), which is considered a sensitive natural community. Direct impacts to Diegan coastal sage scrub (including disturbed) are considered

significant and would require mitigation as described below. The SE10 Alternative Alignment Option and Road Alternative Alignment Option would also result in direct impacts to disturbed habitat, developed land, orchard, and/or non-native vegetation/ornamental, which are not considered sensitive natural communities. Impacts to non-sensitive vegetation communities are not considered significant and, therefore, do not require mitigation. All project impacts would be considered permanent. Project impacts are depicted in Figures 6a through 6c and are summarized below within Table 2, *Proposed Project Impacts to Vegetation Community/Land Cover Types*.

Table 2
PROPOSED PROJECT IMPACTS TO VEGETATION COMMUNITIES/LAND COVER TYPES¹

Vegetation Community or Land Cover Type¹	Project Impacts (Acres)^{1,2}	Mitigation Ratio	Mitigation Required (Acres)^{1,2}
<i>Existing Alignment Option</i>			
Diegan Coastal Sage Scrub (32500)	0.65	2:1	1.30
Disturbed Habitat (11300)	0.11	--	--
Developed Land (12000)	0.02	--	--
Non-native Vegetation/Ornamental (12000)	0.02	--	--
<i>Existing Alignment Option Total</i>	0.80	--	1.30
<i>SE10 Alternative Alignment Option</i>			
Diegan Coastal Sage Scrub (32500)	0.25	2:1	0.50
Disturbed Habitat (11300)	0.32	--	--
Developed Land (12000)	0.17	--	--
Non-native Vegetation/Ornamental (12000)	0.08	--	--
Orchard (18100)	0.02	--	--
<i>SE10 Alternative Alignment Option Total</i>	0.84	--	0.50
<i>Road Alternative Alignment Option</i>			
Diegan Coastal Sage Scrub (32500)	0.31	2:1	0.62
Disturbed Habitat (11300)	0.44	--	--
Developed Land (12000)	0.02	--	--
Non-native Vegetation/Ornamental (12000)	0.02	--	--
<i>Road Alternative Alignment Option Total</i>	0.79	--	0.62

Source: HELIX 2025a; Appendix B

¹ Vegetation categories and numerical codes are from Holland (1986) and Oberbauer (2008) and are listed by Habitats.

² Upland habitats are rounded to the nearest 0.01 acre.

Existing Alignment Option

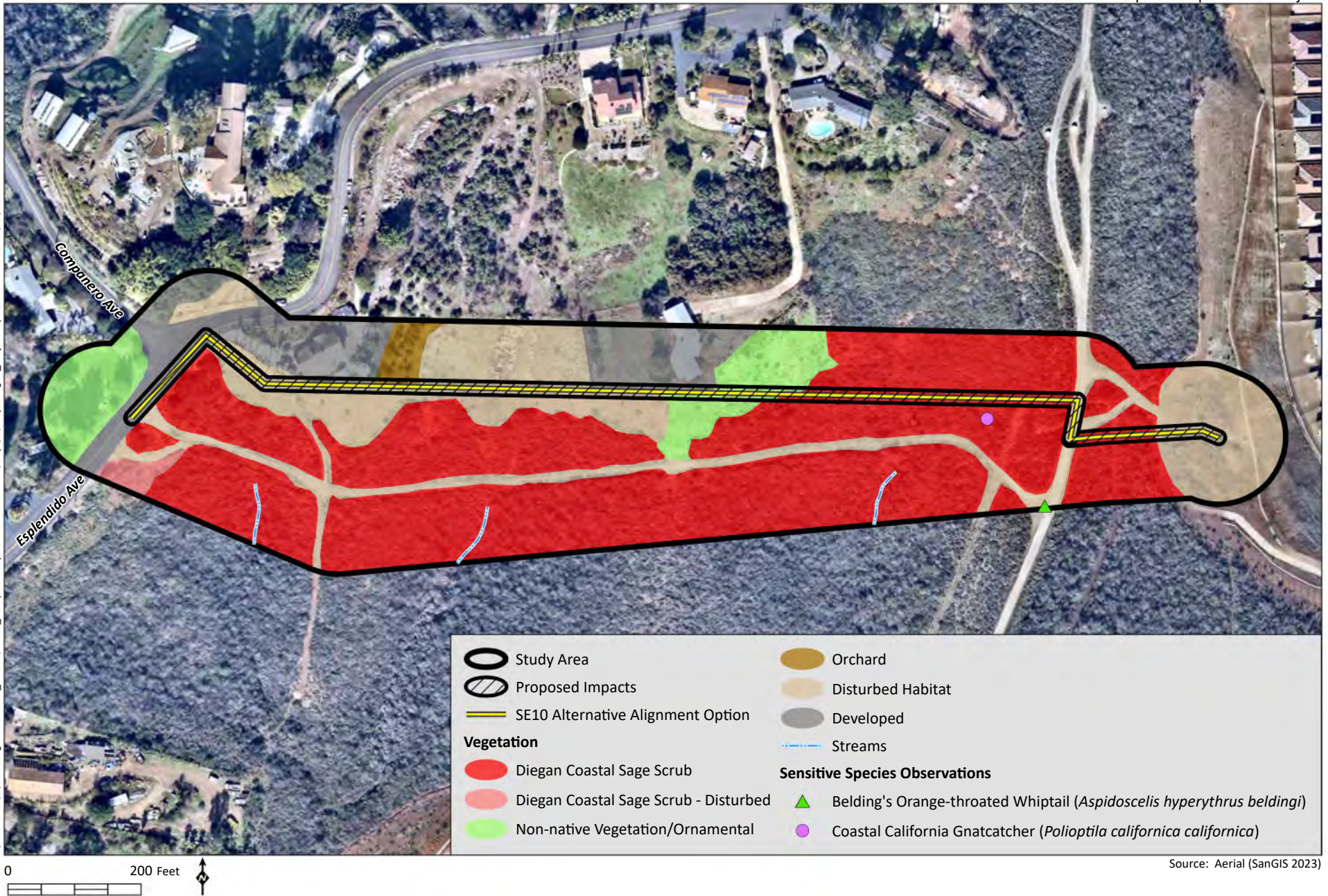
Less Than Significant with Mitigation Incorporated. The Existing Alignment Option would result in significant direct impacts to approximately 0.65 acre of Diegan coastal sage scrub (Figure 6a of Appendix B; Table 2). Mitigation measures BIO-1 and BIO-2 require the installation of temporary construction fencing and biological monitoring where work limits occur adjacent to suitable habitat. Implementation of mitigation measure BIO-3 to compensate for the permanent loss of Diegan coastal sage scrub through the purchase of coastal sage scrub credits at the Red Mountain Conservation Bank or other CDFW approved mitigation bank would reduce potential impacts to below a significant level.

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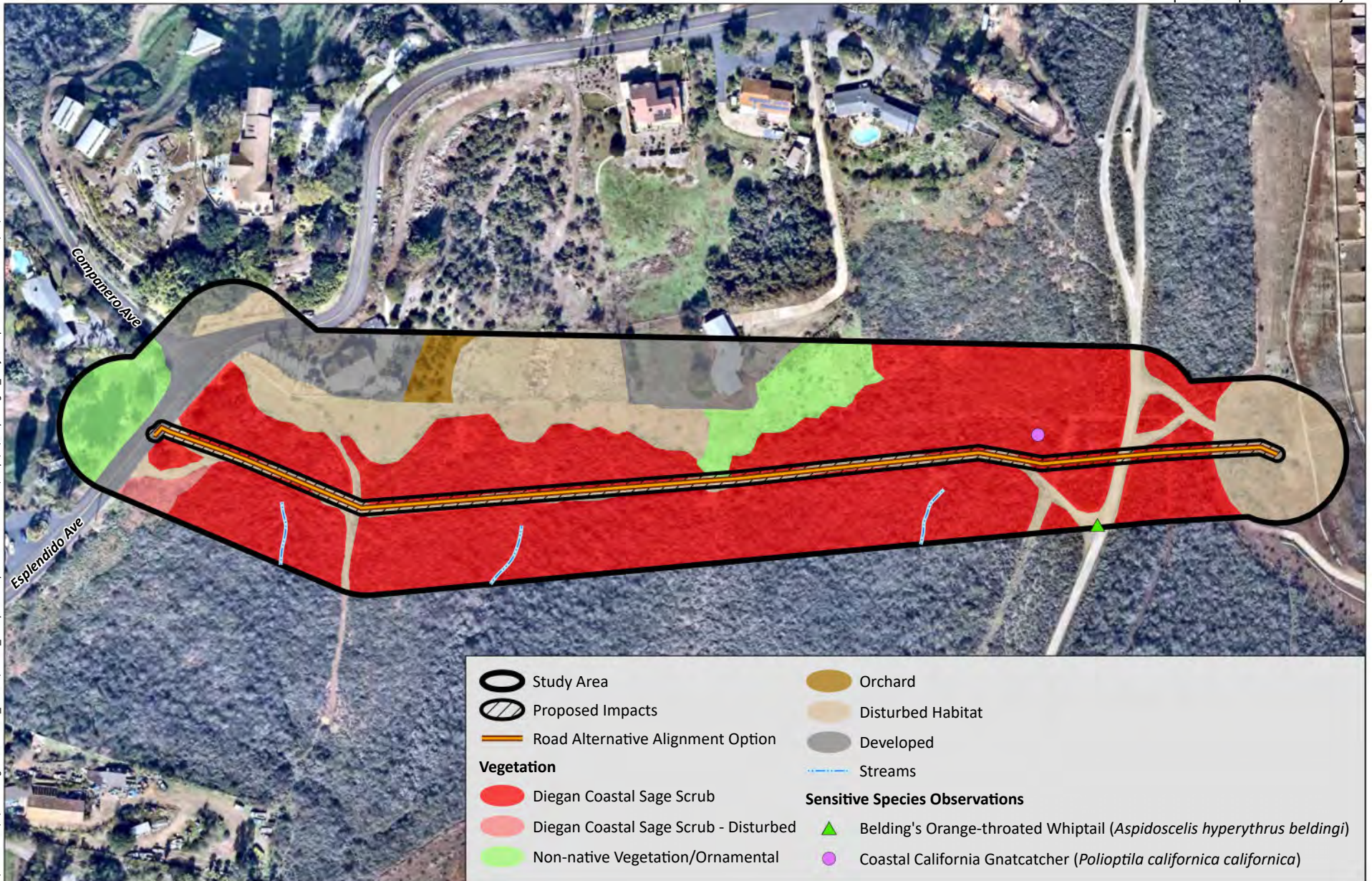


Source: Aerial (SanGIS 2023)

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Source: Aerial (SanGIS 2023)

SE10 Alternative Alignment Option

Less Than Significant with Mitigation Incorporated. The SE10 Alternative Alignment Option would result in significant direct impacts to approximately 0.25 acre of Diegan coastal sage scrub (Figure 6b of Appendix B; Table 2). Mitigation measures BIO-1 and BIO-2 require the installation of temporary construction fencing and biological monitoring where work limits occur adjacent to suitable habitat. Implementation of mitigation measure BIO-3 to compensate for the permanent loss of Diegan coastal sage scrub through the purchase of coastal sage scrub credits at the Red Mountain Conservation Bank or other CDFW approved mitigation bank would reduce potential impacts to below a significant level.

Road Alternative Alignment Option

Less Than Significant with Mitigation Incorporated. The Road Alternative Alignment Option would result in significant direct impacts to approximately 0.31 acre of Diegan coastal sage scrub (Figure 6c of Appendix B; Table 2). Mitigation measures BIO-1 and BIO-2 require the installation of temporary construction fencing and biological monitoring where work limits occur adjacent to suitable habitat. Implementation of mitigation measure BIO-3 to compensate for the permanent loss of Diegan coastal sage scrub through the purchase of coastal sage scrub credits at the Red Mountain Conservation Bank or other CDFW approved mitigation bank would reduce potential impacts to below a significant level.

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

No Impact. No potentially protected wetlands and waters subject to the jurisdiction of United States Army Corps of Engineers under Section 404 of the Clean Water Act occur within the impact areas for any of the proposed alignment options. All three proposed alignments have been specifically planned to avoid Regional Water Quality Control Board (RWQCB) and CDFW potentially jurisdictional features that are known to occur within the study area south of the Existing Alignment Option (Figure 7 of Appendix B).

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

Less Than Significant Impact. The project study area does not occur within a Core Linkage Area and is bounded on all sides by existing residential development. Although native habitat occurs within each alternative alignment option and is contiguous with habitat adjacent to each alternative alignment option, no alternative would impede wildlife access to, within, or through off-site areas used as urban wildlife movements, or for foraging or breeding. Each alternative alignment impact area may be used by smaller urban-adapted mammal species and bird species, but they are not considered wildlife corridors or habitat linkages. Additionally, none of the three alternative alignment impact areas (i.e., 20-foot-wide easements) support critical populations of animal species. The proposed project alignments would be narrow (20 feet wide), the active construction work would be temporary in nature, and the surrounding habitat would remain available for wildlife movement and nursery sites. Therefore, implementation of the project would not interfere substantially with wildlife movement or corridors or impede the use of native wildlife nursery sites and impacts would be less than significant.

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

Section 14.12.270 of the City's Municipal Code states that where a permit is required for excavation, fill, or obstruction for installation or repair of utilities under any public street, sidewalk, trail, or public place, such construction should be located away from trees. As such, work along the project frontage would be required to occur away from trees and their root systems where possible and in accordance with tree protection measures.

Existing Alignment Option

Less Than Significant with Mitigation Incorporated. The Existing Alignment Option would result in temporary impacts to 0.65 acre of Diegan coastal sage scrub habitat (Table 2). No mature trees are expected to occur within this habitat. Permanent impacts to upland habitat would be mitigated before initiation of construction as described in mitigation measure BIO-3 through the purchase of coastal sage scrub credits at the Red Mountain Conservation Bank or other CDFW approved mitigation bank. Additionally, any mature trees removed from the City of San Marcos for purposes of the project, would be replaced at a 1:1 ratio. As such, implementation of the Existing Alignment Option would be consistent with local policies and ordinances protecting biological resources.

SE10 Alternative Alignment Option

Less Than Significant with Mitigation Incorporated. The SE10 Alternative Alignment Option would result in permanent impacts to 0.25 acre of Diegan coastal sage scrub habitat (Table 2). Mature trees may be present in the orchard habitat mapped along this alignment. Permanent impacts to upland habitat would be mitigated following completion of construction as described in mitigation measure BIO-6. Additionally, any mature trees removed within City boundaries would be replaced at a 1:1 ratio. As such, implementation of SE10 Alternative Alignment Option would be consistent with local policies and ordinances protecting biological resources.

Road Alternative Alignment Option

Less Than Significant with Mitigation Incorporated. The Road Alternative Alignment Option would result in temporary impacts to 0.31 acre of Diegan coastal sage scrub habitat (Table 2). No mature trees are expected to occur within this habitat. Temporary impacts to upland habitat would be restored and revegetated following completion of construction as described in mitigation measure BIO-3 through the purchase of coastal sage scrub credits at the Red Mountain Conservation Bank or other CDFW approved mitigation bank. Additionally, any mature trees removed within City boundaries would be replaced at a 1:1 ratio. As such, the implementation of the Road Alternative Alignment Option would be consistent with local policies and ordinances protecting biological resources.

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

No Impact. All three proposed alignment options occur partially within the boundaries of the draft North County Multiple Species Conservation Program (MSCP) and partly within the draft San Marcos Multiple Habitat Conservation Program (MHCP) Subarea Plan; however, the District is not a participating entity for either plan. Therefore, the draft policies and guidelines of these plans are not applicable to the project. The analysis for the project; however, considered the context of the County MSCP and the

MHCP, and implementation of the project would not conflict with any local, regional, or state habitat conservation plan. The proposed 2:1 mitigation ratio would be consistent with the MHCP and North County MSCP standards. The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan and no impact would occur.

Mitigation

- BIO-1 Construction Fencing for Resource Delineation:** Prior to construction activities, a qualified biologist shall supervise the placement of orange construction fencing or equivalent, along the limits of disturbance adjacent to sensitive biological habitats and verify compliance with any other project conditions. This phase shall include flagging delimiting buffers to protect sensitive biological resources (e.g., habitats/flora and fauna species, including nesting birds) during construction. Construction activities shall be restricted to areas within the approved limits.
- BIO-2 Biological Construction Monitoring:** A qualified biologist will conduct an on-site pre-construction environmental training session for construction personnel to inform them of the sensitive biological resources in the local area and the avoidance measures in place to remain in compliance. The biologist will regularly monitor construction activities throughout construction, including resource delineation and fencing. If items of non-compliance are identified, the biologist shall notify the on-site construction superintendent immediately to discuss and implement corrective actions. Issues of non-compliance that result in additional impacts to sensitive biological resources shall be documented and provided to the District within 72 hours of identification.
- BIO-3 Sensitive Vegetation Mitigation Replacement:** To mitigate potential impacts on coastal California gnatcatcher and Crotch's bumble bee habitat, and significant impacts to sensitive habitat (Diegan coastal sage scrub), the District shall provide mitigation at a 2:1 ratio, for a total of 1.30 acres of coastal sage scrub for the Existing Alignment Option, 0.50 acre for the SE10 Alternative Alignment Option, or 0.62 acre for the Road Alternative Alignment Option (Table 2). Additionally, any mature trees removed within the City of San Marcos will be replaced at a 1: 1 ratio following construction. The coastal sage scrub mitigation shall be provided prior to the start of project construction through purchase of coastal sage scrub credits at the Red Mountain Conservation Bank or other CDFW approved mitigation bank. This mitigation may be superseded by mitigation determined in consultation with the USFWS and/or CDFW under the Federal and/or State Endangered Species Act, if applicable for species impacts.
- BIO-4 Listed Wildlife Species Avoidance and Conservation Measures:** Impacts to habitat for listed wildlife species determined to have potential to occur, including coastal California gnatcatcher and Crotch's bumble bee, shall be compensated by the implementation of habitat-based mitigation per mitigation measure BIO-3 above.

If project impacts to vegetation or grading are necessary within and/or adjacent to native habitat between February 15 and August 31, then pre-construction surveys shall be conducted for coastal California gnatcatcher per mitigation measure BIO-5 below. Crotch's bumble bee surveys shall be conducted during the colony active season for Crotch's bumble

bee (April 1 through August 31) per mitigation measure BIO-6 below. Grubbing, grading, or clearing during the breeding and/or active colony season for these species could occur if it is determined based on the results of the pre-construction surveys that the species is/are not present. If surveys conclude the presence of the target species in the survey area, the District shall consult with the USFWS (Section 10) regarding project-level related significant adverse effects to coastal California gnatcatcher, as appropriate (BIO-5). If Crotch's bumble bee is detected during pre-construction protocol surveys, the District shall notify CDFW, and if required by CDFW, shall prepare/submit an application for a Section 2081(b) Incidental Take Permit for impacts to Crotch's bumble bee (BIO-6).

- BIO-5 Pre-Construction Coastal California Gnatcatcher Surveys and Avoidance:** The preferred approach to project implementation would be for no grubbing or clearing of vegetation to occur within 500 feet of occupied Diegan coastal sage scrub during the breeding season of the coastal California gnatcatcher (February 15 through August 31). All grading permits and improvement plans shall state the same.
1. **FESA Compliance:** Before the issuance of a grading permit, it shall be demonstrated that any FESA-required consultation with USFWS regarding the project's effects to gnatcatcher has occurred, and, if take of gnatcatcher is expected after implementing the included avoidance and minimization measures, that the USFWS has authorized such take through an incidental take statement or incidental take permit, as applicable. In addition, if the USFWS issues a biological opinion or incidental take permit for the project that covers coastal California gnatcatcher, that document shall supersede any inconsistent measures provided in this report.
 2. **Compensatory Mitigation:** Mitigation for impacts to coastal California gnatcatcher habitat shall occur under mitigation measure BIO-3.
 3. **Non-breeding Season Avoidance and Minimization Measures:** For construction between September 1 and February 14, a qualified gnatcatcher biologist shall conduct a pre-construction survey to determine whether gnatcatchers occur within the impact area(s). The pre-construction survey shall consist of three site visits occurring on three separate days, beginning no more than 30 days prior to performing vegetation clearing, with the third visit occurring one day prior to the start of clearing and grubbing. To avoid take under the FESA, the project biologist shall direct workers to begin initial vegetation clearing in an area away from gnatcatchers. In addition, the project biologist will passively flush birds toward areas of appropriate vegetation that are to be avoided. The project biologist will have the authority to stop or modify work to ensure gnatcatchers will not be injured or killed by initial vegetation clearing/grubbing. The project biologist shall record the number and map the location of any gnatcatchers disturbed by initial vegetation clearing/grubbing or construction and report these numbers and locations to the USFWS within 24 hours.
 4. **Breeding Season Avoidance and Minimization Measures:** If project construction activities (i.e., earthwork, clearing, grubbing, and fuel modification) are proposed within the coastal California gnatcatcher nesting season (February 15 through August 31), the following measures shall be implemented to avoid potential impacts:

- a. Pre-Construction Surveys: Following notification to USFWS, the qualified biologist(s) shall conduct a pre-construction survey to confirm that coastal California gnatcatcher are absent or breeding and nesting activities are not present within 500 feet of the outer limits of disturbance. The pre-construction survey shall consist of three site visits occurring on three separate days, beginning no more than 7 days prior to starting work, with the third visit occurring one day prior to the start of work, and USFWS shall be notified at least seven days before the initiation of the survey. The qualified biologist(s) shall submit to USFWS the number and locations of coastal California gnatcatcher observed on and within 500 feet of the project footprint. If the results are negative, construction shall be allowed to proceed.
- b. Biological Monitoring: Construction activities shall not occur within 500 feet of an active coastal California gnatcatcher nest unless noise monitoring and/or noise attenuation measures are implemented (see below). Noise monitoring and noise attenuation measures shall be approved by USFWS before implementation. A qualified biologist(s) shall monitor the initial clearing of suitable habitat. After vegetation removal is complete, surveys shall be completed once per week during project construction that occurs within the breeding season. Weekly surveys may be suspended if approved by USFWS.
- c. Noise Monitoring: If an active nest is observed on or within 500 feet of the project footprint, a qualified acoustician shall assess the potential for noise levels to exceed 60 A-weighted decibels (dBA) hourly in areas occupied by the coastal California gnatcatcher, or an hourly average increase of 3 dBA if existing ambient noise levels exceed 60 dBA. The qualified acoustician shall coordinate with the qualified biologist(s) and USFWS to identify noise attenuation measures. Construction may proceed within 500 feet of an active nest if noise levels are maintained below a 60 dBA hourly average, or below an hourly average increase of 3 dBA if existing ambient noise levels exceed 60 dBA, near the nest site and as approved by USFWS.
 - i. A qualified acoustician shall be retained to determine ambient noise levels for construction activities within 500 feet of active nests. Noise levels near the nest site shall not exceed an hourly average of 60 dBA, or an hourly average increase of 3 dBA if existing ambient noise levels exceed 60 dBA. If project-related noise levels exceed the threshold described above, construction activities shall cease until additional minimization measures are taken to reduce project-related noise levels to below an hourly average of 60 dBA, or below an hourly average increase of 3 dBA if existing ambient noise levels exceed 60 dBA. If additional measures do not decrease project-related noise levels below the thresholds described above, construction activities shall cease until USFWS is contacted to discuss alternative methods.
 - ii. All project personnel shall attend a training program presented by a qualified biologist before construction activities. The training program shall inform project personnel about the life history of coastal California gnatcatcher and all avoidance and minimization measures.

- iii. The construction contractor shall only allow construction activities to occur during daylight hours.
- iv. The construction contractor shall require functional mufflers on all construction equipment (stationary or mobile) used within or immediately adjacent to any 500-foot avoidance buffers to reduce construction equipment noise. Stationary equipment shall be situated so that noise generated from the equipment is not directed towards any suitable habitat for the coastal California gnatcatcher.
- v. The construction contractor shall place staging areas as far as feasible from any suitable coastal California gnatcatcher habitat.
- vi. The biological monitor shall prepare written documentation of all monitoring activities at the completion of construction activities, which shall be submitted to USFWS.
- vii. If noise-generating construction activities are not completed prior to the breeding season, sensitive bird species are present nesting, and noise levels exceed the established threshold, appropriate measures shall be implemented to reduce construction noise levels at occupied habitat and may include the following:
 - Construction equipment shall be properly outfitted and maintained with manufacturer-recommended noise-reduction devices.
 - Diesel equipment shall be operated with closed engine doors and equipped with factory-recommended mufflers.
 - Mobile or fixed “package” equipment (e.g., arc-welders and air compressors) shall be equipped with shrouds and noise control features that are readily available for that type of equipment.
 - Electrically powered equipment shall be used instead of pneumatic or internal-combustion-powered equipment, where feasible.
 - Unnecessary idling of internal combustion engines (e.g., in excess of five minutes) shall be prohibited.
 - The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.
 - Temporary sound barriers or sound blankets shall be installed between construction operations and adjacent noise-sensitive habitat. The project contractor shall construct a temporary noise barrier at least six feet in height meeting the specifications listed below (or of a Sound Transmission Class 19 rating or better) to attenuate noise.
 - All barriers shall be solid and constructed of wood, plastic, fiberglass, steel, masonry, or a combination of those materials, with no cracks or gaps

through or below the wall. Any seams or cracks must be filled or caulked. If wood is used, it can be tongue and groove or close butted seams and must be at least 3/4-inch thick or have a surface density of at least 3.5 pounds per square foot. Sheet metal of 18-gauge (minimum) may be used if it meets the other criteria and is properly supported and stiffened so that it does not rattle or create noise itself from vibration or wind. Noise blankets, hoods, or covers also may be used, provided they are appropriately implemented to provide the required sound attenuation.

BIO-6 Crotch's Bumble Bee Surveys: The District shall retain a qualified biologist (with the appropriate handling permits if handling the bees) to conduct focused surveys. Focused surveys shall follow CDFW's Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species (CDFW 2023). Focused surveys shall be conducted throughout the entire study area during the appropriate flying season (April 1 through August 31) to ensure no missed detection of Crotch's bumble bee occurs. Survey results, including negative findings, shall be submitted to CDFW prior to implementing project ground-disturbing activities.

If Crotch's bumble bee is detected, or if ground-disturbing activities are proposed to start before the next flight season, the District shall coordinate with CDFW and obtain appropriate take authorization from CDFW (pursuant to Fish & Game Code, § 2080 et seq). The District shall comply with the mitigation measures detailed in the take authorization issued by CDFW. The project proponent shall receive a fully executed take authorization prior to implementing project ground-disturbing activities and vegetation removal.

Surveys and coordination with CDFW will not be required if Crotch's bumble bee is no longer a candidate or listed species when project ground-disturbing activities and vegetation removal are ready to start.

BIO-7 Nesting Bird and Raptor Avoidance: Trimming, grubbing, and clearing of vegetation shall be avoided during the general avian breeding season (generally February 1 to August 31, including raptors) 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 seven days prior to vegetation clearing to determine if active bird nests are present in the affected areas. The survey shall include the vegetation to be impacted and a surrounding 300-foot buffer for nesting birds, and a 500 foot for raptors. Surveys on privately owned properties that are not accessible will be surveyed using binoculars. If there are no nesting birds (includes nest building or other breeding/nesting behavior) detected, 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.

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?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

The discussion below is based on the Cultural Resources Study prepared by HELIX (2024), attached to this Initial Study as Appendix C.

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

No Impact. HELIX staff obtained a record search of the project area and a one-mile radius from the South Coastal Information Center (SCIC) on April 17, 2024. The records search included a review of previously conducted cultural resources studies and previously recorded cultural resources from the project alignment options and search radius. Various additional archival sources were consulted by HELIX, including historic topographic maps and aerial imagery.

The records search results indicated a total of 62 cultural resources studies have been completed within one mile of the project area, 13 of which overlap the project area. One of the overlapping studies, the AB Line Replacement Project, and Meyer's Siphon Replacement Project, followed the current project alignment. This study consisted of a records search and a field check, both of which were negative for cultural resources. The records search results also indicated that 18 cultural resources have been previously recorded within the one-mile radius surrounding the project alignment options, none of which had been recorded within the project area. In addition, no structures were mapped within the project alignment options in the topographic maps or aerial photographs consulted during the archival research, and no historical resources were identified during the pedestrian survey of the study area. As there are no historical resources within the proposed alignment that would be affected by the project, no impact to historical resources would occur.

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

Less Than Significant with Mitigation Incorporated. As described in item V.a, a review of the records search results indicated that no cultural resources have been previously recorded within the project area, and a 2015 field check of the alignment options failed to identify any cultural resources. In addition, the Sacred Lands File search provided by the NAHC was negative for the presence of Sacred Lands within the project vicinity. However, San Pasqual and Rincon both stated that the project area is

culturally sensitive and requested government-to-government consultation, which is further discussed in Section XVIII.

A cultural resources survey was conducted by a HELIX archaeologist and Luiseño Native American Monitor on July 20, 2024. The survey identified two shell scatters located along the SE10 Alignment Alternative Option at the base of the private properties located upslope to the north. However, it was determined that the identified shell scatters had been displaced from their primary context and, therefore, lack integrity. No additional archaeological testing was recommended. However, the presence of cultural resources further indicates the cultural sensitivity of the project area. Therefore, an archaeological and Native American monitoring program shall be implemented under mitigation measure CUL-1, as described below. With the implementation of CUL-1, the project would not cause a substantial adverse change in the significance of an archaeological resource, and impacts would be reduced to a less than significant level.

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

Less Than Significant Impact. The proposed project alignment options would be constructed in an Open Space area that is not located on or adjacent to a formal cemetery or a known burial ground. In addition, the Existing Alignment Option would be constructed in a previously disturbed area. However, ground-disturbing activity could result in the discovery of previously unknown human remains. Should human remains be uncovered during construction, the project would comply with existing regulations, including California Health and Safety Code Section 7050.5, and the remains would be protected, analyzed, and preserved as required. If the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the NAHC, would be contacted to determine proper treatment and disposition of the remains in accordance with California Public Resources Code section 5097.98. Therefore, impacts on human remains would be less than significant.

Mitigation

CUL-1 Archaeological Resource Construction Monitoring. Cultural resource mitigation monitoring shall be conducted to provide for the identification, evaluation, treatment, and protection of any cultural resources that are affected by or may be discovered during the construction of the proposed project. The monitoring shall consist of the full-time presence of a Qualified Archaeologist and a Traditionally and Culturally Affiliated (TCA) Native American Monitor from a TCA Luiseño Tribe for initial ground-disturbing construction activities, including clearing/grubbing, grading, trenching, etc. The monitoring activities shall be identified and defined in a Pre-Excavation Agreement between the District and the TCA Luiseño Tribe. The purpose of this agreement shall be to formalize protocols and procedures for the protection, treatment, and disposition of, but not limited to, such items as Native American human remains, funerary objects, cultural and religious landscapes, ceremonial items, traditional gathering areas and cultural items, located and/or discovered through the cultural resource mitigation monitoring program in conjunction with the construction of the proposed project, including additional archaeological surveys and/or studies, excavations, geotechnical investigations, soil surveys, grading, or any other ground-disturbing activities. Other tasks of the monitoring program shall include the following:

- The requirement for cultural resource mitigation monitoring shall be noted on all applicable construction documents, including demolition plans, grading plans, etc.

- The Qualified Archaeologist and TCA Luiseño Native American Monitor shall attend all applicable pre-construction meetings with the Contractor and/or associated Subcontractors.
- The Qualified Archaeologist shall maintain ongoing collaborative consultation with the TCA Luiseño Native American Monitor during all ground-disturbing or altering activities, as identified above.
- The Qualified Archaeologist and/or TCA Luiseño Native American Monitor may halt ground-disturbing activities if archaeological artifact deposits or cultural features are discovered. In general, ground-disturbing activities shall be directed away from these deposits for a short time to allow a determination of potential significance, the subject of which shall be determined by the Qualified Archaeologist and the TCA Luiseño Native American Monitor, in consultation with the TCA Luiseño Tribe. Ground-disturbing activities shall not resume until the Qualified Archaeologist, in consultation with the TCA Luiseño Native American Monitor, deems the cultural resource or feature has been appropriately documented and/or protected. At the Qualified Archaeologist's discretion, the location of ground-disturbing activities may be relocated elsewhere in the study area to avoid further disturbance of cultural resources.
- The Qualified Archaeologist and/or TCA Luiseño Native American Monitor may also halt ground-disturbing activities around known archaeological artifact deposits or cultural features if, in their respective opinions, there is the possibility that they could be damaged or destroyed.
- The avoidance and protection of discovered unknown and significant cultural resources and/or unique archaeological resources is the preferable mitigation for the proposed project. If avoidance is not feasible, a Data Recovery Plan may be authorized by the District as the Lead Agency under CEQA. If data recovery is required, then the TCA Luiseño Tribe shall be notified and consulted in drafting and finalizing any such recovery plan.
- Prior to the release of any bonds associated with construction, a Monitoring Report, and/or Evaluation Report, if appropriate, which describes the results, analysis, and conclusions of the cultural resource mitigation monitoring efforts (e.g., data recovery plan) shall be submitted by the Qualified Archaeologist, along with the TCA Luiseño Native American Monitor's notes and comments, to the District for approval.

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

- 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. Construction of the three proposed alignment options would each consume energy, primarily in the form of petroleum-based fuels (i.e., gasoline and diesel). Heavy-duty off-road construction equipment, haul trucks delivering and removing construction materials, and worker vehicles would consume these fuels. Project-related consumption of such energy resources for construction would be temporary, typical for this type of construction, and cease upon the completion of construction. No inefficient or unnecessary construction methods are proposed such that excessive energy resources would be consumed during the construction of each of the proposed alignments. During the operation of each of the alignment options, no energy resources would be required since project components would be passive infrastructure elements. Therefore, the three proposed alignment options would not result in wasteful, inefficient, or unnecessary consumption of energy resources 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. During construction, the construction contractor would be required to use equipment that complies with applicable regulations related to energy-efficient operations. The project would be gravity powered and would not require energy during operation. Therefore, there would be no conflicts with state or local plans for renewable energy or energy efficiency and no impact 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.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
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 study area is located in tectonically active Southern California. However, none of the three proposed project alignment options are within an Alquist-Priolo Fault Zone

(DOC 2024). The nearest active fault to the study area is the Wildomar segment of the Elsinore Fault Zone, located approximately 15 miles northeast of the study area (DOC 2024). As there are no faults mapped within the three proposed project alignment options, the risk of fault rupture within the three alignment options is low and impacts would be less than significant.

ii. Strong seismic ground shaking?

Less Than Significant Impact. Based on the presence of the faults throughout the project region, there is potential for strong ground shaking to occur. Since the project would not construct structures inhabitable by humans, there are no risks to people or structures related to ground shaking that would occur during project operation. The proposed water pipeline would be engineered and constructed in compliance with current seismic codes and standards for the project's location. Ground shaking in the project region would not result in substantial adverse effects related to the project and impacts would be less than significant.

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. The City General Plan identifies the eastern portion of the three proposed project alignment options as an area of low susceptibility to geologic hazards, including liquefaction (City 2012; Figure 6-1). In addition, the County Multi-Jurisdictional Hazard Mitigation Plan identifies the western portion of the three proposed project alignment options as an area of low liquefaction risk (County 2023; Figure 6). The project would not result in adverse effects as a result of liquefaction and impacts would be less than significant.

iv. Landslides?

Less Than Significant Impact. Similar to the above discussion, the City General Plan identifies the eastern portion of the three proposed project alignment options as an area of low susceptibility to geologic hazards, including landslides (City 2012; Figure 6-1), while the County Multi-Jurisdictional Hazard Mitigation Plan identifies the western portion of the three proposed project alignment options as an area that is not susceptible to landslides (County 2023; Figure 7). Further, the proposed pipeline installation would not create habitable structures that would be at risk in the event of a landslide. Impacts would be less than significant.

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

Less Than Significant Impact. The project would increase the potential for erosion during construction due to the removal of stabilizing surfaces, excavation, and backfill. Short-term erosion and sedimentation impacts would be addressed through conformance with the contractor's required best management practices, as described in Section 1.1, as well as the erosion control requirements outlined in the project's grading permit. Implementation of these practices would ensure project construction would not result in substantial soil erosion or topsoil loss. After completion of construction activities, the District would implement brush management of the easement, similar to existing conditions. No increase in erosion in the project area would occur as compared to existing conditions. 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?

No Impact. As described in items VII.a.iii and VII.a.iv above, the project would not result in adverse effects related to landslide or liquefaction. The potential for lateral spreading, subsidence, and collapse are typically related to a location's potential for liquefaction. Therefore, the project is not located on or anticipated to result in an unstable geologic unit associated with landslide, lateral spreading, subsidence, liquefaction, or collapse. No impact would occur.

- 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. As discussed in the Murai Specific Plan Final EIR (City 2018, SCH No. 2016091054), which previously examined the eastern portion of the proposed project alignment options, the majority of the onsite materials are anticipated to have a very low to low expansion potential. However, some of the onsite materials are anticipated to exhibit a medium expansion potential. As such, these materials are susceptible to volume changes with variations in their moisture content, expanding with the introduction of water and shrinking as the soil dries (City 2018). The proposed project would construct below-ground infrastructure and would not introduce new surface water or irrigation to the study area or surrounding areas. Furthermore, the County General Plan does not identify the western portion of the proposed project alignment options as an area with potential expansive soil (County 2011a; Figure 2.6-5). Impacts related to construction within expansive soils would therefore be less than significant.

- 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 project does not propose the installation or use of septic tanks or alternative waste water disposal systems. The project would install a water pipeline that would allow for the continued transport of water throughout the project region. No impact would occur.

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

Less Than Significant Impact. The western portion of the proposed project alignment options are identified in the County General Plan as an area of marginal paleontological sensitivity (County 2011a; Figure 2.5-3). The Murai Specific Plan EIR, which examined the eastern portion of the proposed project alignment options, determined that the area is underlain by Santiago Peak Volcanics which have a low probability of producing paleontological resources (City 2018). Therefore, implementation of the three proposed project alignment options would not result in significant impacts to previously undiscovered paleontological resources, and no paleontological monitoring is required.

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

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

Less Than Significant Impact. The County adopted its Final Climate Action Plan (CAP) on September 11, 2024, which is a qualified greenhouse gas (GHG) reduction plan pursuant to CEQA Guidelines Section 15183.5. The County CAP includes the CAP Consistency Review Checklist as Appendix 8, which incorporates applicable CAP measures and actions into proposed projects and provides a streamlined environmental review process for GHG emissions analysis. The CAP Consistency Review Checklist consists of a two-step process: Step 1 includes a demonstration of consistency with the General Plan and Zoning Ordinance; and Step 2 includes a demonstration of consistency with applicable CAP measures and actions. The proposed project alignment options have been analyzed in accordance with the CAP Consistency Review Checklist (see Appendix D) and would be consistent with the County General Plan and Zoning Ordinance as well as all applicable County CAP measures and actions.

The City adopted its Final CAP on December 8, 2020 (City 2020a), which is also a qualified GHG reduction plan pursuant to CEQA Guidelines Section 15183.5. The City CAP relies on a screening threshold of 500 MT CO₂e per year based on land use size and a CAP Consistency Checklist to determine whether a project's emissions would be consistent with GHG emissions estimated within the City's CAP. Development projects consistent with an applicable local qualified GHG reduction plan are eligible for streamlined GHG analysis under CEQA. Development projects within the City which are consistent with the City's CAP would be consistent with statewide GHG reduction goals for 2030 (per Senate Bill [SB] 32) and would demonstrate progress towards the 2045 GHG reduction goal established by Executive Order S-3-05. As discussed in Appendix D of the City's CAP, projects that are projected to emit more than 500 MT CO₂e of GHGs annually would need to then demonstrate consistency through the completion of the CAP Consistency Checklist (City 2020a), which contains questions pertaining to how a development project would be consistent with relevant CAP strategies and measures. Projects determined to be consistent with relevant CAP strategies and measures demonstrated through regulatory compliance or mitigation would have less than cumulatively considerable GHG emissions.

Project construction would result in GHG emissions generated by vehicle engine exhaust from construction equipment and worker commuting trips. However, construction of either of the three proposed project alignment options would be minimal and temporary in nature and would be well

below the City CAP screening threshold. The City CAP's screening threshold only applies to operational emissions, and no operational emissions would result from the proposed project. However, SCAQMD recommends that construction emissions be amortized over a 30-year period and added to the operational emissions, which would further reduce the minimal emissions produced during construction of the project. Construction emissions would not exceed the City screening threshold of 500 MT CO₂e per year and the project would not be required to demonstrate consistency through the CAP Consistency Checklist. As discussed above, the proposed project alignment options would be additionally consistent with the County CAP. Therefore, impacts related to the direct or indirect generation of GHG emissions 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?

Less Than Significant Impact. There are numerous State plans, policies, and regulations adopted for the purpose of reducing GHG emissions. The principal overall State plan and policy is AB 32, the California Global Warming Solutions Act of 2006. The initial quantitative goal of AB 32 was to reduce GHG emissions to 1990 levels by 2020. Senate Bill 32 would require further reductions of 40 percent below 1990 levels by 2030 and AB 1279 established a policy to achieve net zero GHG emissions no later than 2045 and achieve and maintain net negative GHG emissions thereafter. Statewide plans and regulations such as GHG emissions standards for vehicles (AB 1493), the low carbon fuel standard, and regulations requiring an increasing fraction of electricity to be generated from renewable sources are being implemented at the statewide level; as such, compliance at the project level is not addressed.

As described in item VIII.a, the project would comply with the County's CAP as well as the City's CAP, which are intended to bring the County and City into alignment with statewide plans, policies, and regulations related to GHG emissions. Therefore, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs and impacts would be less than significant.

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?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
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?	☐	☐	☒	☐
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

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

Less Than Significant Impact. Construction activities may involve the limited transport, storage, use, and/or disposal of hazardous materials, such as for the fueling and servicing of construction equipment on-site. These activities would be short-term or one-time in nature and would be subject to federal, state, and local health and safety regulations, which would minimize hazards related to the use of these materials. Long-term operation of the project would not involve hazardous materials since pipelines would be sealed underground and do not emit hazardous materials. The project would not result in a significant hazard related to the transport, use, or disposal of hazardous materials and impacts 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, limited amounts of hazardous materials would be used during construction; however, these materials would be used and stored in accordance with applicable regulations that would limit the potential for their accidental release. As the proposed pipeline would be sealed underground, there are no reasonably foreseeable upset or accident conditions that would result in the release of hazardous materials into the environment. 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?

No Impact. There are no schools located within one-quarter mile of the three proposed project alignment options. The nearest school to the proposed project alignment options would be Paloma Elementary School, which is located approximately 0.75 miles south of the southernmost project alignment option. Therefore, the project would not result in the emission or handling of hazardous materials within one-quarter mile of a school site and no impact would occur.

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

No Impact. The Department of Toxic Substances Control (DTSC) EnviroStor database and the State Water Resources Control Board (SWRCB) GeoTracker database were consulted to identify if the study area or surrounding nearby properties are on a list compiled pursuant to Government Code 65962.5. No open cases for hazardous materials sites were recorded in GeoTracker within a 1,000-foot radius of the three proposed project alignment options (SWRCB 2024). In addition, no open cases for hazardous materials sites were recorded in EnviroStor within a 1,000-foot radius of the three proposed project alignment options (DTSC 2024). As such, the project would not create a significant hazard to the public or the environment due to a hazardous materials site and no impact would occur.

- 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 nearest airport to the study area is the McClellan-Palomar Airport, located approximately 5.2 miles to the northwest. The study area is partially located in Review Area 2 for the McClellan-Palomar Airport but is not located within the noise contours, Accident Potential Zones, or Federal Aviation Administration height notification areas associated with this airport (San Diego County Regional Airport Authority [SDCRAA] 2011). As a result, the proposed project would not result in a safety hazard or excessive noise for people residing or working in the project area, and 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. During construction of the project, heavy construction vehicles could interfere with emergency response to the site or emergency evacuation procedures in the event of an emergency (e.g., vehicles traveling behind the slow-moving truck). Construction activity of the three proposed project alignment options would partially occur in the public right-of-way on Esplendido Avenue and Blue Bird Canyon Road and would therefore require a Traffic Control Permit from the County and a Right-Of-Way Permit from the City, which includes the submittal of a traffic control plan. The Traffic Control Permit and Right-Of-Way Permit would be developed with measures to ensure traffic safety is maintained throughout project construction. The project's Traffic Control Permit would be reviewed and approved by the County and Right-Of-Way Permit would be reviewed and approved by the City to ensure that project construction would not interfere with emergency response or evacuations. After construction, no project components would be aboveground and there would be no interference with emergency operations. Adherence to the Traffic Control Permit and Right-Of-Way

Permit would reduce potential conflicts with emergency response or evacuation plans 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?

Less Than Significant Impact. The western portion of the three proposed project alignment options is within an area designated as a Very High Fire Hazard Severity Zone (California Department of Forestry and Fire Protection [CAL FIRE] 2023). The study area is comprised of vacant lands with low-lying brush and present the potential for wildland fires during construction. Implementation of brush management practices, further described in Section 1.1 above, would ensure the use of construction equipment near wildlands does not result in wildland fires. No change to wildland fire risk would occur after construction when the pipeline is sealed underground. Impacts would be less than significant.

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?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☒
iii. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
iv. Impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

- 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 associated with the project include short-term construction-related discharges. The proposed project is considered a Linear Underground Project that would disturb less than one acre of land, and the construction contractor would be required to comply with the requirements outlined within the project's grading permit, including erosion control measures. Upon completion of construction, project components would be located underground and would not result in runoff that could degrade water quality. With the implementation of construction requirements outlined in the grading permit, impacts related to water quality 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?

No Impact. The three proposed project alignment options would be constructed within undeveloped open space which would be kept free of vegetation during operation, and no increase in the amount of impermeable surface at the study area would occur. The project would not require the withdrawal of groundwater. Therefore, the project would not decrease groundwater supplies or interfere with groundwater recharge and no impact would occur.

- 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. During construction, the removal of vegetation and excavation of trenches would expose soils, which may result in erosion or siltation on- or off-site. In addition, the project area would be kept free of vegetation during operation; however, the project would be required to comply with the erosion control measures within the project's grading permit. In addition, the project would implement required best management practices which would further prevent erosion or siltation on- or off-site. With implementation of the erosion control measures described above, impacts related to erosion and siltation 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. The study area consists of densely vegetated open space and would be kept free of vegetation after pipeline installation, which would be similar to the condition of the existing District utility easement. Project components would be located underground, and no additional pervious surfaces would be introduced by the project. As such, no change to the volume or rate of runoff from the project area would occur such that flooding would be induced on- or off- site, and 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 sources of polluted runoff?

Less Than Significant Impact. As discussed in item X.c.ii above, the project would not result in changes to the amount of runoff from the project area. The project would also not contribute pollutants to the project area that would result in polluted runoff during project operation. During construction activities, the project's contractor would implement standard practices to prevent siltation and polluted runoff from entering the stormwater drainage system. Impacts would be less than significant.

- iv. Impede or redirect flood flows?

No Impact. The study area does not contain floodplains designated by the Federal Emergency Management Agency (FEMA 2012). In addition, the County does not identify the study area as an area within the 100- or 500-year floodplain (County 2023; Figure 5). Therefore, the project would not impede or redirect potential flood flows, and no impact would occur.

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

No Impact. As described in item X.c.iv, the proposed study area is not within a floodplain. The study area would not be at risk of inundation due to tsunami, as it is 9.3 miles east of the Pacific Ocean. In addition, the potential for a seiche to impact the study area is unlikely due to the study area's distance from an upstream large body of water, as discussed in the Murai Specific Plan Final EIR (City 2018). Implementation of the project would not risk release of pollutants in flood hazard, tsunami, or seiche zones and no impact would occur.

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

Less Than Significant Impact. The Carlsbad Management Area Water Quality Improvement Plan was prepared in June 2016 for the Carlsbad Watershed Management Area Responsible Agencies, which include the Cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista, and the County of San Diego (Project Clean Water 2021). The purpose of the Carlsbad Water Quality Improvement Plan is to guide the Responsible Agencies' jurisdictional runoff management plans towards achieving improved water quality in MS4 discharges (or stormwater discharges) and receiving water bodies. The proposed project alignment options are located within the San Marcos Hydrologic Area, which is the second largest within the Carlsbad Watershed Management Area. The Carlsbad Management Area Water Quality Improvement Plan outlines areas of priority water quality conditions and highest priority water quality conditions. As described in Section 1.1, the project would implement required erosion control practices during construction to prevent construction pollutants and products

from violating any water quality standards or waste discharge requirements. Further, the site is not located within a sustainable groundwater management plan area (California Department of Water Resources 2024). Therefore, impacts are determined to 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?	☐	☐	☐	☒
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?	☐	☒	☐	☐

a) Physically divide an established community?

No Impact. The eastern portion of the three proposed project alignment options would be installed within land designated as Open Space in the City's Murai Specific Plan, while the western portion of the proposed project alignment options would be installed within land designated as Semi-Rural Residential in the County General Plan. All project components would be located underground upon completion of construction. As such, the project would not physically divide an established community and no impact would occur.

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?

Less Than Significant with Mitigation Incorporated. The proposed project alignment options would be installed underground within private property and would not result in changes to land use types in the project area. During construction, staging would occur in the project area along the chosen alignment and would not result in changes to land uses.

As described throughout this Initial Study, the project has the potential to result in a conflict with policies and/or regulations adopted for the purpose of avoiding or mitigating environmental impacts. As evaluated above in Section 2.IV, the proposed project could result in potential impacts to biological resources. Implementation of mitigation measures BIO-1 through BIO-7 would reduce or avoid construction-related impacts to resources.

The project proposes work within the Esplendido Avenue and presents the potential to result in traffic hazards and impacts to circulation. Adherence to the Traffic Control Plan approved by the City would reduce the potential for adverse impacts related to circulation and ensure consistency with local traffic policies. After construction is completed, surfaces would be returned to their pre-project conditions and circulation elements would resume functioning as outlined in the City General Plan Mobility Element.

As evaluated in Section 2.XIII, construction activities have the potential to generate noise adjacent to residences; however, these activities would occur during the hours prescribed by the City and County Noise Ordinance. Should a residence be located within the setback distance described in Section 2.XIII, mitigation measure NOI-1 would be implemented which would reduce potential impacts to a less than significant level.

The proposed project would not result in changes to land use and would not result in other land use policy conflicts. With the implementation of the mitigation measures discussed above, impacts would be less than significant.

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

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

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

Less Than Significant Impact. Mineral Resource Zone (MRZ) categories are used by the State Geologist to classify the lands according to their potential to contain mineral resources. The study area is within MRZ-3, where the significance of mineral deposits is undetermined (County 2011a; City 2012). Further exploration work within these areas could result in the reclassification of specific localities into the MRZ-2 category. However, the project does not propose a land use that would preclude mineral extraction, nor would it permanently restrict access to areas for potential future mining operations. The project would not result in the loss of availability of mineral resources or a delineated mineral resource recovery site and impacts would be less than significant.

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?	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 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?	☐	☐	☐	☒

The discussion below is based on the Construction Noise Analysis prepared by HELIX (2025b), attached to this Initial Study as Appendix E. Noise levels presented herein are expressed in terms of decibels (dB), with A weighting (dBA) to approximate the hearing sensitivity of humans and time-averaged noise levels are expressed by the symbol L_{EQ} .

- 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 with Mitigation Incorporated. Operation of the pipeline would not result in any permanent increases in noise levels in the project area. However, construction of the project would result in temporary construction-related noise increases. The County Noise Ordinance states that except for emergency work, it shall be unlawful for any person to operate construction equipment or cause construction equipment to be operated, that exceeds an average sound level of 75 dBA for an eight-hour period, between 7:00 a.m. and 7:00 p.m. The San Marcos Municipal Code prohibits demolition and building construction activities that occur Monday through Friday before 7:00 a.m. and after 6:00 p.m. or on Saturdays before 8:00 a.m. or after 5:00 p.m. The San Marcos Municipal Code Section 17.32.180 addresses the time limits that apply to grading, extraction, and blasting between 7:00 a.m. and 4:30 p.m. Monday through Friday. Grading, extraction, or related earth moving is not allowed in the City on the weekends or holidays. The City Noise Ordinance does not include a quantified noise level limit for construction noise; however, the City has commonly utilized the County's Noise Ordinance noise limit of 75 dBA for construction activities.

Noise levels from the anticipated construction equipment were calculated in the Roadway Construction Noise Model. The model considered a pickup truck, a dump truck, a dozer, a compactor, and a backhoe to operate continuously and simultaneously at a single location. Exceedances of the construction noise

limit of 75 dBA L_{EQ} (8-hour) for construction activities for any project alternative would occur within the setback distance provided in Table 3, *Construction Equipment Setback Distances*.

Table 3
CONSTRUCTION EQUIPMENT SETBACK DISTANCES

Project Alternative	Threshold at NSLU (dBA L_{EQ} 8-hour)	Land Use Type	Distance Within Which Noise Levels Would Exceed Threshold (feet)
Existing Alignment Option	75	Residential	110
Road Alternative Alignment Option	75	Residential	110
SE10 Alternative Alignment Option	75	Residential	110

Source: HELIX 2025b; Appendix E

dBA = A-weighted decibel; L_{EQ} = time-averaged noise level

The setback distances where construction noise levels are expected to exceed the 75 dBA L_{EQ} (8-hour) noise limit under each project alternative are displayed in Figures 4 through 6 of Appendix E. If a residence is located within the setback distance, mitigation measures would be required. Because each alignment option would be located within these distances, impacts would be significant.

Construction noise minimization measures provided in mitigation measure NOI-1 as well as other sound control methods would be required to reduce the noise levels to the specified limits. In addition, construction of the project would occur in accordance with the allowable construction activity hours set by the City and County identified above. With the incorporation of mitigation measure NOI-1, the project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of City or County standards, and impacts would be less than significant.

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

Less Than Significant Impact. The County General Plan EIR (County 2011b) considers impacts related to human annoyance by vibration in accordance with Federal Transportation Administration (FTA) thresholds, which state residential land uses would be disturbed by generation of 80 vibration decibels (VdB) from frequent events, defined as more than 30 vibration events per day. The FTA also provides vibration damage criteria for buildings and states that buildings extremely susceptible to vibration damage may be affected by vibration levels of 90 VdB (FTA 2018). The City does not have adopted vibration criteria; however, the Murai Specific Plan EIR, which encompasses the proposed study area, additionally relied on the FTA thresholds as described above (City 2018).

The highest potential for vibration during construction would be associated with compacting equipment such as a vibratory roller. According to the FTA, a vibratory roller typically produces a vibration level of 94 VdB at a distance of 25 feet (FTA 2018). A vibratory roller is anticipated to be used within the Esplendido Avenue roadway. At these locations, a roller would be used over 100 feet from nearby

residences. At 100 feet, a vibratory roller would generate a vibration level of 76 VdB.¹ This would not exceed the threshold for vibration damage for buildings extremely susceptible to vibration damage. Therefore, no structural damage due to vibration would occur.

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

No Impact. The study area is not located within the planning area for nearby airports and is not within two miles of an airport where such a plan has not been adopted (SDCRAA 2011). As such, the project is not within the noise contours for nearby airports and people constructing the project would not be exposed to excessive aircraft noise. No impact would occur.

Mitigation

NOI-1 Construction Noise Management Plan. Noise levels from project-related construction activities shall not exceed the noise limit specified in San Diego County Code Section 36.408 and 36.409 of 75 dBA (8-hour average), when measured at the boundary line of the property where the noise is located or any occupied property where noise is being received. A Construction Management Plan describing the measures shall be included on the construction plans to ensure compliance with the noise limit. The plan shall be prepared by the project applicant for approval prior to issuance of the grading permit. The following measures may be included to reduce construction noise:

- Construction equipment to be properly outfitted and maintained with manufacturer-recommended noise-reduction.
- Diesel equipment to be operated with closed engine doors and equipped with factory-recommended mufflers.
- Mobile or fixed “package” equipment (e.g., arc-welders and air compressors) to be equipped with shrouds and noise control features that are readily available for that type of equipment.
- Electrically powered equipment to be used instead of pneumatic or internal-combustion-powered equipment, where feasible.
- Unnecessary idling of internal combustion engines (e.g., in excess of 5 minutes) to be prohibited.
- Material stockpiles and mobile equipment staging, parking, and maintenance areas to be located as far as practicable from noise-sensitive receptors.
- The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.
- No project-related public address or music system shall be audible at any adjacent sensitive receptor.

¹ Vibration level at distance = Reference vibration level – 30*LOG(D/25), where Reference vibration level is at 25 feet and D is distance from equipment to the receiver in feet; formula from FTA 2018.

- Temporary sound barriers or sound blankets may be installed between construction operations and adjacent noise-sensitive receptors. Due to equipment exhaust pipes being approximately 7 to 8 feet above ground, a sound wall at least 8 feet in height above grade, to block the line-of-sight between project construction activities and residences along the northern, and western property lines. These barriers would mitigate noise levels to within acceptable levels. To effectively reduce noise levels, the sound barrier should be constructed of a material with a minimum weight of two pounds per square foot with no gaps or perforations and remain in place until the conclusion of construction activities.
- The project applicant shall notify residences within 100 feet of the project's property line in writing within one week of any construction activity. The notification shall describe the activities anticipated, provide dates and hours, and provide contact information with a description of a complaint and response procedure.
- The on-site construction supervisor shall have the responsibility to receive and resolve noise complaints. A clear appeal process for the affected resident shall be established prior to construction commencement to allow for resolution of noise problems that cannot be immediately solved by the site supervisor.

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

- 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)?

No Impact. The proposed project would not include any new homes or businesses and would not directly induce population growth. Although the pipeline would replace the existing pipeline with a larger pipeline, the proposed project is not anticipated to induce population growth, as it would accommodate flows from planned development in the area. Land use plans developed by the City anticipate growth in the Murai Specific Plan Area where the project is proposed. While the project would serve these uses, it would not induce growth that was not previously anticipated. As such, the project would not induce direct or indirect population growth, and no impact would occur.

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

No Impact. All three of the proposed project alignment options would not require the removal of existing housing, and therefore, would not necessitate the construction of replacement housing elsewhere. No impact would occur.

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, to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?	☐	☐	☐	☒
b) Police protection?	☐	☐	☐	☒
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

- a) Fire protection?

No Impact. The Project would not induce population growth or create new aboveground structures that would require fire protection services. The proposed pipeline would operate passively underground and would not be a potential fire source. During construction, fire protection may be required, but these would be short-term demands and would not require increases in the level of public service offered or affect response times. No new or altered fire protection facilities would be required, and no impact would occur.

- b) Police protection?

No Impact. All three proposed project alignment options would not result in population growth or the construction of features that would require police protection. Since the project components would be contained underground, no police protection services would be required during operation. No impact would occur.

c) Schools?

No Impact. The three proposed project alignment options would not induce population growth, including that of school-aged children. Therefore, no new or altered school facilities would be required and no impact would occur.

d) Parks?

No Impact. The three proposed project alignment options would not result in population growth and thereby would not result in an increased need for parks or the need for upgrades to existing park facilities. No impact would occur.

e) Other public facilities?

No Impact. No population growth would occur as a result of the project. Therefore, no increased use of public facilities or need for new public facilities would occur and there would be no impact.

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?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

a) 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 three proposed project alignment options would not result in population growth and would not increase the use of parks or recreational facilities. Thus, substantial physical deterioration of these facilities would not occur or be accelerated, and no impact would occur.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The three proposed project alignment options would install water pipelines at three different possible locations and would not propose any recreational facilities. Additionally, the three proposed project alignment options would not induce population growth that would require the construction or expansion of park or recreational facilities. No impact would occur.

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?	☐	☐	☒	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

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

Less Than Significant Impact. During construction, the project would temporarily alter existing circulation patterns. As described in Section 1.1, the project would establish a Traffic Control Plan from the City which would outline procedures and traffic control measures necessary to ensure adequate access would be maintained during the altered traffic conditions. At the conclusion of construction, Esplendido Avenue and Blue Bird Canyon Road would be returned to pre-project conditions in compliance with the County's circulation programs. The project would not affect City roadways. Plans and policies. Impacts would be less than significant.

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

Less Than Significant Impact. According to CEQA Guidelines Section 15064.3 subdivision (b), vehicle miles traveled (VMT) exceeding an applicable threshold of significance may indicate a significant impact. The County has adopted the Transportation Study Guidelines which provide a list of project types that can be screened from detailed VMT analysis and assumed to result in a less than significant impact. Projects that generate fewer than 110 trips per day can be assumed to cause a less than significant transportation impact (County 2022). The City has adopted a similar screening threshold within the Transportation Impact Analysis Guidelines, which also states that projects generating less than 110 trips per day can be assumed to cause a less than significant transportation impact (City 2020b). Project-generated trips would be limited to the construction period when a limited number of construction workers and various construction materials would be transported to the site. Based on CalEEMod default assumptions (see Appendix A) it was estimated that construction of the project would involve 20 one-way worker trips per day, or 40 round-trip worker trips. The project would not exceed the 110-trip threshold and no conflicts with CEQA Guidelines Section 15064.3 subdivision (b) would occur. Impacts would be less than significant.

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

Less Than Significant Impact. As previously described, the project would require altered traffic patterns during construction; however, adherence to the provisions of the project Traffic Control Permit and Right-Of-Way Permit from the County and City, respectively, would ensure that road and lane closures would not result in substantial hazards to construction personnel or users of the circulation system. After construction, roadways would be returned to their pre-project conditions and would not introduce hazardous design features or incompatible uses. Impacts would be less than significant.

- d) Result in inadequate emergency access?

Less Than Significant Impact. During construction occurring in public ROWs, measures included in the traffic control plan would be implemented to ensure that adequate emergency access would be maintained. After construction, roadways would be returned to pre-project conditions and would accommodate emergency vehicle access. 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	☐	☒	☐	☐
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.	☐	☒	☐	☐

- 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)?
- 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. As discussed in Section V, the Sacred Lands File search results from the NAHC were received on May 2, 2024, and were negative. HELIX contacted the recommended representatives to request information on tribal or cultural resources associated with the project area on May 31, 2024. To date, two responses have been received, one from the San Pasqual Band of Mission Indians (San Pasqual) and one from the Rincon Band of Luiseño Indians (Rincon). A response from San Pasqual indicated that the study area is within their Traditional Use Area (TUA) and requested Assembly Bill (AB) 52 government-to-government consultation, to review any cultural resource reports generated for this project and offered to provide Native American monitoring for the project. Rincon stated that this project is within their TUA and their specific Area of Historic Interest, and that the project area is in the vicinity of a “place name...associated with the Luiseño people.” Rincon additionally requested AB 52 government-to-government consultation and that a Rincon monitor be present at the cultural resources survey for this study.

As discussed in item V.b above, the cultural resources survey for the project identified two shell scatters located along the SE10 Alignment Alternative Option at the base of the private properties located upslope to the north. HELIX conducted a site visit with Rincon’s Tribal Historic Preservation Officer, Cheryl Madrigal, on July 17, 2024. Ms. Madrigal examined the shell scatters and agreed with the determination that the identified shell scatters had been displaced from their primary context and, therefore, lack integrity, and no additional archaeological testing is recommended. However, the presence of cultural resources further indicates the cultural sensitivity of the project area and Ms. Madrigal recommended archaeological and Native American monitoring during ground disturbance.

The District commenced the AB 52 process by sending out consultation invitation letters on March 26, 2025 to the tribes who previously requested notification pursuant to Public Resources Code section 21080.3.1.

Rincon responded on April 17, 2025, stating that the project is within their TUA and the Rincon Band is traditionally and culturally affiliated to the project area. Rincon requested copies of existing documents pertaining to the project such as the cultural survey including the archaeological site records, geographic location files, archaeological record search results, geotechnical report, and the grading plans. Upon receipt and review, the Rincon Band would like to consult on the project. The District met with Rincon on May 16, 2025, and Rincon requested copies of the technical documents, which were provided. Rincon agreed with the recommendation to require archaeological and Native American monitors for ground-disturbing activities (as discussed in Section V, CUL-1). No follow-up requests were received. No other Tribes responded to the District’s consultation request.

Ground disturbance associated with the proposed project has the potential to unearth previously unknown cultural resources of Native American origin that could be considered tribal cultural resources. However, the mitigation measure CUL-1 outlined in Section V would mitigate this potential impact. Therefore, an archaeological and Native American monitoring program shall be implemented under mitigation measure CUL-1, as described in Section V. With the implementation of CUL-1, the project would not cause a substantial adverse change in the significance of a tribal cultural resource, and impacts would be reduced to a less than significant level.

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?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☐	☒
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

- a) 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. No wastewater, storm water, electric, natural gas, or telecommunications utilities would be required for operation of the proposed project. The proposed project consists of the replacement of an existing water pipeline at one of three proposed locations. Although the project would replace an existing 14-inch pipe and replace it with a large 18-inch pipe, it would be to maintain flows for existing and planned development in the area. The project would not substantially increase water flows in the area, requiring the expansion of associated District infrastructure. Future development proposing connections to District infrastructure would be required to undergo separate

review by the District to ensure capacity to accommodate proposed water flows. The three proposed project alignment options would not require the construction or relocation of utilities which could cause significant environmental effects and 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. The project would not involve operations that would require permanent water supplies. Water supplies required during the construction of the project would be limited to water utilized in water trucks for dust suppression on the study area. Sufficient water supplies from the District are available to provide these limited water supplies to the project during construction. No change to water supplies available to reasonably foreseeable future development during normal, dry, and multiple dry years would occur as a result of the implementation of the three proposed project alignment options. No impact would occur.

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

No Impact. The proposed project would involve the construction of a water pipeline and would not require wastewater service. Therefore, the project would not exceed the wastewater capacity of the local wastewater treatment provider. No impact 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?

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

Less Than Significant Impact. The project would not generate solid waste during operation. During construction, excavated material and other construction supply waste would be disposed of in accordance with applicable construction waste regulations. CALGreen construction debris standards do not apply to this project type. The minimal quantities of solid waste generated during construction would not exceed the capacity of local infrastructure or result in conflicts with applicable statutes and regulations. Impacts would be less than significant.

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?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

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

Less Than Significant Impact. See item IX.f. Adherence to conditions of the required Traffic Control Permit from the County and a Right-Of-Way Permit from the City would ensure the project would not interfere with emergency response or evacuation plans. During project operation, no project components would interfere with emergency operations 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?

Less Than Significant Impact. As described in item IX.g, the western portion of the study area is within an area designated as a Very High Fire Hazard Zone (CAL FIRE 2023). Operation of the project would not result in an exacerbation of wildfire risk as it would be contained underground. During construction, the use of equipment near dry brush with designated fire risk has the potential to result in exacerbated wildfire risks. The project would implement required brush management practices, as outlined in Section 1.1 above, to minimize the potential for the use of construction equipment to result in wildfires. Impacts would be less than significant.

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?

Less Than Significant Impact. The project includes the installation of a water pipeline and associated infrastructure. Similar to existing conditions, ongoing brush management would be required within the existing easement for the Existing Alignment Option or in a new easement under the SE10 or Road Alternative Alignment Options. This maintenance would not exacerbate fire risks, as the District would continue its brush management practices. The project would not exacerbate fire risk or result in temporary or ongoing impacts to the environment and impacts would be less than significant.

- 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?

Less Than Significant Impact. The project would not create habitable or aboveground structures that could be exposed to significant wildfire risks and would not alter drainage patterns in the project area. As described in Section 1.1 above, the project would implement brush management practices to minimize the potential for wildfires to start during project construction. The proposed project would not alter the existing topology of the site, and erosion control measures would be in place to reduce construction-related soil movement. The project is not anticipated to result in risks to nearby people or structures, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Impacts would be less than significant.

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

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

Less Than Significant with Mitigation Incorporated. The project has the potential to result in impacts to coastal California gnatcatcher, Belding's orange-throated whiptail, and Crotch's bumble bee; however, implementation of mitigation measures BIO-1 through BIO-7 would reduce these impacts to a less than significant level. No special status plant species would be impacted by project implementation. The

project also has the potential to impact significant cultural and tribal cultural resources. Implementation of mitigation measure CUL-1 would ensure these impacts are reduced to a less than significant level. Therefore, the project would not substantially degrade the environment, decrease the number or habitat of special status plant or animal species, or eliminate major periods of California history. Impacts would be less than significant with mitigation incorporated.

- b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are 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)?

CEQA Guidelines Section 15130 requires a discussion of the cumulative impacts of a project when the project’s incremental effect is “cumulatively considerable,” meaning that the project’s incremental effects are considerable when viewed in connection with the effects of past, current, and probable future projects.

Projects proposed by the District to be constructed in the same time period as the project include the Camino Corto/Terracina Way Project and the Deodar Reservoir Rehabilitation Project (District 2025). The Camino Corto/Terracina Way Project involves the replacement of approximately 3,200 feet of steel and asbestos cement pipe in Camino Corto, Camino Patricia, Terracina Way and Goetting Way and is anticipated to be completed in Fall of 2025. The Deodar Reservoir Rehabilitation Project involves structural repairs, replacing the reservoir roof, piping work, electrical, safety and security improvements, and access road resurfacing. Construction is anticipated to be completed in 2025. The Camino Corto/Terracina Way and Deodar Reservoir Rehabilitation projects are proposed approximately 3.7 miles northwest and 5.1 miles southeast, respectively. The identified projects would not have construction schedules overlapping with construction of the proposed project, which is anticipated to begin construction as early as late 2025.

As is the case with the proposed project, the identified District projects are intended to serve existing and planned development, and no growth-inducing components are proposed. The Camino Corto/Terracina Way Project consists of passive infrastructure elements which would contribute flows to the District service area but would not result in ongoing environmental impacts during operation. The Deodar Reservoir Rehabilitation Project would involve structural repairs and safety improvements to an existing facility and would not increase the capacity of the reservoir. As the projects would not induce growth or result in ongoing operations, no cumulative impacts related to operation of the project in combination with the other identified projects would occur.

As the construction of the projects identified above is anticipated to be completed before the construction of the proposed project begins, no cumulative noise impacts would occur. Similarly, the addition of vehicle trips associated with the construction workers required to construct these three projects would not contribute to significant, cumulative transportation impacts.

As discussed in Section 2.III, the project’s construction emissions of criteria pollutants would not exceed the screening thresholds, and the project would not produce any operational air emissions. Due to the distance between the project and identified cumulative projects, no localized air quality violations for sensitive receptors would occur. The project was determined to have a less than significant impact in relation to GHG emissions, which are inherently discussed in terms of cumulative impacts.

With implementation of mitigation measures BIO-1 through BIO-7, no net loss of habitat or special status species would occur and impacts to biological resources would be less than significant at the project level and in combination with cumulative projects. The project would implement mitigation measure CUL-1 and would not contribute to the cumulative loss of cultural or tribal cultural resources. Mitigation measure NOI-1 would be implemented which would reduce potential impacts related to noise to a less than significant level and would not contribute to a cumulatively considerable increase in noise generation.

All resource topics for the project and identified projects have been analyzed in accordance with the CEQA Guidelines and found to pose no impact, a less than significant impact, or a less than significant impact with mitigation. Potential cumulative projects that could be constructed in the vicinity of the project would also be required to comply with existing applicable federal, state, and local regulations. The proposed project, by incorporating all mitigation measures outlined herein, would reduce its contribution to cumulative impacts to be less than cumulatively considerable; therefore, the project would result in individually limited, but not cumulatively considerable, less than significant impacts with mitigation incorporated.

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

Less Than Significant Impact. The three proposed project alignment options would not consist of any construction activities or operational components that would negatively affect any persons in the vicinity. In addition, all resource topics have been analyzed in accordance with the State CEQA Guidelines or associated thresholds and found to pose no impact, a less than significant impact, or a less than significant impact with mitigation incorporated. As discussed in Section III, no violations of air quality thresholds would occur and no significant impacts to sensitive receptors related to pollutants would occur. As discussed in Section IX of this Initial Study, there are no concerns from past activities at the study area and no hazardous materials and/or waste would be generated by the project. As detailed in Section XIII, the project would not generate excessive noise that would conflict with local noise ordinances and cause disturbances to local residents with implementation of mitigation measure NOI-1. During construction, temporarily altered traffic conditions may occur; however, implementation of a traffic control plan would ensure emergency access and evacuation routes are maintained. As discussed in Section XX, the project would implement required brush management practices such that the project would not increase risks related to wildfires. Consequently, the project would not result in any environmental effects that would cause substantial adverse effects on human beings directly or indirectly.

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