Washington Street Sewer Bypass Project

Final Initial Study – Mitigated Negative Declaration

prepared by

Castroville Community Services District
11497 Geil Street
Castroville, California 93660
Contact: Eric Tynan, General Manager

prepared with the assistance of

Rincon Consultants, Inc.
2511 Garden Road, Suite C-250
Monterey, California 93490

January 2023

RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
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1 Introduction and Project Description

1.1 Project Title

Washington Street Sewer Bypass Project

1.2 Lead Agency Name and Address

Castroville Community Services District
11499 Geil Street
Castroville, California 95012

1.3 Contact Person and Phone Number

Eric Tynan, General Manager
(831) 633-2560

1.4 Scope and Use of this Document

This Initial Study-Mitigated Negative Declaration (IS-MND) provides an assessment of the potential impacts to environmental resources that would result from implementing the proposed Washington Street Sewer Bypass Project (herein referred to as "proposed project" or "project"). The discussion and level of analysis are commensurate with the expected magnitude and severity of each impact to environmental resources. This document addresses the environmental effects of installing wastewater conveyance infrastructure. The analyses in Chapter 2 are based on technical reports and studies prepared for the project, supplemented with other public information sources as provided in the list of references.

This document evaluates the potential for impacts to resources areas identified in Appendix G of the current (2022) California Environmental Quality Act (CEQA) Guidelines. These resource areas include:

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

1.4.1 Administration of the Clean Water State Revolving Fund Program in California

The Federal Water Pollution Control Act (Clean Water Act or CWA), as amended in 1987, established the Clean Water State Revolving Fund (CWSRF) program. The CWSRF program offers low interest financing agreements for water quality projects. The proposed Washington Street Sewer Bypass Project may be partially funded with a loan through the CWSRF Loan Program. The program is nationally administered by the United States Environmental Protection Agency (USEPA), and in certain instances the administration has been delegated to the individual states. In California, administration of the CWSRF program has been delegated to the State Water Resources Control Board (SWRCB). In turn, the SWRCB requires all projects being considered under the CWSRF program to comply with CEQA and certain federal environmental protection laws, including the federal Endangered Species Act (Section 7), the National Historic Preservation Act (NHPA; Section 106), the General Conformity Rule for the Federal Clean Air Act (FCAA), and other executive orders and federal regulations. Collectively, the SWRCB refers to these requirements as "CEQA-Plus."

This IS-MND has been prepared in accordance with the *State Environmental Review Process for the Clean Water State Revolving Fund Program* (SWRCB 2017) and is expanded beyond the typical content requirements of an IS-MND to include additional CEQA-Plus information. The SWRCB is a CEQA Responsible Agency for the proposed project and would consider this CEQA document prior to CWSRF loan authorization.

1.5 Project Location

The project site is located in Castroville, a census-designated place in Monterey County, on Assessor's Parcel Numbers (APNs) 133-143-016, 030-141-022 and -023, and the California Department of Transportation (Caltrans) right-of-way (ROW) that lies between them along State Route (SR) 1. Land uses surrounding the project site consist of agricultural land, Caltrans ROW, residential and commercial development, the Castroville Education Center campus of Hartnell College, and undeveloped open space. Portions of the project site are within the Coastal Zone, as established by the California Coastal Commission.

The project site includes an existing Monterey One Water (M1W) pump station along Watsonville Road near Castroville, portions of Washington Street and Merritt Street/SR 183, and agricultural and undeveloped lands along the pipeline alignment on either side of SR 1. The project site is relatively flat and varies in elevation from seven feet above mean sea level at each end of the pipeline to 29 feet at SR 1. The project site is approximately 1.8 miles east of the Pacific Ocean and approximately 250 feet north of Tembladero Slough.

Figure 1 shows the project site's regional context, and Figure 2 shows the project site at a local scale. Figure 3 shows the Monterey County zoning designations surrounding the site, the Caltrans ROW, and the Coastal Zone boundary.

1.6 Project Sponsor's Name and Address

Castroville Community Services District
11499 Geil Street
Castroville, California 95012

Figure 1 Regional Project Location

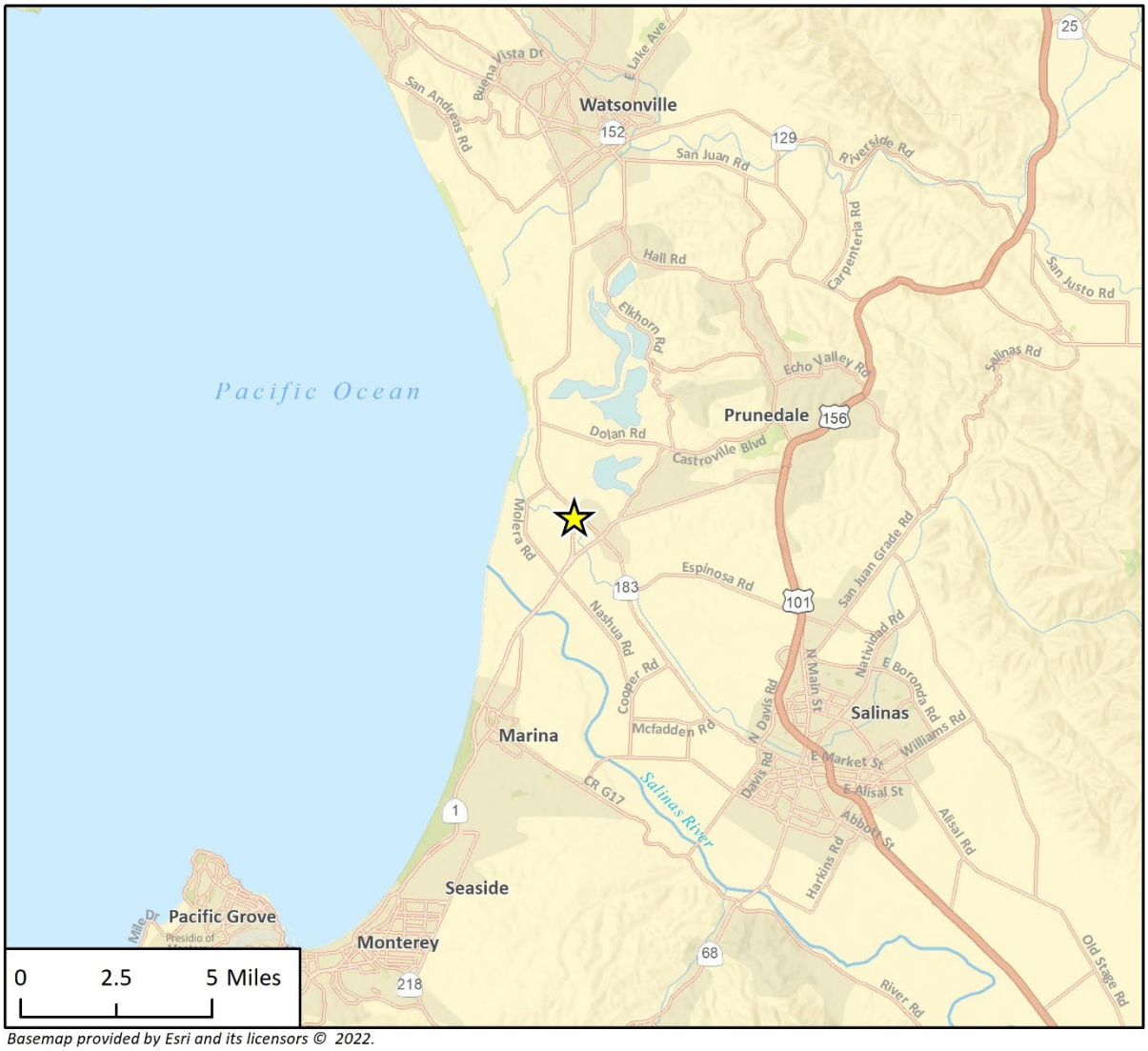

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Figure 2 Project Site Location

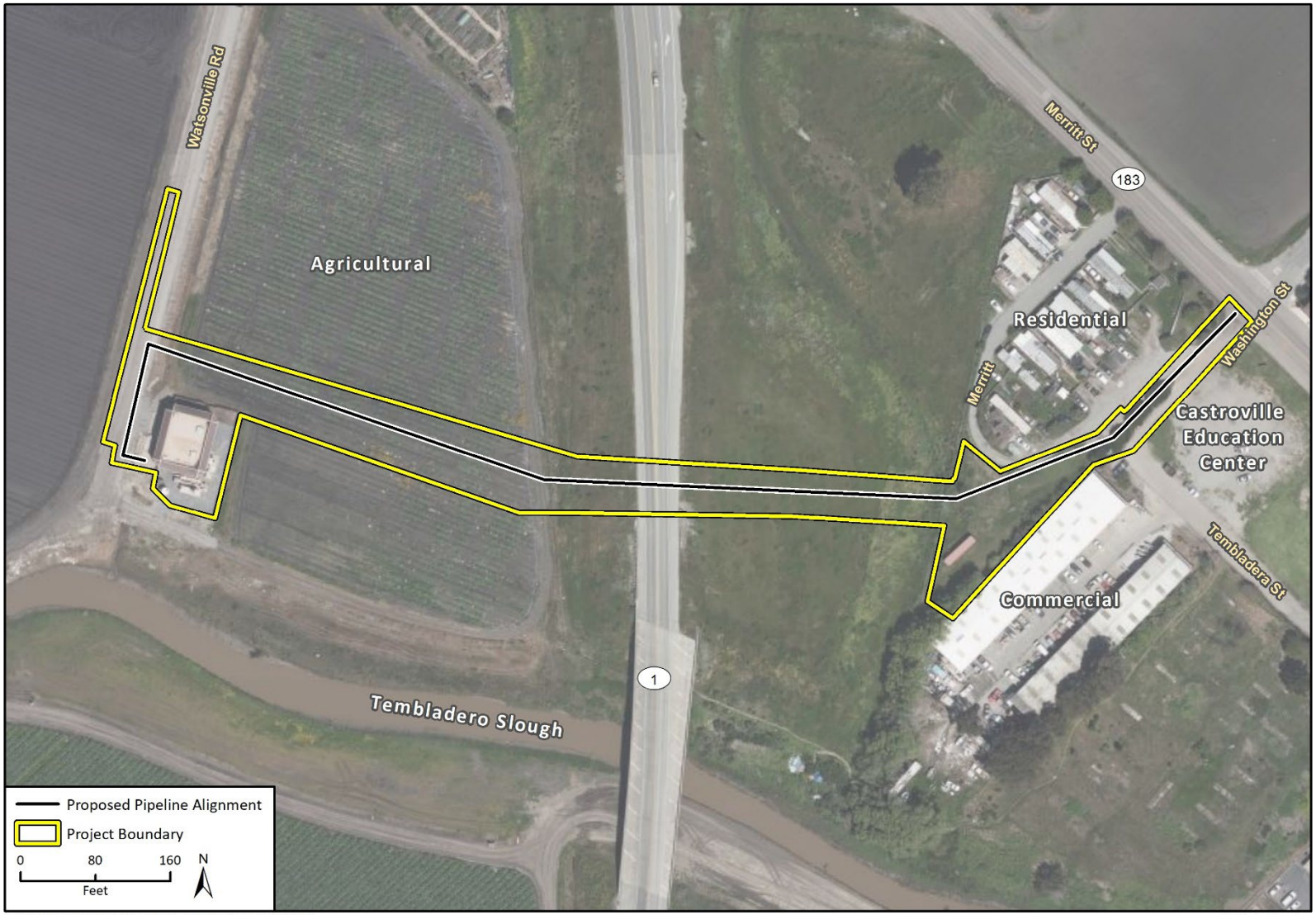

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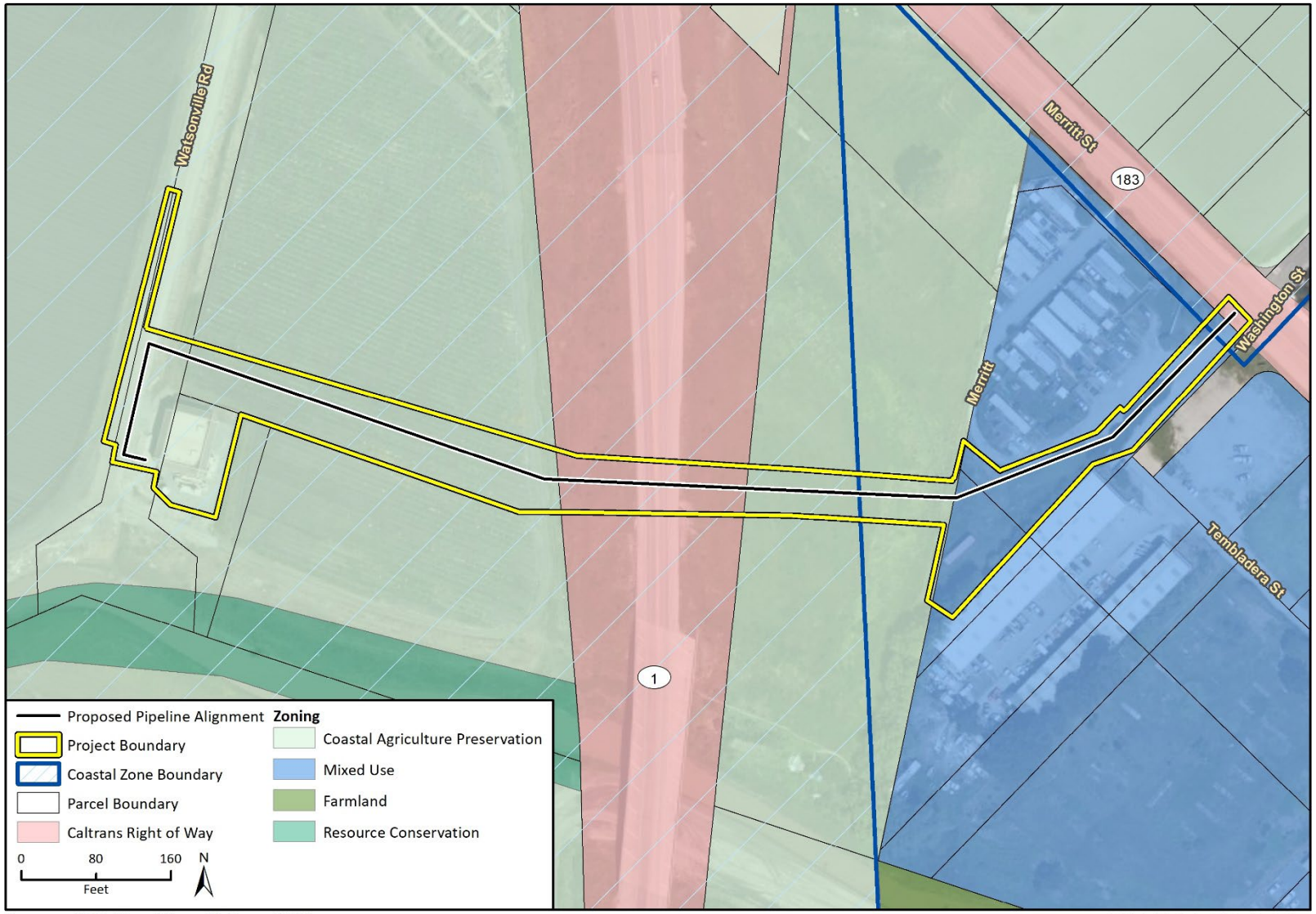
Fig 2 Project Location

Figure 3 Project Site Zoning, Caltrans Right of Way, and Coastal Zone



1.7 General Plan Designations

Mixed Use (Castroville Community Plan), public rights-of-way

1.8 Zoning

Mixed Use (MU-C), Coastal: Agricultural Preservation (CAP-CZ), County rights-of-way

1.9 Description of Project

Project Background

The Castroville Community Services District (District) provides services to customers in the Castroville area of Monterey County. Services provided include water, sewer, stormwater, street lighting, and recreational facilities. The District approximately serves 2,000 residential, commercial, and industrial connections (District 2022).

Currently, the District operates an existing 18-inch sewer line beneath Watsonville Road and Merritt Street/SR 183. There is also an existing abandoned 10-inch sewer line in this location, which roughly follows a portion of the proposed alignment (Figure 2) on the east side of SR-1. In 2013, M1W (formerly the Monterey Regional Water Pollution Control Agency) updated its Wastewater Collection System Master Plan. This updated plan identified the project as an essential improvement needed to provide additional conveyance capacity from the District wastewater collection system to the M1W pump station located on Watsonville Road near the unincorporated community of Castroville. The existing conveyance system is difficult to access and maintain and is under capacity. According to the District, proposed developments identified in the 2006 Castroville Community Plan will exacerbate capacity issues without implementation of the project.

Project Description

The proposed project would involve installation of a 24-inch trunk sewer main, approximately 1,400 feet in length, from the intersection of Washington Street and Merritt Street/SR 183 to the corner of Washington Street and Tembladera Street in the unincorporated community of Castroville, then across undeveloped areas and underneath SR 1 to the M1W pump station located at the south end of Watsonville Road. The proposed 24-inch sewer line would bypass the existing 18-inch sewer line within Watsonville Road to 18-inch sewer upstream of the M1W pump station. The existing 18-inch sewer line would remain in place as an emergency overflow line. The purpose of the project is to provide additional conveyance capacity from the District wastewater collection system to the M1W pump station, and to improve the accessibility of the sewer line in this location.

Pipeline construction would consist of conventional open-cut trench methods and a trenchless crossing to install a segment beneath SR 1.

Construction

Project construction would occur over approximately seven months from May 2024 to November 2024. The project would be constructed in five phases, outlined in Table 1 and described further below.

Table 1 Proposed Construction Schedule

Construction Phase	Duration	Approximate Start and End Dates
Site Preparation for Trenchless Pipeline Installation	2 weeks	May 2024
Pipeline Installation (trenchless)	1 month	June 2024 – July 2024
Site Preparation for Trenched Pipeline Installation	1 month	June 2024
Pipeline Installation (trenched)	4 months	July 2024 – October 2024
Paving and Ground Restoration	1 month	October 2024 – November 2024

Construction work would occur Monday through Friday, from 8:00 a.m. to 6:00 p.m. Construction equipment would be staged on site, as shown in Figure 4.

Site Preparation

Site preparation for trenchless and trenched pipeline installation would occur immediately prior to each phase. During site preparation activities, the project would remove vegetation and existing pavement along the open-cut trench alignment and trenchless exit and entry points. Any existing pavement would be cut and removed from the project site to be recycled or disposed of at an appropriate facility. The project would remove existing ornamental hedges located within the proposed pipeline alignment on Washington Street, to be replaced upon completion of installation if desired and in coordination with the property owner. In addition, the project would result in the disturbance of approximately 0.7 acre of landscaped vegetation within the construction work and laydown areas east of SR 1. Upon completion of pipeline installation activities, the project would involve replanting of shrubs at the intersection of Washington Street and Merritt Street within the proposed work area if desired and in coordination with the property owner.

Easements within the agricultural land and along the residential areas would be established. The type of vegetation to be replanted in disturbed areas could be determined by agreements with the existing landowner associated with the construction easement.

Pipeline Installation

During the trench and trenchless pipeline installation phases, approximately 3,000 cubic yards of soil would be excavated, of which approximately 2,700 cubic yards would be used as fill. Approximately 300 cubic yards of soil would be imported from off-site sources, and approximately 300 cubic yards of soil would be exported off-site. Haul trucks would utilize SR 1, Merritt Street/SR 183, Washington Street, Tembladera Street, and Watsonville Road to transport demolition debris and soil material to the Monterey Peninsula Landfill near the City of Marina, approximately four miles south of the site, or another location as determined by the construction contractor.

Pipeline installation would occur underneath or within roadways located within Caltrans ROW, including SR 1 and along Merritt Street/SR 183. As part of the encroachment permitting process, traffic control plans would be prepared for work within the Caltrans and County rights-of-way. Traffic control plans would be developed to maintain residential and commercial site access to adjacent land uses.

TRENCHLESS INSTALLATION

Trenchless installation would involve the use of a drilling rig to create an underground pathway beneath the Caltrans ROW along SR 1. The drilling rig would install a 36-inch steel casing through

Figure 4 Project Construction Areas

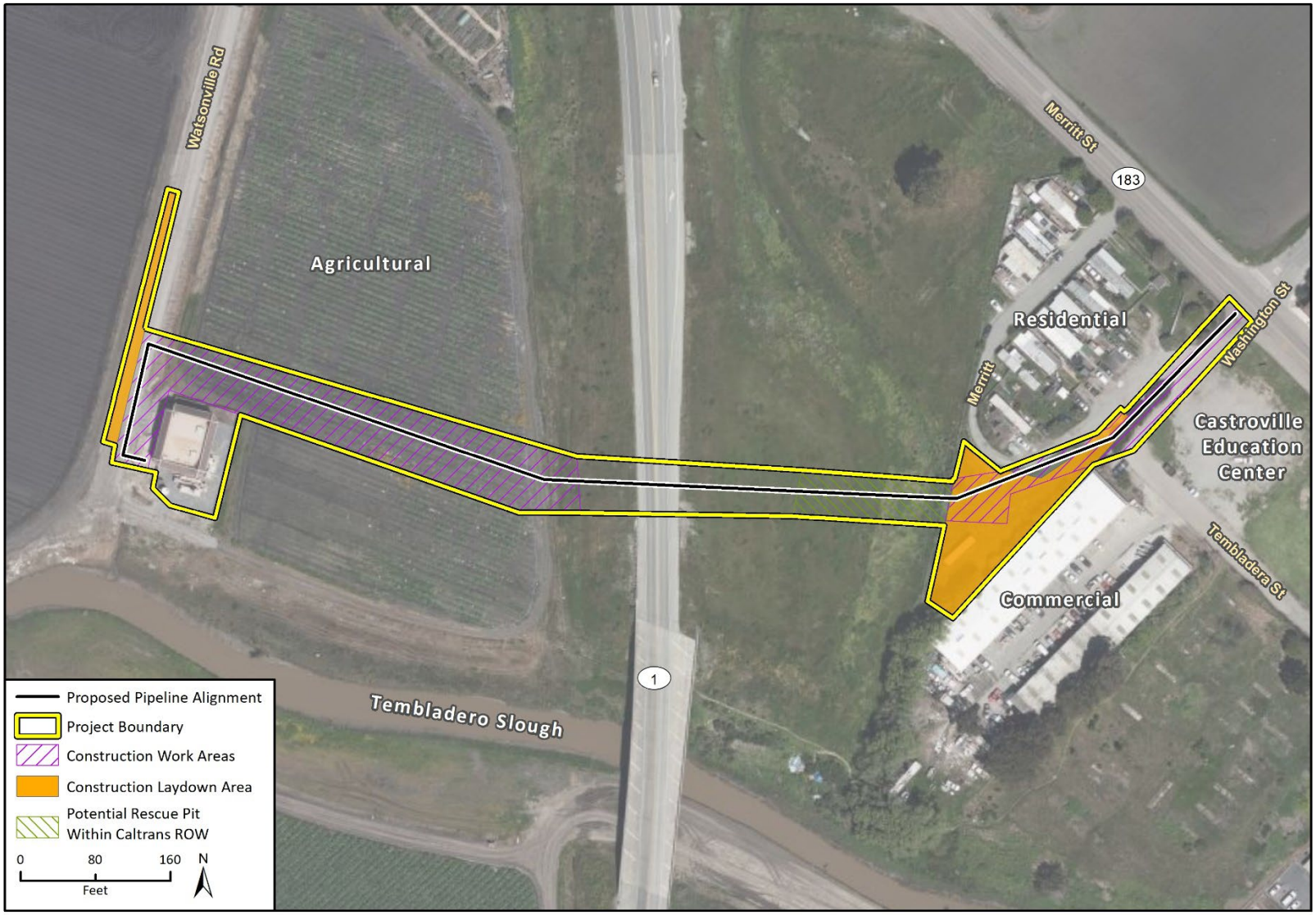


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Fig 3 Project Components

the underground pathway without disturbing the ground surface within the SR 1 Caltrans ROW. The 24-inch sewer line itself would be installed during the open-cut trench installation phase.

An entry pit would be dug on the west side of SR 1, where trenchless drilling would begin within the pit. The entry pit would be approximately 40 feet long, 15 feet across, and 10 feet deep. An exit pit would be installed on the east side of SR 1, where the trenchless drilling equipment would exit the soil. The exit pit would be approximately 12 feet long, 12 feet wide, and 15 feet deep. During trenchless installation, a 235-horsepower diesel generator would be used to power construction equipment. It is estimated the diesel generator would be used for two days for up to 12 hours per day, and an additional eight days for up to eight hours per day.

Trenchless pipeline installation would occur at a maximum depth of 30 feet below ground surface. Trenchless construction activities would also occur during normal working hours of Monday through Friday, from 8:00 a.m. to 6:00 p.m.

Due to the length of the trenchless pipeline installation, there is a possibility that drilling equipment could become stranded within and underneath SR 1 right of way during construction. Should this occur, a rescue pit within the Caltrans ROW would be installed to the east side of SR 1. If necessary, the rescue pit would be 15 feet long, 15 feet wide, and excavated to a maximum depth of 30 feet to provide access to the trenchless installation equipment. Figure 4 shows the area in which a potential rescue pit within Caltrans right-of-way could be required. To account for this possibility, this analysis conservatively assumes the potential rescue pit would be required.

OPEN-CUT TRENCH INSTALLATION

Conventional open-cut trench methods would be used to install the remainder of the pipeline alignment, including in the agricultural field west of SR 1, the undeveloped area east of SR 1, and within the ROW of Washington Street and Merritt Street/SR 183 east of SR 1. Excavation would occur at a maximum depth of 15 feet, and sections of the 24-inch sewer main would be placed along the excavated pipeline pathway. Excavated soil would either be hauled away for disposal or temporarily stored adjacent to the trenches or in construction laydown areas to be used as trench backfill. The segment of 24-inch gravity sewer beneath SR 1 would be placed in the 36-inch steel casing installed during the trenchless installation phase.

An agricultural drainage ditch is situated on the western edge of the agricultural field west of SR 1, running north to south along the eastern shoulder of Watsonville Road. The drainage ditch is likely under the jurisdiction of the United States Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW). To comply with applicable regulations and jurisdictional permits, a pump with an intake filter would be used to temporarily divert flows within the drainage ditch around the section where open-cut trench sewer line installation would occur. It is anticipated this temporary bypass would be in place for approximately one day to accommodate pipeline installation activities through the drainage ditch. A biological resources pre-construction survey and biological monitoring would be undertaken during pumping activities in the drainage ditch. Section 2.4, *Biological Resources,* contains further details regarding the drainage ditch, jurisdictional permitting, and potential impacts to biological resources.

Groundwater may be encountered during trench installation on the west side of SR 1. If groundwater is encountered during excavation for trench pipeline installation, dewatering of the soil would be required. To account for this possibility, this analysis conservatively assumes dewatering would occur for the entire five-month duration of pipeline installation. Dewatering

waste would either (1) be discharged into an on-site infiltration pit, or (2) be treated and then discharged through the new sewer to the M1W pump station. The location of the on-site infiltration pit would be determined by the project construction contractor.

Paving and Ground Restoration

This final phase of construction would involve repaving portions of Washington Street and Merritt Street/SR 183 and restoring the ground surface of the agricultural lands excavated for trench pipeline installation. As described above, excavated areas would be filled with previously excavated soil and an additional 300 cubic yards of imported soil. The project would disturb approximately 0.6 acre of agricultural land during open-cut trench sewer line installation. Agricultural topsoil would be stockpiled separate from other soils and backfill, and would be restored after completion of pipeline installation.

Operation and Maintenance

Once construction of the proposed project is complete, the operation and maintenance needs of the sewer main would be reduced compared to the existing sewer line. Because of the new and improved facilities, the new sewer line would require fewer maintenance trips than the existing under-capacity sewer. The project would not introduce new electricity demands or staffing needs.

Project Design Features

The following project design feature (PDF) would be incorporated into the project.

PDF-1 Construction Best Management Practices

To avoid and/or minimize potential direct and indirect impacts associated with construction, the following Best Management Practices (BMPs) will be implemented:

a. Fugitive dust from ground disturbance activities will be minimized using water trucks and covering of soil stockpiles. Soil will not be stockpiled adjacent to the drainage ditch within the project site nor along project site boundaries adjacent to Tembladero Slough. Exposed areas will be watered up to three times daily as needed.
b. Prior to project mobilization, all limits of construction work adjacent to potentially jurisdictional waters will be clearly delineated with construction fencing or similar highly visible material and maintained throughout the duration of construction.
c. Drain inlets in the vicinity of the project site will be protected from construction runoff. Berms, silt fences, fiber rolls, covers, sand/gravel bags, and or straw wattles will be placed along slopes and property lines, in particular along Watsonville Road along the drainage ditch and the project site boundary adjacent to Tembladero Slough, to prevent construction runoff.
d. All vehicles and equipment will be in good working condition and free of leaks. The contractor will prevent oil, petroleum products, or any other pollutants from contaminating the soil or entering a watercourse (dry or otherwise). When vehicles or equipment are stationary, mats or drip pans will be placed below vehicles to contain fluid leaks.
e. Material storage and material/spoils from project activities will be located and stored 100 feet from waterways. Adequate spill prevention and response equipment will be maintained on site and readily available to implement to minimize impacts to the aquatic environments.
f. Off-site tracking of loose construction and landscape materials will be prevented by providing anti-tracking strips at entrances to the project site.

The District would implement additional construction BMPs as required to comply with Section 4 of the Monterey Regional Storm Water Management Program.

1.10 Coastal Zone

As shown in Figure 3, most of the project site is located in the Coastal Zone, as established by the California Coastal Commission. The California Coastal Commission has planning, regulatory, and permitting responsibilities, in partnership with local governments, for development occurring within the Coastal Zone, an area along the coastline of California. The County of Monterey maintains a Local Coastal Program (LCP), a planning document identifying allowable development within the Coastal Zone that must be certified by the California Coastal Commission. The LCP allows the County to issue Coastal Development Permits, which are required for development in the Coastal Zone. The County's LCP was certified by the California Coastal Commission in 1986, with amendments to the LCP certified in the years following, most recently in 2020.

The California Coastal Commission appeals jurisdiction includes areas within 100 feet of any wetland, estuary, or stream, among other conditions; because the project would be located within 100 feet of Tembladero Slough, the project site is considered to be in the appeals jurisdiction. None of the project site is located within the California Coastal Commission's retained permit jurisdiction. As noted in Table 2, the project would require a Coastal Development Permit from the County of Monterey.

1.11 Other Public Agencies Whose Approval is Required

This project would require permits from other public agencies, outlined below in Table 2.

Table 2 Summary of Potentially Required Approvals

Regulating Agency	Potential Permit/Approval	Reason for Permit/Approval
California Department of Transportation (Caltrans)	Encroachment Permit and Traffic Control Plan	Construction of sewer line within Caltrans ROW on SR 1 and Merritt Street/SR 183
County of Monterey	Encroachment Permit	Construction of sewer line within County roadways
	Coastal Development Permit	Construction of sewer line within Coastal Zone

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is "Potentially Significant" 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/Soils	☐	Greenhouse Gas Emissions	☐	Hazards & Hazardous Materials
☐	Hydrology/Water Quality	☐	Land Use/Planning	☐	Mineral Resources
■	Noise	☐	Population/Housing	☐	Public Services
☐	Recreation	☐	Transportation	■	Tribal Cultural Resources
☐	Utilities/Service Systems	☐	Wildfire	■	Mandatory Findings of Significance

Determination

Based on 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 to 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 "less than significant with mitigation incorporated" 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 potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or

mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	Date
Printed Name	Title

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2 Environmental Checklist

1 Aesthetics

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

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

A scenic vista is a viewpoint that provides expansive views of a highly valued landscape for the public benefit. Although the Monterey County General Plan does not define or identify scenic vistas, the Conservation and Open Space Element of the General Plan establishes Goal OS-1 which seeks to retain the character and natural beauty of Monterey County by preserving, conserving, and maintain unique physical features, natural resources, and agricultural operations (County of Monterey 2010). Monterey County's visual resources are linked to its geography and topography. As such, Monterey County offers numerous scenic landscapes including valleys, ridgelines, vegetation, watercourses, coastal views, and travel routes. The County of Monterey defines seascapes and coastal views as one of the most valued visual resources (County of Monterey 2008).

The project site is located primarily within developed or agricultural areas along SR 1 within the unincorporated community of Castroville. Visual resources in the vicinity of the project site consist

of views of agricultural lands on either side of SR 1 and long-range views of hillsides to the east. The Pacific Ocean is not visible from the project site due to distance. The project would involve installation of an underground sewer line on either side and underneath SR 1 between the existing M1W pump station and Washington Street. The entire pipeline would be located belowground and would therefore not be visible following the completion of project construction. During construction, equipment, worker vehicles, and the open-cut trench would be visible from SR 1 and the existing residential and commercial areas along Washington Street and Merritt Street/SR 183. However, construction would occur over approximately seven months; accordingly, impacts to views of agricultural lands and hillsides would be temporary and would return to their existing condition once construction is completed. Therefore, the project would not have a substantial adverse effect on a scenic vista, and no impact would occur.

NO IMPACT

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

According to maps prepared by Caltrans, the portion of SR 1 traversing the project site is eligible for designation as a state scenic highway. SR 156, beginning near its intersection with SR 183 approximately 0.8 mile southeast of the project site, is the closest officially designated state scenic highway to the project site (Caltrans 2018). The project site is not visible from this portion of SR 183 due to distance and intervening development. Further, the project would not require tree removal and would not damage rock outcroppings or historic buildings. Therefore, the project would not substantially damage scenic resources within a state scenic highway, and no impact would occur.

NO IMPACT

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

According to Public Resources Code 21071(a), Castroville is classified as a nonurbanized area because its population is less than 100,000 persons and it is not located adjacent to one or more incorporated cities with populations that would add up to 100,000 persons or more when combined with the population of Castroville. The proposed sewer line would be located belowground and would not result in changes to the existing visual character or quality of public views of the project site and its surroundings. The project would not require tree removal. The project would temporarily stage construction equipment on site and install the open-cut trench within existing agricultural land; however, these impacts would be temporary and would be limited to the project construction period. The proposed project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Project construction would occur during daytime only and would not introduce new sources of light or glare at the project site that would adversely affect nighttime views in the area. During

construction, sources of light or glare such as construction equipment or construction worker vehicles would be temporarily located on the project site. These sources of light and glare would be limited only to the construction period and would not adversely affect daytime views of the area. In operation, the proposed sewer line would located entirely belowground, and would not involve lights or reflective surfaces that would adversely affect views in the area. Therefore, light and glare impacts to daytime and nighttime views in the area would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

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

According to maps prepared by the California Department of Conservation (DOC), the agricultural land within the project site west of SR 1, outside of the SR 1 Caltrans ROW, is designated as Prime Farmland (DOC 2016a). Open-cut trench installation of the sewer line within this agricultural land would result in approximately 0.6 acre of agricultural land being unavailable for use during the seven-month construction period. Excavation for the depth of the open-cut trench would also disturb the soil and topsoil within the project area. During project construction, topsoil (the top 12 to 18 inches of soil) within the area designated as Prime Farmland would be stockpiled and stored separately from other excavated soils and backfill and would be restored once construction is complete. Following construction, agricultural use would continue at its pre-project condition.

Therefore, the project would not convert Farmland to non-agricultural use, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The agricultural lands within the project site west of SR 1, outside of the SR 1 Caltrans ROW, are zoned as Coastal: Agricultural Preservation (CAP-CZ) (County of Monterey 2022a). As discussed under item (a), open-cut trench installation of the sewer line within this agricultural land would result in the temporary disruption of existing agricultural uses. However, construction activities would be temporary and would not result in permanent aboveground land use changes that would conflict with the site's zoning. The DOC's statewide map Williamson Act Contract Lands indicates the project site is not enrolled in a Williamson Act contract (2016b). Therefore, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

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

The project site does not contain forest land or timberland. According to maps prepared by the California Department of Fish and Wildlife (CDFW), the project site is not within an area identified as private timberlands or public lands with forests (CDFW 2019). The site is zoned as Coastal: Agricultural Preservation (CAP-CZ), which does not include forest land or timberland uses (County of Monterey 2022). Therefore, the project would not conflict with existing zoning or cause rezoning of forest land, timberland, or areas zoned for Timberland Production, and would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur.

NO IMPACT

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

The proposed project would provide additional conveyance capacity from the District wastewater collection system to the M1W pump station in order to meet existing and planned demand, and would improve the accessibility of the sewer line in this location. Upon completion of construction, the aboveground conditions would be restored to match existing conditions. The project would therefore not result in other changes which could result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. No impact would occur.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	■	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	■	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	■	☐	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	■	☐

Overview of Air Pollution

The federal and State Clean Air Acts (CAA) mandate the control and reduction of certain air pollutants. Under these laws, the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for "criteria pollutants" and other pollutants. Some pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere, including carbon monoxide (CO), volatile organic compounds (VOC)/reactive organic gases (ROG),[1] nitrogen oxides (NO_X), particulate matter with diameters of ten microns or less (PM_{10}) and 2.5 microns or less ($PM_{2.5}$), sulfur dioxide, and lead. Other pollutants are created indirectly through chemical reactions in the atmosphere, such as ozone, which is created by atmospheric chemical and photochemical reactions primarily between VOC and NO_X. Secondary pollutants include oxidants, ozone, and sulfate and nitrate particulates (smog).

Air pollutant emissions are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories:

- Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat.

[1] CARB defines VOC and ROG similarly as, "any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate," with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions, and the term VOC is used in this IS-MND.

- Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products.

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and can also be divided into two major subcategories:

- On-road sources may be legally operated on roadways and highways.
- Off-road sources include aircraft, ships, trains, and self-propelled construction equipment.

Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

Air Quality Standards and Attainment

The project site is located is located in the North Central Coast Air Basin, which is under the jurisdiction of the Monterey Bay Air Resources District (MBARD). As the local air quality management agency, MBARD is required to monitor air pollutant levels to ensure that the NAAQS and CAAQS are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the North Central Coast Air Basin is classified as being in "attainment" or "nonattainment." In areas designated as non-attainment for one or more air pollutants, a cumulative air quality impact exists for those air pollutants, and the human health impacts associated with these criteria pollutants are already occurring in that area as part of the environmental baseline condition. Under state law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-attainment. The North Central Coast Air Basin is currently designated nonattainment-transitional for the ozone CAAQS and nonattainment for the PM_{10} CAAQS but is either unclassified or designated attainment for all other NAAQS and CAAQS (CARB 2020).[2] The health effects associated with criteria pollutants for which the North Central Coast Air Basin is in non-attainment are described in Table 3.

Table 3 Health Effects Associated with Non-Attainment Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: (a) pulmonary function decrements and localized lung edema in humans and animals and (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Nitrogen Dioxide (NO_2)	(1) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (2) risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; and (3) contribution to atmospheric discoloration.
Suspended particulate matter (PM_{10})	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma).

Source: USEPA 2021a

[2] A region is designated nonattainment-transitional for ozone when the standard has not been exceeded on more than three days at any one location during the last year.

Air Quality Management

The California Clean Air Act requires each air district with jurisdiction over a nonattainment area in the state to adopt a plan showing how the CAAQS for the ozone will be met. Most recently, MBARD adopted the 2012-2015 Air Quality Management Plan (2015 AQMP) to demonstrate a pathway for the region to make progress toward meeting the ozone CAAQS. Reducing NO_x emissions is crucial for reducing ozone formation and given that the primary sources of NO_x emissions are mobile sources, the 2015 AQMP primarily includes measures to reduce NO_x emissions, focusing on on-road and off-road vehicles.

Air Pollutant Emission Thresholds

The MBARD (2008) *CEQA Air Quality Guidelines* provide a list of construction and operational air pollutant emissions thresholds as well as a list of mitigation measures to incorporate in circumstances where emissions are above applicable thresholds.

Table 4 presents MBARD's project-level significance thresholds for construction and operational criteria air pollutant and precursor emissions. These represent levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the North Central Coast Air Basin's existing air quality conditions. For the purposes of this analysis, the project would result in a significant impact if construction or operational emissions from the project would exceed the thresholds shown in Table 4.

Table 4 Air Quality Thresholds of Significance

Pollutant	Source	Threshold of Significance
Construction Impacts		
PM_{10}	Direct	82 lbs/day[1]
Operational Impacts		
VOC	Direct and Indirect	137 lbs/day
NO_X	Direct and Indirect	137 lbs/day
PM_{10}	On-site	82 lbs/day[2]
CO	N/A	LOS at intersection/road segment degrades from LOS D or better to LOS E or F or V/C ratio at intersection/road segment at LOS E or F increases by 0.05 or more or delay at intersection at LOS E or F increases by 10 seconds or more or reserve capacity at unsignalized intersection at LOS E or F decreases by 50 or more
	Direct	550 lbs/day[3]
SO_X, as SO_2	Direct	150 lbs/day

lbs/day = pounds per day; PM_{10} = particulate matter with a diameter of 10 microns or less; VOC = volatile organic compounds (also referred to as ROG, or reactive organic gases); NO_X = oxides of nitrogen; CO = carbon monoxide; SO_X = oxides of sulfur; SO_2 = sulfur dioxide; LOS = level of service, V/C = volume-to-capacity

[1] This threshold only applies if construction is located nearby or upwind of sensitive receptors. In addition, a significant air quality impact related to PM_{10} emissions may occur if a project uses equipment that is not "typical construction equipment" as specified in Section 5.3 of the MBARD (2008) *CEQA Air Quality Guidelines*.

[2] MBARD's operational PM_{10} threshold of significance applies only to on-site emissions, such as project-related vehicle trips along on-site unpaved roads. These impacts are generally less than significant. However, for large development projects, even if almost all travel is on paved roads, entrained road dust from vehicular travel can exceed the significance threshold.

[3] Modeling should be undertaken to determine if the project would cause or substantially contribute (550 pounds per day) to exceedance of the carbon monoxide ambient air quality standards. If not, the project would not have a significant impact.

Source: MBARD 2008

Methodology

Air pollutant emissions generated by project construction and operation were estimated using the Roadway Construction Emission Model (RCEM), version 9.0.0. RCEM uses project-specific information, including the project's land uses, location, and construction parameters, to model construction emissions. The analysis reflects the construction of the project as described under Section 1.9, *Description of Project*.

Construction emissions modeled include emissions generated by construction equipment used on-site and emissions generated by vehicle trips associated with construction, such as worker, vendor, water truck, and haul trips. Construction of the proposed project was analyzed based on the construction schedule and construction equipment list provided by the project's engineering and design team. Construction would begin in May 2024 and occur over the course of approximately 7 months with work occurring Monday through Friday. The project would be constructed in five phases: site preparation for trenchless installation; trenchless pipeline installation; site preparation for open-trench pipeline installation; open-trench pipeline installation; and paving and ground restoration. It is assumed all construction equipment would be diesel-powered. Approximately 300 cubic yards of soil would be imported and 100 cubic yards would be exported. Vendor truck emissions were estimated in RCEM by defining user inputs in the 'Asphalt Hauling Emissions' data entry section because RCEM does not include vendor truck emissions.

As stated in Section 1.9, *Description of the Project,* the operation and maintenance needs of the sewer main would be reduced as compared to the existing sewer line. The new sewer line would require fewer maintenance trips than the existing under-capacity sewer line. The project also would not introduce new electricity demands or staffing needs. Therefore, as emissions from operations and maintenance would be similar or less than existing operations, the operational impacts are discussed qualitatively in this analysis.

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

A project would conflict with or obstruct implementation of the 2015 AQMP if either it induced population such that the population of unincorporated Monterey County exceeds the population forecast for the appropriate five-year increment utilized in the 2015 AQMP or if construction and operational emissions of ozone precursors would exceed MBARD significance thresholds (MBARD 2008).

The proposed project would provide additional conveyance capacity from the District wastewater collection system to the M1W pump station in order to meet existing and planned demand, as the existing conveyance system is under capacity. The project is not intended to accommodate future unplanned development. The project would also not directly generate population growth through construction of housing or creation of substantial employment opportunities. Therefore, the project would not directly or indirectly induce population growth such that the population of unincorporated Monterey County would exceed the population forecast utilized in the 2015 AQMP.

MBARD states construction projects using typical construction equipment that temporarily emit precursors of ozone (VOCs and NO_X) are accommodated in the emission inventories of state and federally-required air plans and would not have a significant impact on the attainment and maintenance of ozone NAAQS or CAAQS (MBARD 2008). The project would involve the use of typical construction equipment; as such, construction-related emissions of VOCs and NO_X would be less than significant. MBARD also states a project would contribute substantially to a violation of NAAQs or CAAQs if it would emit 82 lbs/day or more of PM_{10} (MBARD 2008). PM_{10} emissions from

construction of the project would not exceed MBARD thresholds as shown in Table 5 under item (b) below. Therefore, the proposed project would not conflict with or obstruct the implementation of the applicable air quality plan, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Construction Emissions

Construction activities such as site preparation, grading, construction worker travel to and from the project site, delivery and hauling of construction materials and debris to and from project site, and fuel combustion by on-site construction equipment would generate emissions of ozone precursors (ROG and NO_X), carbon monoxide, and fugitive dust (PM_{10} and $PM_{2.5}$). According to the MBARD guidelines, PM_{10} is typically the greatest pollutant of concern during construction.

The MBARD (2008) *CEQA Air Quality Guidelines* provide project-level thresholds for construction emissions. If a project's construction emissions fall below the project-level thresholds, the project's impacts to regional air quality are considered individually and cumulatively less than significant. Table 5 shows the estimated maximum daily emissions for each year of project construction. As shown therein, project construction would generate maximum daily PM_{10} emissions of approximately 7 lbs/day, which is well below the MBARD threshold of 82 lbs/day. In addition, MBARD states construction projects using typical construction equipment that temporarily emit precursors of ozone (VOCs and NO_X) are accommodated in the emission inventories of state and federally-required air plans and would not have a significant impact on the attainment and maintenance of ozone NAAQS or CAAQS (MBARD 2008). The project would involve the use of typical construction equipment; as such, construction-related emissions of VOCs and NO_X would be less than significant. Therefore, project construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard, and impacts would be less than significant.

Table 5 Estimated Maximum Daily Construction Emissions (lbs/day)

Construction Year	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
2024	8	61	77	< 1	8	4
Maximum Emissions (lbs/day)	**8**	**61**	**77**	**< 1**	**8**	**4**
MBARD Thresholds	N/A	N/A	N/A	N/A	82[1]	N/A
Threshold Exceeded?	N/A	N/A	N/A	N/A	No	N/A

lbs/day = pounds per day; VOC = volatile organic compounds; NO_X = oxides of nitrogen; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = particulate matter with a diameter of 10 microns or less; $PM_{2.5}$ = particulate matter with a diameter of 2.5 microns or less; N/A = not applicable

[1] This threshold only applies if construction is located nearby or upwind of sensitive receptors. In addition, a significant air quality impact related to PM_{10} emissions may occur if a project uses equipment that is not "typical construction equipment" as specified in Section 5.3 of the MBARD CEQA Guidelines (2008).

Notes: All numbers have been rounded to the nearest whole number. Emissions modeling was completed using RCEM. See Appendix A for modeling results.

Although construction-related air quality impacts would be less than significant, MBARD recommends the use of the following best management practices for the control of short-term construction emissions (MBARD 2008). These measures were not included in the modeling in order to provide a more conservative estimate of air pollutant emissions. However, if adhered to, these best management practices would further reduce air pollutant emissions:

- Water all active construction areas at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure.
- Prohibit all grading activities during periods of high wind (over 15 miles per hour)
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days)
- Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed areas
- Maintain at least two feet of freeboard on haul trucks
- Cover all trucks hauling soil, sand, and other loose materials
- Plant vegetative ground cover in disturbed areas as quickly as possible
- Cover inactive storage piles
- Sweep streets if visible soil material is carried out from the construction site
- Post a publicly visible sign that specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the MBARD shall be visible to ensure compliance with Rule 402 (Nuisance)
- Limit the area under construction at any one time

Operational Emissions

Operation of the project would include routine inspections and maintenance of infrastructure; however, maintenance trips and their associated air pollutant emissions would be reduced in comparison to existing conditions. As stated under *Description of Project*, the new sewer line would require fewer maintenance trips than the existing under-capacity sewer. The project would not introduce new electricity demands or staffing needs. Therefore, project operation would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Carbon Monoxide Hotspots

A carbon monoxide hotspot is a localized concentration of carbon monoxide that is above a carbon monoxide ambient air quality standard. Localized carbon monoxide hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local carbon monoxide concentration exceeds the federal one-hour standard of 35.0 ppm or the federal and state eight-hour standard of 9.0 ppm (CARB 2022a).

The project would result in a reduced frequency of operation and maintenance trips needed for the sewer line. Therefore, the project would not result in volumes of traffic that would create, or substantially contribute to, the exceedance of state and federal ambient air quality standards for carbon monoxide. The project would not expose sensitive receptors to substantial pollutant concentrations related to carbon monoxide hotspots, and impacts would be less than significant.

Toxic Air Contaminants

Construction-related activities would result in temporary project-generated emissions of diesel particulate matter (DPM) exhaust emissions from off-road, heavy-duty diesel equipment for demolition, site preparation, trenching, infrastructure installation, paving, and other construction activities. DPM was identified as a toxic air contaminant (TAC) by CARB in 1998 (CARB 2022b).

Generation of DPM from construction projects typically occurs in a single area for a short period of time. Construction of the proposed project would occur in phases over approximately 7 months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the maximally exposed individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. However, young children are more sensitive to exposure to some carcinogens than adults. Therefore, OEHHA has implemented age sensitivity factors that take into account the increased sensitivity of children during early development stages (i.e., 3rd trimester exposure to 16 years). Given the age sensitivity factors, exposure at a young age to even short term projects have the potential to result in substantial risk exposure.

The maximum daily PM_{10} emissions would range from 0.75 to 0.92 lbs/day of exhaust (DPM), with the maximum emissions occurring during trenchless pipeline installation activities. The proposed project would be consistent with the applicable AQMP requirements and control strategies intended to reduce emissions from construction equipment and activities. The proposed project would also comply with the CARB Air Toxics Control Measure that limits diesel powered equipment and vehicle idling to no more than five minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation. Compliance with these requirements would minimize emissions of TACs during construction. However, given the construction area's proximity to nearby sensitive receptors, including residences along Merritt Street/SR 183 and a community college building along Tembladera Street, impacts from TACs could be potentially significant. Implementation of Mitigation Measure AQ-1 would reduce potential impacts to a less than significant level.

The project would not include any mobile or stationary sources of air pollution once operational. Therefore, impacts related to TAC emissions from stationary sources would be less than significant.

Mitigation Measure

AQ-1 Construction Emissions Reduction

- The following measures shall be noted on construction plans and implemented during construction: All mobile off-road equipment (wheeled or tracked) greater than 50 horsepower used during construction activities shall meet the USEPA Tier 4 interim standards. Tier 4 certification can be for the original equipment or equipment that is retrofitted to meet the Tier 4 interim standards.

- Alternative Fuel (natural gas, propane, electric, etc.) construction equipment shall be incorporated where available. These requirements shall be incorporated into the contract agreement with the construction contractor. A copy of the equipment's certification or model year specifications shall be available upon request for all equipment on-site.

Significance After Mitigation

With incorporation of Mitigation Measure AQ-1, the project would be required to use off-road diesel-powered construction equipment that meets or exceeds the most stringent and environmentally protective CARB and USEPA Tier 4 off-road emissions standards, or alternatively fueled equipment which would substantially reduce DPM emissions. The Tier 4 standards reduce DPM emissions by approximately 81 to 96 percent as compared to equipment that meet the Tier 2 off-road emissions standards, depending on the specific horsepower rating of each piece of equipment. Thus, with implementation of Mitigation Measure AQ-1, construction activities would not expose sensitive receptors to substantial TAC concentrations that would potentially exceed cancer risk greater than ten per one million population. Construction-related health impacts would be reduced to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

During construction activities, temporary odors would be generated by vehicle exhaust and construction equipment. Construction-related odors would be short-term and would cease upon completion. In addition, MBARD Rule 402 prohibits the discharge of air contaminants or other emissions that would cause a nuisance or detriment to a considerable number of persons or to the public, with the exception of odors from agricultural activities. Compliance with Rule 402 is required and would further reduce construction odor impacts. Therefore, project construction would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people, and impacts would be less than significant.

Land uses typically producing odorous emissions include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (MBARD 2008). The project includes replacement and rehabilitation of existing wastewater conveyance facilities that are primarily located underground and are sealed, which would reduce the potential for odorous emissions. Minor quantities of odorous emissions may be released along the pipeline alignment from vents and release valves. However, these odor sources are not new to the project area, and emissions would be temporary and limited to the immediate vicinity. Therefore, project operation would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	■	☐	☐
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?	☐	■	☐	☐
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?	☐	☐	☐	■

Regulatory authority over biological resources is shared by federal, State, and local authorities under a variety of statutes and guidelines. Primary authority for general biological resources lies

within the land use control and planning authority of local jurisdictions (in this instance, the County of Monterey). The California Department of Fish and Wildlife (CDFW) is a trustee agency for biological resources throughout the State under CEQA and also has direct jurisdiction under the California Fish and Game Code (CFGC). Under the California and federal Endangered Species Acts, CDFW and the United States Fish and Wildlife Service (USFWS) also have direct regulatory authority over species formally listed as threatened or endangered and species protected by the Migratory Bird Treaty Act (MBTA).

The following analysis is based primarily on the Biological Resources Assessment (BRA) prepared for the project by Rincon Consultants, Inc. (Rincon), which is included as Appendix B. For the purposes of this analysis, the study area is comprised of the footprints of project components as well as a 100-foot buffer around those features in order to capture potential direct and indirect impacts to biological resources. As part of the BRA, Rincon conducted a field reconnaissance survey of the Study Area in September 2022.

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

Special status species are defined as those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by USFWS or National Marine Fisheries Service (NMFS) under the federal Endangered Species Act; those listed or candidates for listing as rare, threatened, or endangered by CDFW under the California Endangered Species Act; and animals designated as "Species of Special Concern" by CDFW or "Fully Protected" under the California Fish and Game Code. Rookery sites for species that nest colonially, such as bat maternity roosts, are also treated as special status. In addition, species designated as locally important by a local agency and/or otherwise protected through ordinance or local policy are considered special status species. California Rare Plant Rank (CRPR) List 1B and List 2 plant species are typically regarded as rare, threatened, or endangered under CEQA by lead agencies and are considered as such in this document. CRPR List 3 and List 4 plant species are typically not considered for analysis under CEQA except where they are part of a unique community, from the type locality, designated as rare or significant by local governments or where cumulative impacts could result in population–level effects. The CRPR 3 and 4 species reported from the region are not locally designated as rare or significant, are not part of a unique community, and the Study Area is not known to be the type locality for any ranked plant species. Therefore, CRPR 3 and CRPR 4 species were not included in this analysis (Appendix B).

Special-status Plant Species

Based on the database and literature review performed for the BRA (Appendix B), 36 special status plant species are known to occur or have the potential to occur within the vicinity of the project site. However, due to development, landscaping, and agricultural use throughout most of the project site, and lack of native coastal vegetation communities, none were determined to have a moderate or greater potential to occur within the project site. No impact would occur.

Special-status Wildlife Species

Of the 39 special-status wildlife species evaluated in the BRA (Appendix B), two species, western pond turtle (*Emys marmorata*) and California red-legged frog (*Rana draytonii)*, have a moderate and

low potential, respectively, to occur in the project site. Western pond turtle is a CDFW Species of Special Concern found in ponds, lakes, rivers, creeks, marshes, and irrigation ditches, with abundant vegetation. It requires basking sites of logs, rocks, cattail mats, or exposed banks. There is one known occurrence of this species within five miles of the project site; this occurrence was observed in a freshwater marsh approximately 4.8 miles east of the site. The potential for this species is limited to portions of the project where suitable habitat exists, including Tembladero Slough and adjacent ruderal habitat. California red-legged frog is federally listed as threatened and is also a CDFW Species of Special Concern throughout its range. The current range of California red-legged frog extends along the coast from Mendocino County south to Mexico and inland from parts of the southern Cascade and northern Sierra Nevada ranges south to Fresno County. California red-legged frog inhabits quiet pools of streams, marshes, and ponds.

Project construction activities could directly impact western pond turtle and California red-legged frog by resulting in injury of individuals or destruction of breeding habitat, which constitute potentially significant effects. Implementation of Mitigation Measures BIO-1 and BIO-2 would be required to reduce potential impacts to western pond turtle and California red-legged frog to a less-than-significant level.

Other Protected Species

Non-game migratory birds protected under CFGC Section 3503 have the potential to breed within the project site. Native avian species common in coastal scrub, landscaping, developed, and ruderal areas have the potential to breed and forage throughout the project site. Species of birds common to the area that typically occur in the region, such as black phoebe (*Sayornis nigricans*), cliff swallow (*Petrochelidon pyrrhonota*), and other common California native bird species are likely to utilize the project site for nesting. Nesting by a variety of common birds protected by CFGC Section 3503 could occur in virtually any location throughout the project site.

Direct impacts to nesting birds may occur due to removal or trimming of trees, shrubs, and other nesting substrates that may contain active nests. Indirect impacts to nesting birds may also occur during construction activities in the vicinity of an active nest resulting from distress to adults and disruption of nesting behavior due to construction noise that may lead to nest abandonment or failure. Therefore, impacts to nesting birds from construction would be potentially significant. Implementation of Mitigation Measure BIO-3 is required to reduce impacts to a less-than-significant level.

Mitigation Measures

BIO-1 Western Pond Turtle Avoidance and Minimization

- A qualified biologist(s) shall conduct a pre-construction survey within 48-hours prior to the onset of work activities, as well as surveys and/or monitoring during initial disturbance of potential western pond turtle habitat. If this species is found and the individuals are likely to be injured or killed by work activities, the approved biologist shall have the authority to stop work and sufficient time to move them from the project site before work activities begin or restart. The biologist(s) must relocate any western pond turtle the shortest distance possible to a location that contains suitable habitat that is not likely to be affected by activities associated with the proposed project.
- If a western pond turtle egg clutch is discovered during pre-construction surveys, the location shall be surrounded with high visibility fencing under the guidance of a qualified biologist. The

nest shall be avoided by construction until a qualified biologist determines that the clutch has hatched. If, during construction, a western pond turtle nest is discovered, construction shall cease immediately upon the discovery and the qualified biologist notified. The same procedure described above shall then be applied.

- To the extent feasible construction activities shall be scheduled outside of the typical nesting season for western pond turtle (April-August).

BIO-2 California Red-legged Frog Avoidance and Minimization

- A qualified biologist(s) shall conduct a pre-construction survey within 48-hours prior to the onset of work activities, as well as surveys and/or monitoring during initial disturbance of potential California red-legged frog habitat or as otherwise directed by the USFWS. The USFWS should be notified if a California red-legged frog, in any of its life stages, is observed within the project site.
- Construction crew shall be taught prior to construction to check beneath the staging equipment each morning prior to commencement of daily construction activities. Should California red-legged frog occur within the staging areas, construction activities should be halted until the California red-legged frog vacates the area on its own or until a biologist with USFWS approval relocates the California red-legged frog.
- Prior to ground disturbance, a temporary wildlife exclusion barrier should be installed along the limits of disturbance. A qualified biologist should inspect the area prior to barrier installation. The barrier should be designed to prevent California red-legged frog from entering the project area and should remain in place until all development activities have been completed. This barrier should be inspected daily by a qualified biologist or the qualified biologist's designee and maintained and repaired as necessary to ensure that it is functional and is not a hazard to California red-legged frogs on the outer side of the barrier.
- A qualified biologist should be present during all grading and initial ground disturbing activities. Should California red-legged frog be observed within the study area, the USFWS should be notified, and construction should be halted until either the California red-legged frog exits the site on its own or until a biologist with USFWS approval relocates the California red-legged frog.
- No work should occur during a rain event (over 0.25 inch). If a rain event occurs, a qualified biologist should inspect the site again prior to resuming work.

BIO-3 Nesting Bird Avoidance and Minimization Measures

The following avoidance and minimization measures shall be implemented during project construction activities:

- Initial site disturbance should occur outside the general avian nesting season (February 1 through September 15), if feasible.
- If initial site disturbance occurs in a work area within the general avian nesting season indicated above, a qualified biologist shall conduct a pre-construction nesting bird survey no more than 14 days prior to initial disturbances in the work area. The survey shall include the entire area of disturbance area plus a 50-foot buffer (relevant to non-raptor species) and 300-foot buffer (relevant to raptors) around the site. If active nests are located, all construction work shall be conducted outside a buffer zone from the nest to be determined by the qualified biologist. The buffer should be a minimum of 50 feet for non-raptor bird species and at least 300 feet for raptor species. Larger buffers may be required and/or smaller buffers may be established

depending upon the species, status of the nest, and construction activities occurring in the vicinity of the nest. The buffer area(s) shall be closed to all construction personnel and equipment until the adults and young are no longer reliant on the nest site. A qualified biologist shall confirm that breeding/nesting is completed and young have fledged the nest prior to removal of the buffer.

- If construction activities in a given work area cease for more than 14 days, additional surveys shall be conducted for the work area. If active nests are located, the aforementioned buffer zone measures shall be implemented.

Significance After Mitigation

Implementation of Mitigation Measure BIO-1 would minimize potential impacts to western pond turtle, a special-status species, through preliminary detection of individuals within the project site through a pre-construction survey and implementation of avoidance, minimization, and mitigation measures should any western pond turtle or egg clutch be encountered during the survey. Implementation of Mitigation Measure BIO-2 would similarly minimize potential impacts to California red-legged frog, a special-status species, through preliminary detection and implementation of avoidance, minimization, and mitigation measures. Finally, implementation of Mitigation Measure BIO-3 would reduce the potential for project construction activities to result in the loss of active bird nests through a pre-construction nesting bird survey and establishment of avoidance buffers around active nests, if present. Overall, implementation of these measures would reduce project impacts to special-status plant and wildlife species to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

Plant communities are considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. CDFW ranks sensitive communities as “threatened” or “very threatened” and keeps records of their occurrences in the California Natural Diversity Database. Seven sensitive natural communities are known to occur within the seven-quadrangle search area, none of which were observed in the project site during the field reconnaissance survey - central dune scrub, central maritime chaparral, Coastal and Valley Freshwater Marsh, Coastal Brackish Marsh, and Northern Coastal Salt Marsh. One vegetation alliance listed as sensitive by CDFW was observed in the project site, the small tule patches *Schoenoplectus acutus* [Global Rank GNR3 State Rank S3S44 (Appendix B)].

Only small areas of the project site adjacent to Tembladero Slough contain tules. However, no project elements are proposed in this area and tules only occur at the base of the slope below agricultural access roads outside any practical work area. Therefore, no direct effects to tule habitat or other natural communities would occur during trenching or drilling. However, there is potential for indirect impacts to sensitive habitat to occur, such as introduction of invasive species or incidental trampling of habitat as construction workers move around the area. Therefore, impacts to

3 GNR Unranked — Global rank not yet assessed.
4 S3 - Vulnerable; at moderate risk of extirpation in the jurisdiction due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors. S4 - Apparently secure; at a fairly low risk of extirpation in the jurisdiction due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.

sensitive plant communities could be potentially significant, and implementation of Mitigation Measure BIO-4 would be required to reduce impacts to a less-than-significant level.

The project is located within the Coastal Zone. The project would be required to comply with all applicable regulatory requirements pertaining to setbacks from environmentally sensitive habitat within the drainage along Watsonville Road, including those contained in the Monterey County LCP and the Monterey County Code (see Section 5.5, *Local Policies and Ordinances,* of Appendix B).However, due to construction activities occurring directly adjacent to the environmentally sensitive habitat and pumping activities within the drainage, Mitigation Measure BIO-4 would be required.

Mitigation Measures

BIO-4 Implement Sensitive Plant Community and Environmentally Sensitive Habitat Area Avoidance and Minimization Measures

The following measures shall be implemented for project construction activities:

- To the extent feasible, all project activities, including access routes, staging areas, stockpile areas, and equipment maintenance, shall be located outside of the limits of mapped sensitive habitats. Sensitive habitat areas shall be mapped by a qualified biologist and clearly shown on construction plans. Bright orange protective fencing (e.g., orange snow fencing) shall be installed at the outermost edge of sensitive habitats and shall not be disturbed except as required for project activities.
- Imported soil shall be obtained from a source that is known to be free of invasive plant species.
- Minimize removal or disturbance of existing vegetation outside of the footprint of project construction activities.
- Limit site access and parking, equipment storage and stationary construction activities to the designated staging areas to the maximum extent feasible.
- Prior to staging equipment on-site, clean all equipment caked with mud, soils, or debris from off-site sources and/or previous construction sites to avoid introducing or spreading invasive exotic plant species. When feasible, remove invasive exotic plants from the project site. All equipment used on the premises shall be cleaned prior to leaving the site for other projects.
- Position all stationary equipment such as motors, pumps, generators, and/or compressors over drip pans. At the end of each day, move vehicles and equipment as far away as feasible from any water body adjacent to the project site in a level staging area. Position parked equipment also over drip pans or absorbent material.
- Refuel and perform all vehicle and/or equipment maintenance off-site at a facility approved for such activities.
- To the greatest extent feasible, stabilize all exposed or disturbed areas in the project site. Install erosion control measures as necessary such as silt fences, jute matting, weed-free straw bales, plywood, straw wattles, and water check bars, and broadcasting weed-free straw wherever silt-laden water has the potential to leave the work site and enter the nearby aquatic features.

Significance After Mitigation

Mitigation Measure BIO-4 would reduce potential impacts to sensitive plant communities and environmentally sensitive habitat though avoidance, installation of protective fencing, use of on-site soils for fill, minimization of vegetation removal, and implementation of construction best

management practices. Implementation of Mitigation Measure BIO-4 would reduce project impacts to sensitive natural communities to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

As discussed in Section 1.9, *Description of Project,* a drainage ditch is situated on the western edge of the agricultural field west of SR 1, running north to south along the eastern shoulder of Watsonville Road. Because the ditch is connected to Tembladero Slough, which in turn connects to Elkhorn Slough, a traditionally navigable waterway, the ditch has a federal nexus and is likely under the jurisdiction of the USACE. In addition, it is likely under the jurisdiction of CDFW because it has surface flows sufficient to support hydric soil conditions, and under the jurisdiction of the RWQCB pursuant to the Porter-Cologne Water Quality Control Act as waters of the State and County of Monterey pursuant to the California Coastal Act and associated Coastal Commission-approved LCP because it meets the one-parameter definition of a wetland and is considered environmentally sensitive habitat area (ESHA).

The project site is within 100 feet of the top of bank of Tembladero Slough; however, no project elements are proposed for this area and no impacts would occur as a result of construction. Further, the drainage ditch is manmade, largely devoid of vegetation, and contains little habitat value. However, there is sufficient hydrology to support aquatic invertebrates and mosquito fish, and is likely under the jurisdiction of the USACE, CDFW, RWQCB and the County of Monterey pursuant to the LCP. Implementation of the project would require trenching to install the new pipeline and restoration of the site to previous conditions. Therefore, the project would not result in permanent impacts or substantial adverse effects to the drainage but would require USACE, RWQCB, CDFW, and County permitting. As a result, impacts would be potentially significant, and implementation of Mitigation Measure BIO-5 would be required to reduce impacts to a less-than-significant level.

Mitigation Measures

BIO-5 Drainage Restoration

- Temporary impacts to the drainage shall be mitigated by fully restoring the drainage to pre-project conditions, or as required in permits obtained from regulatory agencies.

Significance After Mitigation

Mitigation Measure BIO-5 would minimize potential impacts to jurisdictional waters or wetlands by limiting the size of staging and construction areas, implementing erosion and sediment control measures, and locating vehicles and construction materials at least 100 feet from the drainage ditch. Implementation of Mitigation Measure BIO-5 would reduce project impacts to jurisdictional waters or wetlands to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations or those populations that are at risk of becoming isolated. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The project site is not within any Essential Connectivity Areas (Appendix B) and given the relatively narrow footprint, relatively small size of the project site, degraded nature of Tembladero Slough, and the hazardous nature of the associated roads and agricultural areas, it is unlikely the project site would support a significant movement corridor for wildlife. No impact would occur.

NO IMPACT

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

The Monterey County General Plan (2010) includes a Conservation and Open Space Element for the long-term preservation of open space and natural resources. Goals OS-5.1 through OS-5.25 address the conservation of listed species, critical habitats, and the avoidance of significant impacts to biological resources. These goals require compliance with the Federal Endangered Species Act and California Endangered Species Act and consultation with USFWS and CDFW if listed species or critical habitats will be affected by new development. Section 2.3 of the County of Monterey's North County Land Use Plan also provides for the preservation of environmentally sensitive habitats and prohibits all development within certain environmentally sensitive habitats as well as the destruction of dune habitats unless no feasible alternative exists and then only if re-vegetation with similar species is a condition of project approval. The North County Area Plan requires a permit for removal of oak or madrone trees. No oak or madrone trees would be removed as a result of the proposed project. As discussed in the BRA (Appendix B), impacts to special status species and sensitive plant communities (including environmentally sensitive habitats) would be less than significant with incorporation of the mitigation measures. Therefore, the project would not conflict with any local policies or ordinances protecting biological resources.

Mitigation Measures

Mitigation Measures BIO-1 and BIO-2, listed above, would be required.

Significance After Mitigation

Mitigation Measures BIO-1 and BIO-2 would minimize impacts to special status plant and animal species that are known to occur or have moderate potential to occur within the project site, as discussed under item (a). Impacts would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The project site is not subject to an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur.

NO IMPACT

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5 Cultural Resources

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

This section provides an analysis of the project's impacts on cultural resources, including historical and archaeological resources as well as human remains. CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC] Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources; or any object, building, structure, site, area, place, record, or manuscript a lead agency determines to be historically significant (CEQA Guidelines Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it:

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

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a-b]). PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or

3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

The impact analysis included here is organized based on the cultural resources thresholds included in CEQA Guidelines Appendix G: Environmental Checklist Form. Threshold A broadly refers to historical resources. To more clearly differentiate between archaeological and built environment resources, the analysis under Threshold A is limited to built environment resources. Archaeological resources, including those that may be considered historical resources pursuant to Section 15064.5 and those that may be considered unique archaeological resources pursuant to Section 21083.2, are considered under Threshold B.

Methodology and Results of Historic Properties Inventory Report

In October 2022, Rincon conducted a cultural resources investigation and analysis of the project site. This analysis included a cultural resources records search of the California Historical Resources Information System at the Northwest Information Center (NWIC), located at California State University, Sonoma, and a Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search. Rincon also conducted a pedestrian survey of the project footprint for all locations as part of the study and prepared a cultural resources assessment in the form of a Historic Properties Inventory Report (HPIR) covering the entirety of the proposed project (Appendix C).

The NWIC records search was performed to identify previously conducted cultural resources studies, as well as previously recorded cultural resources within the project site and a one-mile radius surrounding it. The records search included a review of available records at the NWIC, as well as the National Register of Historic Places (NRHP), the CRHR, the Office of Historic Preservation Historic Properties Directory, the California Inventory of Historic Resources, the Archaeological Determinations of Eligibility list, and historical maps. The NWIC records search identified 85 cultural resources studies conducted within a one-mile radius of the project site, three of which evaluated portions of the project site. The NWIC search identified nine previously recorded cultural resources within a one-mile radius of the project site, none of which overlap portions of the project site.

On August 30, 2022, Rincon Archaeologist Laura Maldonado, MA performed a pedestrian field survey of the project site. The pedestrian survey was conducted by walking a series of north/south oriented transects spaced no more than 10 meters (approximately 30 feet) apart within the project site. Ms. Maldonado examined the project site for evidence of artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock), ecofacts (marine shell and bone), soil discolorations that might indicate the presence of cultural midden, soil depressions, and features indicative of the former presence of structures of buildings (e.g., standing exterior walls, postholes, foundations) or historical debris (e.g., metal, glass, ceramics). No archaeological or built environment resources were identified during the field survey. One building related to the wastewater collection system, the M1W pump station, is located in the western portion of the project site; however, it is not age-eligible and, consequently, was not documented as a part of the HPIR.

An SLF search is completed by topographic quadrangle, and a positive SLF result is returned if any sacred sites are identified within the mapping quadrangle within which a project site is located. However, no specific locational information is provided. The NAHC responded on September 27, 2022, stating the results of the SLF search were positive. The NAHC provided a list of nine Native American contacts who may have knowledge of cultural resources of Native American origin within the APE. Rincon subsequently conducted Section 106 outreach with local Native American groups to

obtain information on known Native American resources located in the vicinity. As a result, concerns from several Tribes regarding the sensitivity of the APE were documented in the HPIR (Appendix C).

Rincon also contacted the County of Monterey Historic Resources Review Board, the Monterey County Historical Society, and the Archives and Special Collections at California State University, Monterey Bay, to request information regarding historical resources in the proposed undertaking APE. Rincon prepared and emailed outreach letters to these groups on September 28, 2022. Follow-up phone calls were conducted between October 11 – 14, 2022. Outreach conversations are summarized in the HPIR (Appendix C).

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

As discussed above, the project site does not contain any built environment historical resources. The M1W pump station does not meet the age threshold to be considered for inclusion in the CRHR and is therefore not considered a historical resource. Therefore, the project would have no impact on historical resources of the built environment.

NO IMPACT

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

As discussed above, the NWIC records search and background research identified nine previously recorded cultural resources within a one-mile radius of the project site, none of which overlap portions of the project site.

Although the project site is identified by the County of Monterey as archaeologically sensitive (see Appendix C), no Native American archaeological resources have been identified within the site. The project site has been heavily graded, tilled, partially paved, and subject to development since the 1950s. The results of the soils analysis indicate the project site is not sensitive for buried resources.

As such, the project has a low likelihood of impacting any buried archaeological resources at the project site. However, the lack of surface archaeology sites does not preclude the existence of subsurface resources. The proposed project would include excavation and trenching. There is always a possibility that unknown buried archaeological resources could be encountered during project ground disturbance that may be considered important examples of California history or prehistory. Impacts are therefore potentially significant and Mitigation Measure CR-1 would be required.

Mitigation Measures

CR-1 Unanticipated Discovery of Cultural Resources

In the event that archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the find shall halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the find. If the resource is determined by the qualified archaeologist to be prehistoric, then a Native American representative shall also be contacted to participate in the evaluation of the resource. If the qualified archaeologist and/or Native American representative determines it to be appropriate, archaeological testing for CRHR eligibility shall be completed. If the resource proves to be eligible for the CRHR and impacts to the resource cannot be

avoided via project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of CCR Guidelines Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources related to the resource. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential information that justifies the resource's significance. The District shall review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation shall be submitted to the regional repository of the CHRIS, per CCR Guidelines Section 15126.4(b)(3)(C).

Significance After Mitigation

Mitigation Measure CR-1 includes procedures for the appropriate handling of unanticipated discoveries of cultural resources. Implementation of Mitigation Measure CR-1 would reduce potential impacts to archeological resources to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

The discovery of human remains is always a possibility during ground disturbing activities, which would be required for the proposed project. In addition to being potential archaeological resources, human burials have specific provisions for treatment in PRC Section 5097. Additionally, California Health and Safety Code Sections 7050.5, 7051, and 7054 contain specific provisions for the protection of human burial remains. Existing regulations address the illegality of interfering with human burial remains and protects them from disturbance, vandalism, or destruction. PRC Section 5097.98 also addresses the disposition of Native American burials, protects such remains and establishes the NAHC as the entity to resolve any related disputes.

If human remains are found, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the NAHC, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of being granted access to the site and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Due to required compliance with PRC Section 5097.98 and California Health and Safety Code Section 7050.5, impacts to human remains would be less than significant.

LESS THAN SIGNIFICANT IMPACT

6 Energy

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

As a state, California is one of the lowest per capita energy users in the United States, ranked 48th in the nation, due to its energy efficiency programs and mild climate (United States Energy Information Administration 2022). The project would only require the usage of petroleum fuels for construction activities and maintenance trips. Therefore, petroleum fuels are the focus of this analysis. Petroleum fuels are primarily consumed by on-road and off-road equipment in addition to some industrial processes, with California being one of the top petroleum-producing states in the nation (United States Energy Information Administration 2022). Gasoline, which is used by light-duty cars, pickup trucks, and sport utility vehicles, is the most used transportation fuel in California with approximately 12.5 billion gallons sold in 2020 (CEC 2022b). Diesel, which is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles, is the second most used fuel in California with 2.9 billion gallons sold in 2020 (CEC 2022b).

Energy consumption is directly related to environmental quality in that the consumption of nonrenewable energy resources releases criteria air pollutant and greenhouse gas (GHG) emissions into the atmosphere. The environmental impacts of air pollutant and GHG emissions associated with the project's energy consumption are discussed in detail in Section 2.3, *Air Quality*, and Section 2.8, *Greenhouse Gas Emissions*, respectively.

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

Construction

The project would require site preparation, including hauling material off-site; pipeline installation; and pavement and site restoration. During project construction, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and vehicles used to transport materials to and from the site. As shown in Table 6, project construction would require approximately 5,988 gallons of gasoline and approximately 33,194 gallons of diesel fuel. These

construction energy estimates are conservative because they assume that the construction equipment used in each phase of construction is operating every day of construction.

Table 6 Estimated Fuel Consumption during Construction

Source	Fuel Consumption (gallons)	
	Gasoline	Diesel
Construction Equipment & Water Truck/Hauling Trips	--	33,194
Construction Worker Vehicle Trips	5,988	--

See Appendix D for energy calculation sheets.

Energy use during construction would be temporary in nature, and construction equipment used would be typical of similar-sized construction projects in the region. In addition, construction contractors would be required to comply with the provisions of California Code of Regulations Title 13 Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the USEPA Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. These practices would result in efficient use of energy necessary to construct the project. In the interest of cost-efficiency, construction contractors also would not utilize fuel in a manner that is wasteful or unnecessary. Therefore, the project would not involve the inefficient, wasteful, and unnecessary use of energy during construction, and impacts would be less than significant.

Operation

The project would not result in additional vehicle fuel demands, as the maintenance needs of the sewer main would be reduced compared to the under-capacity sewer line. As such, the project would result in beneficial impacts related to vehicle fuel demands. The project would also not introduce new electricity demands, and would be consistent with similar water pipeline facilities and equipment used throughout California. Furthermore, the project would not introduce new staffing needs.

Therefore, the project would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation. No adverse operational energy impact would occur.

NO IMPACT

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

The District has not adopted a plan for renewable energy or energy efficiency with which the project could comply. Goal OS-9 of the Monterey County General Plan (2010) and its related policies are directed at promoting efficient energy usage. The Association of Monterey Bay Area Governments' 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) does not contain policies related to construction emissions, and the project would not include any sources of operational emissions. Therefore, the project would not conflict with the 2045 MTP/SCS and its policies. As detailed under item (a), the project would not introduce new electricity needs to the existing wastewater system and would result in fewer operations and maintenance trips, which

would further Goal OS-9 and its policies. SB 100 mandates 100 percent clean electricity for California by 2045. The proposed project would not consume electricity. However, the existing pump station at the western terminus of the project alignment is powered by the electricity grid and would eventually be powered by renewable energy mandated by SB 100. The project would not conflict with this statewide plan. Additionally, the project area is served by Central Coast Community Energy (3CE), which offers electricity supplied by approximately 31 percent renewable energy in its 3CE Choice program and electricity supplied by 100 percent renewable energy in its 3CE Prime program (3CE 2022). 3CE is subject to the requirements of SB 100 and aims to provide 100 percent clean electricity to all customers by 2030; 15 years ahead of the State's goal. As such, the proposed project would receive electricity that meets or exceeds State requirements for renewable energy generation (3CE 2022). Therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and no impact would occur.

NO IMPACT

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7 Geology and Soils

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

Analysis in this section is based in part on a Soils Engineering Report prepared for the project by Geo Solutions in December 2020, included as Appendix E, and a Paleontological Resources Assessment prepared for the project by Rincon Consultants in October 2022, included as Appendix F.

a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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?

The project site is located in a seismically active area of California; however, the project site is not located in an Alquist-Priolo Fault Zone (DOC 2019). Several known faults, such as the Reliz Fault (approximately 6 miles south), Zayante-Vergeles Fault (approximately 8.5 miles east), Chupines Fault (approximately 12 miles south), San Andreas Fault (approximately 13 miles east), and other faults exist in the vicinity of the project site (United States Geological Survey 2022a). However, these faults do not cross the project site and are not considered "active" for the purposes of the Alquist-Priolo Act because they have not ruptured in the past 11,000 years (DOC 2019). Therefore, the proposed project would not directly or indirectly cause potential adverse effects related to rupture of a known earthquake fault, and no impact would occur.

NO IMPACT

a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

The San Andreas Fault system, which is the most active fault system in California, is approximately 13 miles east of the project site. Two other active faults, the Monterey Bay-Tularcitos Fault zone, (approximately 14 miles southwest of the project site) and the Palo Colorado-San Gregorio Fault zone (approximately 30 miles south of the project site) also occur in the county (Monterey County Office of Emergency Services 2022). From 2016 to 2022, Monterey County experienced 30 earthquakes with a magnitude greater than 2.5; however, none had a magnitude greater than 4.7 (United States Geological Survey 2022b).

The project site could be subject to seismic ground shaking during an earthquake along the San Andreas Fault or other active faults in the region. The project involves installation of a new sewer line; a large seismic event, such as a seismic shaking or ground failure, could result in breakage of the proposed sewer line and/or underground leakage from the pipeline. The existing facilities are subject to the same risk; therefore, there would no change in the potential for District facilities to directly or indirectly cause substantial adverse effects involving strong seismic ground shaking as compared to existing conditions. Furthermore, in the event an earthquake compromised a project component during operation, the District would temporarily shut-off the sewer line and conduct emergency repairs as soon as possible. Project design would be required to incorporate the materials and installation standards of the American Water Works Association as required pursuant to Title 22 California Code of Regulations (CCR) Chapter 16, which include appropriate standard engineering practices and specifications in pipeline design to minimize risk of structural failure in a seismic event and would reduce any potential secondary impacts. In addition, design and construction of the project would adhere to recommendations outlined in the Soils Engineering Report to minimize impacts related to excavation and potential dewatering (Appendix E).

Therefore, the project would not expose people or structures to potential substantial adverse effects involving strong seismic ground shaking, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

The project site is not located within a mapped liquefaction zone (California Geological Survey 2022). The project would not involve any activities (such as fracking or mining) that could trigger an earthquake that would in turn lead to damage from liquefaction. The project would not include habitable structures and would therefore not expose people to loss, injury, or death involving seismic-related ground failure, including liquefaction. Therefore, the project would not directly or indirectly cause potential adverse effects related to seismic ground failure or liquefaction, and no impact would occur.

NO IMPACT

a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

The project site is not located in an earthquake-induced landslide hazard zone and is relatively flat (DOC 2021a). Therefore, landslides are not expected to occur within the project site. The project would not include habitable structures therefore not expose people to loss, injury, or death involving landslides. Implementation of the project would not exacerbate the existing risk of earthquake-induced landslides in the immediate vicinity because the project would not directly result in a seismic event or destabilize soils prone to landslide. Therefore, because the project site is not located in an earthquake-induced landslide hazard zone and the project would not introduce new infrastructure to the site that would exacerbate landslide hazards, the proposed project would not directly or indirectly cause potential adverse effects involving earthquake-induced landslides. No impact would occur.

NO IMPACT

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

Soil erosion or the loss of topsoil may occur when soils are disturbed but not secured or restored, such that wind or rain events may mobilize disturbed soils, resulting in their transport off the project site. Project construction would include dust control via use of a water truck that would water the construction area two times a day or as needed to prevent dust in areas of grading. Construction would not disturb greater than one acre; as such, coverage under the National Pollutant Discharge Elimination System Construction General Permit would not be required.

Further, as stated under Section 1.9, *Description of Project,* the project would implement PDF-1, *Construction Best Management Practices.* PDF-1 would minimize soil erosion and the loss of topsoil via watering soil stockpiles; installing berms, silt fences, straw wattles, and other runoff barriers to prevent construction runoff; and placing anti-tracking strips at entrances to the project site. In addition to these best practices, agricultural topsoil disturbed by project construction would be stockpiled separate from other soil and would be restored once construction is complete. Therefore, the project would not result in substantial soil erosion or loss of topsoil, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Although the proposed project would be located in a seismically active area, the project is not located in an earthquake-induced landslide hazard zone or liquefaction zone (DOC 2021a; California Geological Survey 2022). As discussed above under item (b), the project would occur on a relatively flat area that includes an existing sewer line. The proposed project would incorporate all applicable building standards and requirements in compliance with the California Building Standards Code and the American Water Works Association Standards for pipeline installation. Therefore, given the lack of known unstable geologic and soil conditions as well as project compliance with applicable building standards, the proposed project would not significantly affect soil stability or increase the potential for on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. No impact would occur.

NO IMPACT

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

The project site is mapped to contain soils composed almost entirely of Clear Lake clay, with small amounts of Elkhorn fine sandy loam (Natural Resources Conservation Service 2022). The borings conducted for the Soils Engineering Report confirmed that the site is underlain almost entirely by clay (Appendix E). Due to the moderate clay content of most on-site soils, there is potential for expansive soils to occur. However, the existing District facilities are subject to the same risk; therefore, there would no change in the potential for project facilities to create substantial direct or indirect risks to life or property as compared to existing conditions. Further, the project would not include habitable structures and would therefore not create substantial direct or indirect risks to life or property beyond existing conditions. As a result, the project would not create substantial direct or indirect risks to life or property as a result of expansive soil, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

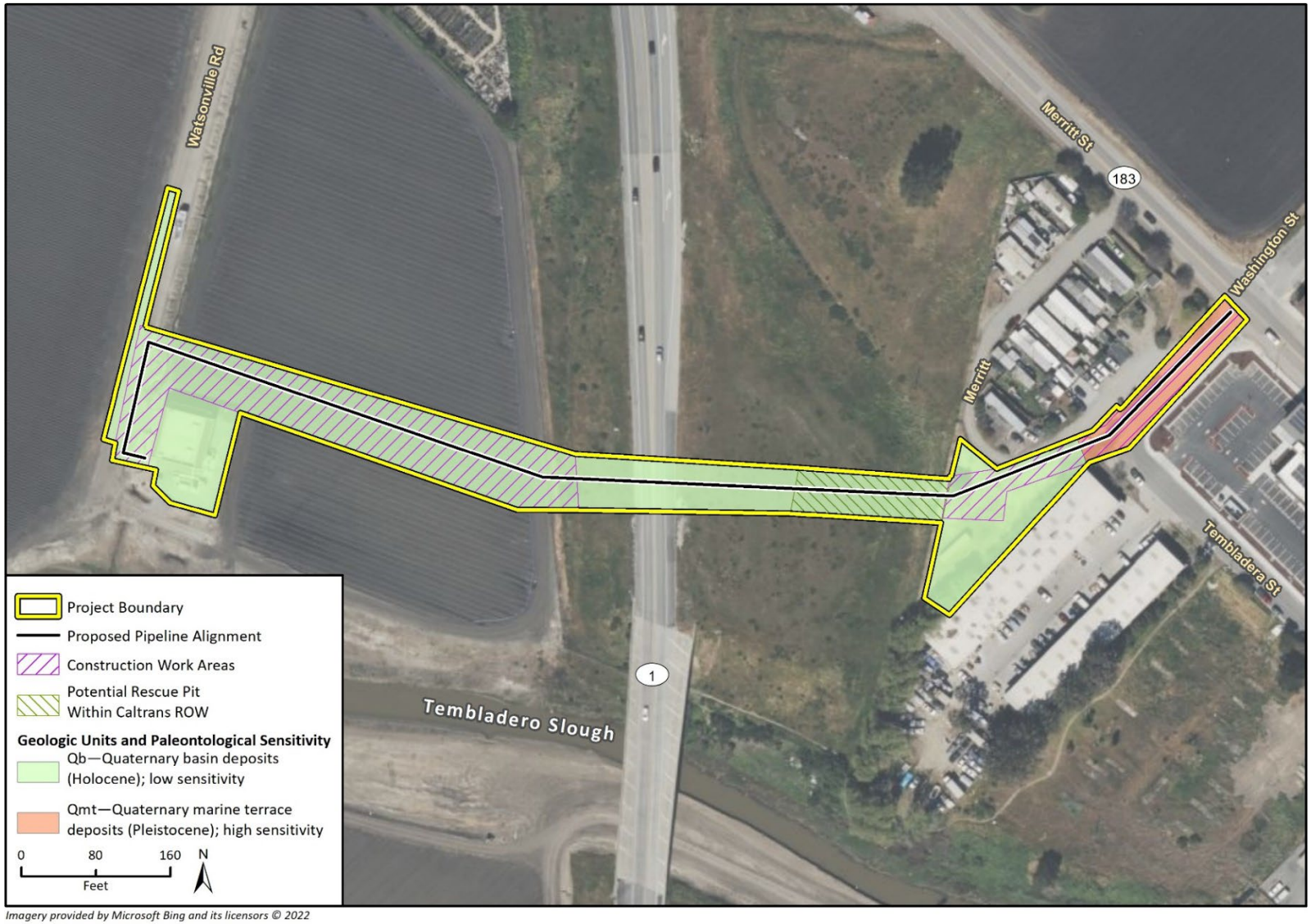
The proposed project involves replacement and upgrade of existing sewer infrastructure that eventually discharges to the M1W Regional Wastewater Facility for treatment. The project does not involve the use of septic tanks or alternative wastewater disposal systems. No impact would occur.

NO IMPACT

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

A Paleontological Resources Assessment was prepared in September 2022 to determine whether the proposed project would result in significant impacts to paleontological resources (Appendix F). According to this assessment, two geologic units are mapped at the surface underlying project components. As shown in Figure 5, these units consist of Quaternary

Figure 5 Geologic Map of Project Site



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Additioanl data provided by Wagner et al. 2002.

basin deposits (Qb), and Quaternary marine terrace deposits (Qmt). The assessment determined that Quaternary basin deposits have low paleontological sensitivity due to their age; however, the Quaternary marine terrace deposits have high paleontological sensitivity as similar deposits have produced vertebrate and invertebrate fossils throughout California, including in the Monterey Bay region (Appendix F).

Ground-disturbing activities (i.e., grading, excavation, boring, trenching) in sediments with low or no paleontological sensitivity are unlikely to result in significant impacts to paleontological resources under CEQA or adverse effects to paleontological resources under federal environmental protection laws. Previously undisturbed portions of the project site that are underlain by Quaternary marine terrace deposits may result in significant impacts or adverse effects to paleontological resources. If construction activities result in the destruction, damage, or loss of scientifically important paleontological resources and associated stratigraphic and paleontological data, they would be considered as having a significant impact or adverse effect on paleontological resources.

Excavations for trenchless pipeline installation (i.e., entry pit, exit pit, and rescue pit [if needed]) are anticipated to reach up to 30 feet below ground surface. These excavations will only affect artificial fill and Quaternary basin deposits, sediments with no and low paleontological sensitivity, respectively (Figure 5). Therefore, excavations for the trenchless pipe installation are anticipated to have a less than significant impact/no adverse effects on paleontological resources.

Excavations for the open-cut trench installation (i.e., trenching) are anticipated to reach up to 15 feet below ground surface. Most of the proposed open-cut trench is underlain by low-sensitivity Quaternary basin deposits (Figure 5). However, high-sensitivity Quaternary marine terrace deposits underlie the easternmost part of the proposed trench alignment. Therefore, excavations for the open-cut trench installation in this area may result in significant impacts/adverse effects to paleontological resources.

Mitigation Measure GEO-1 is required to reduce impacts to a less-than-significant level.

Mitigation Measure

GEO-1 Paleontological Resources Monitoring and Mitigation

The following measures shall be implemented during open-cut trench installation in areas mapped as Quaternary marine terrace deposits:

Paleontological Worker Environmental Awareness Program. Prior to the start of construction, a Qualified Professional Paleontologist (as defined by SVP [2010]) or their designee shall conduct a paleontological Worker Environmental Awareness Program (WEAP) training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff.

Unanticipated Discovery of Paleontological Resources. In the event a fossil is discovered during construction of the project, excavations within 50 feet of the find shall be temporarily halted or delayed until the discovery is examined by a Qualified Professional Paleontologist. The project applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. If the find is determined to be significant, the applicant shall retain a Qualified Professional Paleontologist to direct all mitigation measures related to paleontological resources. The Qualified Professional Paleontologist shall design and carry out a data recovery plan consistent with the SVP (2010) standards.

Significance After Mitigation

Implementation of Mitigation Measure GEO-1 requires a paleontological Worker Environmental Awareness Program training and implementation of measures in the event paleontological resources are encountered. Should such resources be discovered, they would be salvaged, evaluated for significance, and curated in a scientific institution, if appropriate. Therefore, Mitigation Measure GEO-1 would reduce project impacts to paleontological resources to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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8 Greenhouse Gas Emissions

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

Overview of Climate Change and Greenhouse Gas Emissions

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. Climate change is the result of numerous, cumulative sources of greenhouse gas (GHG) emissions contributing to the "greenhouse effect," a natural occurrence which takes place in Earth's atmosphere and helps regulate the temperature of the planet. Most radiation from the sun hits Earth's surface and warms it. The surface, in turn, radiates heat back towards the atmosphere in the form of infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions.

GHG emissions occur both naturally and as a result of human activities, such as fossil fuel burning, decomposition of landfill wastes, raising livestock, deforestation, and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO_2), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO_2e), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 30, meaning its global warming effect is 30 times greater than CO_2 on a molecule per molecule basis (Intergovernmental Panel on Climate Change [IPCC] 2021).[5]

The United Nations IPCC expressed that the rise and continued growth of atmospheric CO_2 concentrations is unequivocally due to human activities in the IPCC's Sixth Assessment Report (2021). Human influence has warmed the atmosphere, ocean, and land, which has led the climate to warm at an unprecedented rate in the last 2,000 years. It is estimated that between the period of

[5] The Intergovernmental Panel on Climate Change's (2021) Sixth Assessment Report determined that methane has a GWP of 30. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the Intergovernmental Panel on Climate Change's (2007) Fourth Assessment Report. Therefore, this analysis utilizes a GWP of 25.

1850 through 2019, a total of 2,390 gigatonnes of anthropogenic CO_2 was emitted, worldwide. It is likely that anthropogenic activities have increased the global surface temperature by approximately 1.07 degrees Celsius between the years 2010 through 2019 (IPCC 2021). Furthermore, since the late 1700s, estimated concentrations of CO_2, methane, and nitrous oxide in the atmosphere have increased by over 43 percent, 156 percent, and 17 percent, respectively, primarily due to human activity (United States Environmental Protection Agency 2021a). Emissions resulting from human activities are thereby contributing to an average increase in Earth's temperature. Potential climate change impacts in California may include loss of snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (State of California 2018).

Regulatory Framework

In response to climate change, California implemented Assembly Bill (AB) 32, the "California Global Warming Solutions Act of 2006." AB 32 required the reduction of statewide GHG emissions to 1990 emissions levels (essentially a 15 percent reduction below 2005 emission levels) by 2020 and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. On September 8, 2016, the Governor signed Senate Bill 32 into law, extending AB 32 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program and the Low Carbon Fuel Standard, and implementation of recently adopted policies and legislation, such as SB 1383 (aimed at reducing short-lived climate pollutants including methane, hydrofluorocarbon gases, and anthropogenic black carbon) and SB 100 (aimed at accelerating the state's Renewables Portfolio Standard Program). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) of CO_2e by 2030 and two MT of CO_2e by 2050 (CARB 2017).

Significance Thresholds

The State of California, MBARD, County of Monterey, and District have not adopted GHG emissions thresholds for land use development projects. Therefore, this analysis utilizes the thresholds published by the Bay Area Air Quality Management District (BAAQMD), which is the air district immediately north of and adjacent to the jurisdiction of MBARD. The use of GHG thresholds developed by the adjoining BAAQMD is considered appropriate by the District because of the broad similarities between the two adjacent air basins. The NCCAB comprises the counties of Santa Cruz, Monterey, and San Benito, with a substantial portion of the air basin located within Santa Cruz and Monterey counties. The San Francisco Bay Area Air Basin that is managed by BAAQMD consists of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, southwestern Solano, and southern Sonoma counties. The areas managed by the two air districts - BAAQMD and MBARD - contain a mix of urban and rural areas and similar emission sources, such as construction, electricity and natural gas consumption, agriculture, and transportation. Given the similarities between the two regions, the District has determined that the thresholds set forth by the BAAQMD are appropriate to use for the project.

To determine if a project's GHG emissions are significant under CEQA, BAAQMD recommends completing a "fair share" analysis to determine how a new land use development project should be "designed and built to ensure it will be consistent with the goal of carbon neutrality by 2045" (BAAQMD 2022). BAAQMD has only recommended thresholds for evaluating a project's operational emissions because "GHG emissions from construction represent a very small portion of a project's lifetime GHG emissions" (BAAQMD 2022). For a project's GHG emissions to be determined less than significant, a project must be consistent with a local GHG reduction strategy that meets the criteria of CEQA Guidelines Section 15183.5(b) or incorporate the following project design elements (BAAQMD 2022):

- Not include natural gas appliances or natural gas plumbing;
- Not result in wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under PRC Section 21100(b)(3) and CEQA Guidelines Section 15126.2(b);
- Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the 2017 Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted SB 743 VMT target reflecting the recommendations provided in the Governor's Office of Planning and Research's *Technical Advisory on Evaluating Transportation Impacts in CEQA* (2018); and
- Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of California Green Building Standards Code (CALGreen) Tier 2.

Methodology

For informational purposes, GHG emissions associated with project construction and operation were estimated using RCEM, version 9.0.0, with the assumptions described under Section 2.3, *Air Quality*. For the purposes of this GHG analysis, it was assumed the project would have a 50-year lifetime. Construction emissions were amortized over the project's estimated 50-year lifetime because construction emissions are confined to a relatively short period of time in relation to the overall life of the proposed project.

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

Pursuant to BAAQMD guidance, the project's GHG emissions would be less than significant if the project includes no natural gas appliances or plumbing; would not result in wasteful, inefficient, or unnecessary energy usage; would achieve lower-than-average project-generated VMT consistent with CARB's 2017 Scoping Plan or a locally adopted VMT target; and achieve compliance with CALGreen Tier 2 requirements for off-street electric vehicle spaces (BAAQMD 2022). The project does not include natural gas connections, and as discussed in Section 2.6, *Energy*, the project would not result in wasteful, inefficient, or unnecessary energy usage. Due to enhanced system functions, the project would result in a net decrease in routine inspections and maintenance trips and their associated VMT, as detailed in Section 2.17, *Transportation*. In addition, CALGreen Tier 2 requirements for off-street electric vehicle spaces are not applicable to the project because no residential or nonresidential buildings would be constructed, and the project would not include parking. Therefore, the project would include the requisite project design elements, as applicable, and pursuant to BAAQMD guidance, the project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Impacts would be less than significant.

Although impacts would be less than significant as discussed above, calculations of CO_2, methane, and nitrous oxide emissions are provided to disclose the magnitude of GHG emissions generated by the project for informational purposes. Project construction would generate temporary GHG emissions as a result of the use of construction equipment on-site as well as from vehicles transporting construction workers to and from the project site and heavy trucks transporting new materials and exported soil. As shown in Table 7, project construction would generate approximately 380 MT of CO_2e in total, or approximately 7.6 MT of CO_2e per year when amortized over a 50-year period (i.e., the expected lifetime of the proposed project for the purposes of this analysis).

Table 7 Estimated Construction GHG Emissions

Construction Year	Emissions (MT of CO_2e per year)
2024 (Total)	380
Total Amortized over 50 Years	**7.6**

MT = metric tons; CO_2e = carbon dioxide equivalents
See Appendix A for RCEM calculations.

Operation of the project would include routine inspections and maintenance of infrastructure; however, maintenance trips and their associated GHG emissions would be reduced in comparison to existing conditions. No adverse operational impact would occur.

LESS THAN SIGNIFICANT IMPACT

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

The District has not adopted a qualified GHG reduction plan; therefore, there are no regional or local GHG reduction plans that would apply to the proposed project. Nonetheless, the project would be consistent with the 2017 Scoping Plan and would not conflict with SB 32 emissions targets because the project would improve the efficiency of the existing wastewater system, thereby reducing operational GHG emissions associated with electricity usage and routine maintenance trips. The project would not emit a substantial quantity of GHG emissions, as discussed under item (a). Therefore, the project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions, and there would be no impact.

NO IMPACT

9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	■	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	■	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	☐	☐	■	☐
d. Be located on a site that is included on a list of hazardous material 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 in 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. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Project construction would temporarily increase the transport and use of hazardous materials in the project site through the operation of vehicles and equipment. Such substances include diesel fuel, oil, solvents, and other similar materials brought onto the construction site for use and storage during the construction period. These materials would be contained within vessels specifically engineered for safe storage and would not be transported, stored, or used in quantities that would pose a significant hazard to the public or construction workers themselves. Furthermore, project construction would require the excavation and transport of paving materials and soils which could possibly be contaminated by vehicle-related pollution (e.g., oil, gasoline, diesel, and other automotive chemicals). All such paving and soils removed during construction would be transported and disposed of in accordance with applicable codes and regulations to minimize potential hazards to construction workers or the surrounding community.

Project operation would involve the conveyance of wastewater and would not require change in the use, storage, or disposal of hazardous materials from existing conditions. Therefore, the project would not create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The use, transport, and storage of hazardous materials during construction of the project (e.g., diesel fuel, oil, solvents, and other similar materials) could introduce the potential for an accidental spill or release to occur. As discussed under item (a) above, operation and maintenance of the project would not involve the routine transport, use, or disposal of hazardous materials. Therefore, potential impacts are limited to the construction period.

The presence of hazardous materials during project construction activities, including but not limited to ground-disturbing activities such as trenching and excavation, could result in an accidental upset or release of hazardous materials if they are not properly stored and secured. Hazardous materials used during project construction would be disposed of off-site in accordance with all applicable laws and regulations, including but not limited to the California Building and Fire Codes, as well as regulations of the federal and State Occupational Safety and Health Administrations. Therefore, the project would not 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, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The nearest school to the project site is the Hartnell College Castroville Education Center, located immediately southeast of the project site's eastern terminus. As discussed above, project construction may involve the temporary transport, storage, use, and disposal of hazardous materials. The management of hazardous materials is governed by several federal, State, and local regulations. Compliance with these laws and regulations would minimize impacts related to

hazardous emissions or the handling of hazardous materials during construction near the Castroville Education Center would be less than significant. In operation, the project would not require the transport, storage, use, or disposal of hazardous materials, and would not result in hazardous emissions. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project be located on a site that is included on a list of hazardous material 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?

The following databases compiled pursuant to Government Code Section 65962.5 were checked for known hazardous materials contamination:

- EnviroStor Database, California Department of Toxic Substances Control (DTSC)
- GeoTracker Database, SWRCB

According to the database search, there are no known hazardous material sites within the project site or within 0.25 mile of the project site (DTSC 2022 and SWRCB 2022). The nearest listed cleanup sites are North Monterey County Middle School, located approximately 0.4 mile northeast of the project site, and a leaking aboveground diesel storage tank located at 10499 McDougall Street, approximately 0.3 mile southeast of the project site. EnviroStor classifies North Monterey County Middle School as "No Further Action," and due to this status, the site does not present a hazard in relation to the proposed project. The site located at 10499 McDougall Street is classified as "Completed – Case Closed" by GeoTracker, indicating that environmental clean-up efforts have been completed. Project construction would not disturb either of these sites. Therefore, the proposed project would not be located on a site that is included on a list of hazardous materials site and would not create a significant hazard to the public or the environment as a result. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The closest public or private airport to the project site is the Marina Municipal Airport, located approximately six miles to the south. The project site is not located within this airport's Airport Influence Area (Monterey County Airport Land Use Commission 2019). Thus, the project would not result in a safety hazard or excessive noise for people working in the project area due to proximity to an airport, and no impact would occur.

NO IMPACT

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

The County of Monterey has published an Emergency Operations Plan establishing policies and procedures and identifying responsibilities of key officials and agencies to manage emergencies and disasters within the Monterey County Operational Area. The plan provides information on the County's emergency management structure, protocols for when the Monterey County Emergency Operations Center is activated, and procedures for notification and activation (County of Monterey

2014). The Emergency Operations Plan does not include policies specific to the project site or project activities; therefore, this analysis focuses on the project's potential to generally interfere with emergency response activities in the project site vicinity.

During construction, temporary single-lane closures of Washington Street, Merritt Street/SR 183, and Tembladera Street along the project alignment may be required to accommodate trenching and pipeline installation within the public ROW. As part of the encroachment permitting process, traffic control plans would be prepared for work within the Caltrans and County ROW. As described in Section 2.17, *Transportation*, project impacts on circulation would be minor and temporary and therefore would not interfere with emergency response and/or evacuation.

Project operation would be similar to existing conditions, and routine maintenance trips would be reduced in frequency as compared to existing conditions due to enhanced system functions. Project components would be located underground, and therefore would not obstruct access to any roadways or structures. Therefore, the project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The project site and surrounding area is located within a Local Responsibility Area for Fire Protection Responsibility and is not within a designated Very High Fire Hazard Severity Zone (California Department of Forestry and Fire Protection 2007). However, the project would involve the use of heavy equipment in open vegetated space within the public ROW, which could potentially result in sparks which could ignite surrounding vegetation. Potential ignition sources may include sparks from exhaust pipes, contact of mufflers with dry grass, and spills or releases of flammable materials such as gasoline. The project would be required to comply with applicable regulations relating to construction in vegetated and forested landscapes, including mandatory use of spark arrestors (Public Resource Code [PRC] Section 4442), maintenance of fire suppression equipment during the highest fire danger period (PRC Section 4428), and adherence to standards for conducting construction activities on days when a burning permit is required (PRC Sections 4427 and 4431). With adherence to these regulatory requirements, construction-related wildland fire risks would be less than significant.

The project would not include housing or other structures which could accommodate occupants, and therefore, would not house occupants which could potentially be exposed to risk of loss, injury, or death involving wildland fires. Impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	■	☐
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 which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	■
(iv) Impede or redirect flood flows?	☐	☐	☐	■
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	■	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	■	☐

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

The project site is located in the Central Coast hydrological region. The nearest surface water bodies are Tembladero Slough, which is immediately south of the project site, and the Pacific Ocean, which is approximately 1.6 miles west of the project site. During borings conducted for the Soils Engineering Report (Appendix E), groundwater was encountered approximately 29 feet below ground surface at a site east of SR 1, and approximately 3.5 feet below ground surface at a site west of SR 1. Excavation, grading, and construction activities associated with project construction would result in soil disturbance. Stormwater flowing through a construction site can collect sediment, debris, and chemicals, and transport them to receiving water bodies, which could result in potentially significant impacts to surface or ground water quality.

As detailed in Section 2.7*, Geology and Soils*, erosion during project construction would be limited given the relatively small footprint of each project component. As described in Section 2.9, *Hazards and Hazardous Materials,* accidental leaks or spills of hazardous materials that may occur during project construction would be cleaned up and disposed of in accordance with applicable regulations. In addition, as discussed in Section 1.9, *Description of Project,* the project would involve implementation of PDF-1, *Construction Best Management Practices,* which would involve implementation of stormwater and potential pollutant control measures within the project site. Therefore, project construction activities would not substantially degrade surface water quality.

As described in Section 1.9, *Description of Project,* if temporary dewatering activities are required, groundwater would either (1) be discharged into an on-site infiltration pit, or (2) be treated and then discharged through the new sewer to the M1W pump station. Groundwater percolated back into the underlying groundwater basin would not adversely impact groundwater quality because groundwater would be percolated directly back into its source groundwater basin. Therefore, project construction activities would not substantially degrade groundwater quality.

Upon completion of the proposed project, the existing potential for unexpected leaks and/or breakages of existing infrastructure, which could affect water quality, would be reduced due to system improvements. Therefore, operation of the project would not violate any water quality standards or waste discharge requirements or substantially degrade surface or groundwater quality. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The project site overlies the Salinas Valley Groundwater Basin (SVGB), for which the Salinas Valley Basin Groundwater Sustainability Agency (SVBGSA) is the Groundwater Sustainability Agency. The SVBGSA adopted a groundwater sustainability management plan for the SVGB on January 9, 2020.

Dewatering activities, if required, would be temporary and short-term. An on-site infiltration pit would facilitate groundwater recharge within the project site, and wastewater discharged through the existing M1W pump station would be treated at the M1W Regional Wastewater Facility and would primarily be recycled for crop irrigation or purified for groundwater replenishment (M1W 2022). Therefore, dewatering during project construction would not substantially decrease groundwater supplies. No long-term use of groundwater supplies would be required for the proposed project.

Groundwater recharge would not be substantially reduced because the project would not increase the amount of impervious surfaces within the project site, as compared to existing conditions, because the proposed sewer line would be located underground. Therefore, the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project would impede sustainable groundwater management of the basin. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?

c.(ii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

c.(iii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would 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?

c.(iv) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces in a manner that would impede or redirect flood flows?

The project would involve installation of a new underground sewer line. The project would not include components that would result in alterations to the course of a stream or river. As described in Section 1.9, *Description of Project,* project construction activities would temporarily divert flow of the drainage ditch west of Watsonville Road during open-cut trenching; however, these activities are anticipated to occur within one day, and the drainage ditch would return to existing conditions afterward. As described above under item (b), the project would not add impervious surfaces to the site, and ground surfaces would be restored upon completion of construction. Therefore, the project would not alter the existing drainage pattern along the pipeline alignment as compared to existing conditions. No impact would occur.

NO IMPACT

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

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps, the southwestern portion of the project site is located within a regulatory floodway. The western and eastern ends of the project site would be within Zone AE, which has a one percent annual chance of flood hazard, and the portion of the project site generally within the Caltrans ROW would be within an area with a 0.2 percent annual chance of flood hazard (FEMA 2017). Although the project site would be located within flood hazard zones, the proposed sewer line would be located entirely below ground. Further, the project would not increase the amount of wastewater traveling within

the project site, and would not require storage of hazardous materials or other potential pollutants on site. Therefore, the project would not risk release of pollutants due to flooding.

The project site is located entirely within a tsunami inundation zone, according to DOC Tsunami Inundation Maps (DOC 2021b). The project site is also adjacent to Tembladero Slough, which could be subject to risk of seiche. However, as described above, the project would be located entirely below ground, and would not require storage of chemicals or hazardous materials on-site. Therefore, the project would not present a new risk of pollutant release due to project inundation. Monterey County Code (MCC) Section 16.16.050(F) sets standards for utilities, including requirements for sanitary sewage systems to be designed to minimize or eliminate the infiltration of flood waters into the system and the discharge from systems into flood waters. Therefore, the project would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The project site is subject to the 2019 Water Quality Control Plan for the Central Coast Basin (Basin Plan), established by the Central Coast Regional Water Quality Control Board. The Basin Plan establishes narrative and numerical water quality objectives and includes total daily maximum loads, which are a calculation of the maximum amount of a pollutant a water body can have and still meet water quality objectives established by the region (Central Coast Regional Water Quality Control Board 2019). As discussed under item (a), the proposed project would not generate substantial erosion, and all accidental leaks or spills of hazardous materials that may occur during construction would be remediated in accordance with applicable regulations. Further, the project would involve implementation of PDF-1, *Construction Best Management Practices,* which would reduce the risk of pollutants entering the drainage ditch or Tembladero Slough. As such, the proposed project would not conflict with or obstruct implementation of the Basin Plan.

As mentioned under item (b), the SVBGSA is the Groundwater Sustainability Agency for the SVGB. In January 2020, the SVBGSA adopted a groundwater sustainability management plan, subject to Sustainable Groundwater Management Act requirements. If temporary dewatering activities are required during project construction, groundwater would either (1) be discharged into an on-site infiltration pit, or (2) be treated and then discharged through the new sewer to the M1W pump station. Groundwater percolated back into the underlying groundwater basin would not adversely impact groundwater quality because groundwater would be percolated directly back into its source groundwater basin. Therefore, the project would not conflict with or obstruct implementation of the SVBGSA groundwater sustainability management plan.

Therefore, the project would not increase groundwater extraction, substantially impede groundwater recharge, or interfere with sustainable groundwater management. As such, the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

11 Land Use and Planning

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

a. Would the project physically divide an established community?

The proposed project would bypass an existing underground pipeline with a larger underground pipeline. During construction, pipeline installation along Washington Street and Merritt Street/SR 183 would be temporary in nature and would maintain roadway access, although temporary lane closures may be required during work in public ROW. In operation, the project would be located entirely underground. Therefore, the project would not physically divide an established community, and no impact would occur.

NO IMPACT

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

The project site is located within unincorporated Monterey County, partially within the community of Castroville. The project would bypass an existing underground pipeline in parcels zoned as Mixed Use (MU-C), Coastal: Agricultural Preservation (CAP-CZ), and within public ROW. Pursuant to MCC Sections 20.30.030 and 21.17.030, water system facilities are permitted in Agricultural Preservation and Mixed Use zones. The project would be subject to compliance with the applicable site development standards outlined in MCC Section 20.17.030.

The project would be in furtherance of County of Monterey General Plan Goal PS-4, which aims to ensure adequate treatment and disposal of wastewater (County of Monterey 2010). In addition, the following goal from the Castroville Community Plan would be applicable to the proposed project (County of Monterey 2007):

- **Goal 10:** Continue to ensure that adequate levels of public services and infrastructure are available to meet the needs of new and existing development.

The proposed project would install a sewer line to serve the needs of existing and development planned under the Castroville Community Plan. Therefore, the project would be consistent with the Castroville Community Plan. Furthermore, as noted throughout this document, the project would

result in no impact, less than significant impacts, or less than significant impacts with the incorporation of mitigation measures for all issue areas evaluated, including biological resources, cultural and tribal cultural resources, paleontological resources, and noise. As a result, the proposed project would be consistent with the goals and policies outlined in the MCC, Monterey County General Plan, and Castroville Community Plan as they relate to these topics. The proposed project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	■
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	■

a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

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

According to Mineral Land Classification Maps prepared by the California Geological Survey, the project site is in an area where available geologic information indicates there is low potential for the presence of significant construction aggregate resources (California Geological Survey 2021). The County of Monterey General Plan does not identify specific areas within the county known to contain significant mineral resources (County of Monterey 2010). Regardless, the proposed project would not involve mineral extraction or changes in land use that could affect the availability of mineral resources. The project site is not currently used for mineral resource extraction. Therefore, no impact to mineral resources would occur.

NO IMPACT

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13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	■	☐	☐
b. Generation of excessive 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?	☐	☐	☐	■

Overview of Noise and Vibration

Noise

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (Caltrans 2013).

HUMAN PERCEPTION OF SOUND

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response. Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Caltrans 2013).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as

one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (10.5 times the sound energy) (Caltrans 2013).

SOUND PROPAGATION AND SHIELDING

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in the noise level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line), the path the sound will travel, site conditions, and obstructions. Noise levels from a point source (e.g., construction, industrial machinery, air conditioning units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this "shielding" depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can significantly alter noise levels.

DESCRIPTORS

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. The noise descriptors used for this analysis are the equivalent noise level (L_{eq}) and the community noise equivalent level (CNEL).

The L_{eq} is one of the most frequently used noise metrics; it considers both duration and sound power level. The L_{eq} is defined as the single steady-state A-weighted sound level equal to the average sound energy over a time period. When no time period is specified, a 1-hour period is assumed. The L_{max} is the highest noise level within the sampling period, and the L_{min} is the lowest noise level within the measuring period. Normal conversational levels are in the 60 to 65-dBA L_{eq} range; ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations (Federal Transit Administration [FTA] 2018).

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using CNEL, which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013).

Groundborne Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent buildings or structures and vibration energy may propagate through the buildings or structures. Vibration may be felt, may manifest as an audible low-frequency rumbling noise (referred to as groundborne noise), and may cause windows, items on shelves, and pictures on walls to rattle. Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants at vibration-sensitive land uses and may cause structural damage.

Typically, ground-borne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. Vibration amplitudes are usually expressed in peak particle velocity (PPV) or root mean squared (RMS) vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used as it corresponds to the stresses that are experienced by buildings (Caltrans 2020).

High levels of groundborne vibration may cause damage to nearby building or structures; at lower levels, groundborne vibration may cause minor cosmetic (i.e., non-structural damage) such as cracks. These vibration levels are nearly exclusively associated with high impact activities such as blasting, pile-driving, vibratory compaction, demolition, drilling, or excavation. The American Association of State Highway and Transportation Officials (AASHTO) has determined vibration levels with potential to damage nearby buildings and structures; these levels are identified in Table 8.

Table 8 AASHTO Maximum Vibration Levels for Preventing Damage

Type of Situation	Limiting Velocity (in/sec PPV)
Historic sites or other critical locations	0.1
Residential buildings, plastered walls	0.2–0.3
Residential buildings in good repair with gypsum board walls	0.4–0.5
Engineered structures, without plaster	1.0–1.5

in/sec = inches per second; PPV = peak particle velocity

Source: Caltrans 2020

Numerous studies have been conducted to characterize the human response to vibration. The vibration annoyance potential criteria recommended for use by Caltrans, which are based on the general human response to different levels of groundborne vibration velocity levels, are described in Table 9.

Table 9 Vibration Annoyance Potential Criteria

	Vibration Level (in/sec PPV)	
Human Response	Transient Sources	Continuous/Frequent Intermittent Sources[1]
Severe	2.0	0.4
Strongly perceptible	0.9	0.10
Distinctly perceptible	0.25	0.04
Barely perceptible	0.04	0.01

in/sec = inches per second; PPV = peak particle velocity

[1] Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: Caltrans 2020

Project Noise Setting

SENSITIVE RECEIVERS

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Noise sensitive receptors generally include schools, parks, residential areas, hospitals, churches, courts, libraries, and care facilities. While neither the District nor the County

define specific noise-sensitive land uses, the County's most stringent noise compatibility standards are for the following land uses: residential (low-density, single-family, duplex, mobile homes), residential (multi-family), transient lodging (hotels, motels), schools, libraries, churches, hospitals, and nursing homes. Noise-sensitive receivers nearest to the project site include single-family residences located approximately 25 feet from the project alignment along Merritt Street, and the Hartnell College Castroville Education Center approximately 130 feet from the project alignment at its nearest point.

AMBIENT NOISE LEVELS

The most common source of noise in the project site vicinity is vehicular traffic (e.g., automobiles, buses, and trucks) on SR 1. Noise levels along SR 1 in the project site vicinity vary from 60 to 70 CNEL, depending on the distances from this roadway (County of Monterey 2010). Ambient noise levels are generally highest during the daytime and rush hour unless congestion substantially slows speeds. Motor vehicle noise is of concern because it is characterized by a high number of individual events, which often create sustained noise levels. There are no other significant sources of noise in the project vicinity.

Regulatory Setting

The District has not adopted noise thresholds for construction or operational activities; therefore, thresholds outlined in the 2010 Monterey County General Plan and the MCC are utilized in this analysis.

Monterey County General Plan

The 2010 Monterey County General Plan Safety Element contains a land use and noise compatibility matrix (shown in Table 10), which summarizes the normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable noise levels for various land uses. Portions of the project site are located within areas designated for residential use or are adjacent to residential properties. According to the County's noise standards shown in Table 10, ambient noise levels up to 60 CNEL or less are normally acceptable for residential uses, which is the most stringent of the land uses adjacent to the project site.

Table 10 Land Use Noise Compatibility Matrix - Community Noise Equivalent Levels (DNL or CNEL, dBA)

Land Use Categories	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential (Low-Density Single-Family, Duplex, Mobile Homes)	<60	55-70	70-75	75+
Residential (Multi-Family)	<65	60-70	70-75	75+
Transient Lodging (Hotels, Motels)	<65	60-70	70-80	80+
Schools, Libraries, Churches, Hospitals, Nursing Homes	<70	60-70	70-80	80+
Auditoriums, Concert Halls, Amphitheaters	N/A	<70	65+	N/A
Sports Arena, Outdoor Spectator Sports	N/A	<75	70+	N/A
Playgrounds, Neighborhood Parks	<70	67.5-75	72.5+	N/A

Land Use Categories	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Golf Courses, Riding Stables, Water Recreation, Cemeteries	<75	70-80	N/A	80+
Office Buildings, Business Commercial and Professional	<70	67.5-77.5	75+	N/A
Industrial, Manufacturing, Utilities, Agriculture	<75	70-80	75+	N/A

N/A = Not Applicable (The County of Monterey has not established noise level ranges for these categories.)

Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply or air conditioning will normally suffice.

Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Clearly Unacceptable: New construction or development should generally not be undertaken.

Source: County of Monterey 2010

The following noise-related policies are provided in the 2010 Monterey County General Plan:

- **Policy S-7.4**: New noise generators may be allowed in areas where projected noise levels (shown in Figure 10 of the Monterey County General Plan) are "conditionally acceptable" only after a detailed analysis of the noise reduction requirements is made and needed noise mitigation features are included in project design.
- **Policy S-7.5**: New noise generators shall be discouraged in areas identified as "normally unacceptable." Where such new noise generators are permitted, mitigation to reduce both the indoor and outdoor noise levels will be required.
- **Policy S-7.6**: Acoustical analysis shall be part of the environmental review process for projects when:
  - Proposed noise generators are likely to produce noise levels exceeding the levels shown in the adopted Community Noise Ordinance when received at existing or planned noise-sensitive receptors.
- **Policy S-7.8**: All discretionary projects that propose to use heavy construction equipment that has the potential to create vibrations that could cause structural damage to adjacent structures within 100 feet shall be required to submit a pre-construction vibration study prior to the approval of a building permit. Projects shall be required to incorporate specified measures and monitoring identified to reduce impacts. Pile driving or blasting are illustrative of the type of equipment that could be subject to this policy.
- **Policy S-7.9**: No construction activities pursuant to a County permit that exceed "acceptable" levels listed in Policy S-7.1 shall be allowed within 500 feet of a noise sensitive land use during the evening hours of Monday through Saturday, or anytime on Sunday or holidays, prior to completion of a noise mitigation study. Noise protection measures, in the event of any identified impact, may include but not be limited to:
  - Constructing temporary barriers, or
  - Using quieter equipment than normal.

- **Policy S-7.10**: Construction projects shall include the following standard noise protection measures:
  - Construction shall occur only during times allowed by ordinance/code unless such limits are waived for public convenience;
  - All equipment shall have properly operating mufflers; and
  - Lay-down yards and semi-stationary equipment such as pumps or generators shall be located as far from noise-sensitive land uses as practical.

Monterey County Code

MCC Chapter 10.60 enforces construction and operational noise regulations. MCC Section 10.60.030 prohibits the operation of machinery that exceeds 85 dBA at 50 feet at any time of day. MCC Section 10.60.040 limits nighttime noise levels to 45 dBA L_{eq} and 65 dBA L_{max} at 50 feet between 9:00 p.m. and 7:00 a.m. MCC Section 10.60.040(C) provides exemptions to compliance with the exterior nighttime noise level standards, including for equipment used in an emergency, which is defined as a situation arising from fire, explosion, act of God, or act of public enemy which, if not corrected immediately, will potentially result in the loss of life, property or substantial environmental resources. However, there is no exemption provided for nighttime construction noise. The MCC does not include quantitative standards for groundborne vibration.

Noise Level Increases over Ambient Noise Levels

The operational and construction noise limits used in this analysis are set at reasonable levels at which a substantial noise level increase as compared to ambient noise levels would occur. Operational noise limits are lower than construction noise limits to account for the fact that permanent noise level increases associated with continuous operational noise sources typically result in adverse community reaction at lower magnitudes of increase than temporary noise level increases associated with construction activities that occur during daytime hours and do not affect sleep. Furthermore, these noise limits are tailored to specific land uses; for example, the noise limits for residential land uses are lower than those for commercial land uses. The difference in noise limits for each land use indicates that the noise limits inherently account for typical ambient noise levels associated with each land use. Therefore, an increase in ambient noise levels that exceeds these absolute limits would also be considered a substantial increase above ambient noise levels. As such, a separate evaluation of the magnitude of noise level increases over ambient noise levels would not provide additional analytical information regarding noise impacts and is therefore not included in this analysis.

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

Construction Noise

Project construction activities would generate temporary noise in the project site vicinity, exposing sensitive receivers located adjacent to the project alignment on Washington Street to increased noise levels. Construction noise would be generated by heavy-duty diesel construction equipment used for site preparation, trenching, paving, drilling, and ground restoration activities. Each phase of construction has a specific equipment mix and associated noise characteristics, depending on the equipment used during that phase. Construction noise would be short-term and temporary at the

individual locations of project components given that construction at each location would only occur for a fraction of the overall eight-month construction period.

MCC Section 10.60.030 prohibits the operation of machinery that exceeds 85 dBA at 50 feet at any time of day. However, the nearest sensitive receivers to the project site are located approximately 25 feet from noise generated by construction equipment. Given the proximity of sensitive receivers to the project site, this analysis assumes a threshold of 85 dBA at 25 feet rather than the established threshold of 85 dBA at 50 feet. This represents a conservative analysis because actual noise levels would be greater at 25 feet.

Table 11 presents estimated construction noise levels at 25 feet for various pieces of heavy equipment anticipated to be utilized for project construction activities. As shown therein, construction equipment noise levels would range from 76 to 93 dBA L_{eq} at 25 feet, which would exceed the threshold of 85 dBA L_{eq} at 25 feet. Therefore, project construction would generate a substantial temporary increase in ambient noise levels in the vicinity of the project, including at nearby noise-sensitive receivers, and impacts would be potentially significant. Mitigation Measure N-1 is required to reduce construction noise impacts to a less-than-significant level.

Table 11 Estimated Construction Equipment Noise Levels[1]

Equipment	Construction Noise Levels at 25 Feet (dBA L_{eq})
Air Compressor	87.5
Backhoe	87.5
Cement and Mortar Mixer	92.5
Concrete/Industrial Saw	83.5
Compactor	89.5
Crane	90.5
Excavator	84.5
Forklift[2]	75.5
Generator	89.5
Front End Loader	87.5
Paver	92.5
Pumps	84.5
Roller	92.5
Sweeper/Scrubber	79.5
Welder	77.5
Threshold	**85**
Threshold Exceeded?	Yes

dBA = A-weighted decibels; L_{eq} = equivalent noise level

[1] FTA provides reference construction noise levels at 50 feet for each piece of equipment. Noise levels at 25 feet for each piece of equipment were calculated using an attenuation rate of 7.5 dBA per doubling of distance.

[2] Because forklift noise levels were not available, noise levels for a manlift were used as a proxy for the purposes of this analysis because these two pieces of equipment are generally similar in size and operational characteristics.

Source: FTA 2018; Federal Highway Administration Roadway Construction Noise Model 2006

Operational Noise

Upon completion, project components would resume operating in a similar fashion to existing conditions. Therefore, project operation would not generate a substantial permanent increase in ambient noise levels in the vicinity of the project, and impacts would be less than significant.

Mitigation Measures

N-1 Temporary Noise Barriers

During construction of the eastern end of the sewer line, temporary noise barriers and/or blankets with a minimum height of eight feet shall be constructed along the entire eastern portion of the project site (along approximately 400 feet of the sewer line alignment) where the project alignment borders residential, commercial, and educational uses on Merritt Street and Washington Street. The temporary noise barriers and/or blankets shall be constructed of material with a minimum weight of two pounds per square foot with no gaps or perforations.

Significance After Mitigation

Implementation of Mitigation Measure N-1 would reduce noise levels at the nearest sensitive receivers by approximately 10 dBA. With mitigation incorporated, noise levels at the nearest sensitive receivers would range from approximately 66 to 83 dBA L_{eq} at 25 feet, which would be below the threshold used in this analysis of 85 dBA L_{eq} at 25 feet. Therefore, Mitigation Measure N-1 would reduce the project's construction-related noise impacts to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

Construction

Pursuant to Policy S-7.8 of the 2010 Monterey County General Plan, construction equipment that creates vibrations that could cause structural damage to structures within 100 feet of the construction area require additional vibrational analysis. The District and County of Monterey have not adopted quantitative standards to assess vibration impacts during construction and operation. However, Caltrans has developed limits for the assessment of vibrations from transportation and construction sources. The Caltrans vibration limits are reflective of standard practice for analyzing vibration impacts on structures from continuous and intermittent sources. The thresholds of significance used in this analysis to evaluate vibration impacts are based on these impact criteria, as summarized in Table 8 and Table 9.

Project construction may require operation of vibratory equipment such as bulldozers and loaded trucks within 25 feet of the residential buildings. As shown in Table 12, vibration levels from individual pieces of construction equipment would not exceed 0.20 in/sec PPV during operation of large bulldozers, which is the threshold at which damage can occur to residential structures, and would not exceed 0.25 in/sec PPV, which is the level at which transient vibration sources are distinctly perceptible. Because the use of construction equipment would not exceed the threshold for structural damage, project construction would not generate excessive groundborne vibration or groundborne noise levels, and impacts would be less than significant.

Table 12 Vibration Levels at Sensitive Receivers

Equipment	Estimated PPV at Nearest Building (25 feet)
Large Bulldozer	0.09
Loaded Truck	0.01
Threshold For Structural Damage to Residential Buildings	**0.20**
Threshold Exceeded?	No
Threshold For Human Annoyance	**0.25**
Threshold Exceeded?	No

See Appendix G for vibration analysis worksheets.

Operation

The proposed project does not include components with the potential to generate significant vibration during operation, such as manufacturing or heavy equipment. No operational vibration impact would occur.

LESS THAN SIGNIFICANT IMPACT

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

The nearest airport to the project site is the Marina Municipal Airport, located approximately 5.8 miles to the south. The project site is not located within this airport's Airport Influence Area (Monterey County Airport Land Use Commission 2019). Because the project site is not located in the vicinity of a private airstrip, airport land use plan, or within two miles of a public or public use airport, the project would not expose people residing or working in the project area to excessive aircraft-related noise. No impact would occur.

NO IMPACT

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14 Population and Housing

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

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

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

The project would involve installation of a sewer line and would not include housing or other infrastructure that would lead directly to population growth. The project would provide additional conveyance capacity from the District wastewater collection system to the M1W pump station in order to meet existing and planned demand. The proposed project would not allow development of land which previously could not be developed due to wastewater service constraints. Furthermore, the project does not include new connections to residences or businesses. As a result, the project would not indirectly induce substantial unplanned population growth. In addition, the project does not include components that would displace existing people or result in the demolition of housing. Therefore, no impact to population and housing would occur.

NO IMPACT

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15 Public Services

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a.	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	1 Fire protection?	☐	☐	☐	■
	2 Police protection?	☐	☐	☐	■
	3 Schools?	☐	☐	☐	■
	4 Parks?	☐	☐	☐	■
	5 Other public facilities?	☐	☐	☐	■

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The project involves installation of a new sewer line and would not introduce new infrastructure requiring additional fire or police protection services. As described in Section 2.14, *Population and Housing*, the project does not include development of structures or infrastructure that would directly or indirectly increase the population in Castroville or Monterey County. Therefore, the project would not result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times or other performance objectives. No impacts would occur.

NO IMPACT

16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	■
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	■

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

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?

As described in Section 2.14, *Population and Housing*, the project does not include development of structures or infrastructure that would directly or indirectly increase the population in Castroville or Monterey County. Therefore, the project would not increase the population served by local recreation facilities or otherwise result in increased demand for or degradation of those facilities. The project also does not include recreational facilities or require the construction or expansion of recreational facilities. No impacts related to recreation would occur.

NO IMPACT

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17 Transportation

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

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

The Circulation Element of the 2010 Monterey County General Plan includes goals to facilitate traffic movement and alleviate congestion by protecting public transportation facilities, encouraging land use patterns that reduce automobile dependence, and requiring new development to be located and designed with convenient access to efficient transportation options.

Construction-related vehicle trips would include construction workers traveling to and from the project site, haul trucks (for moving and importing soil), and other trucks associated with equipment and material deliveries. Such trips would occur on area roadways, such as SR 1, Washington Street, Merritt Street/SR 183, and Watsonville Road. Temporary single-lane closures of Washington Street and Merritt Street/SR 183 along the project alignment would be required to accommodate trenching and pipeline installation within public ROW. However, as part of the encroachment permitting process, traffic control plans would be prepared for work within the Caltrans and County ROW. Construction equipment and materials would be staged along road shoulders and alongside existing commercial structures, as shown in Figure 4 in Section 1.9. Given that construction would be a short-term and temporary activity, trips would account for a relatively small portion of existing traffic on area roadways, and traffic control plans would be implemented, construction-related traffic impacts would not be substantial. Therefore, project construction would not conflict with a program, plan, ordinance, or policy addressing the circulation system impacts, and impacts would be less than significant.

The proposed project involves installation of a sewer line, which would not conflict with adopted policies, plans, or programs addressing the circulation system, including public transit, bicycle, or pedestrian facilities. Project components would be located underground. Operation of the project

would include routine inspections and maintenance trips. However, maintenance trips would be reduced in comparison to existing conditions due to enhanced system functions. Therefore, project operation would not conflict with a program, plan, ordinance, or policy addressing the circulation system, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

CEQA Guidelines Section 15064.3(b) identifies criteria for evaluating transportation impacts. Specifically, the guidelines state VMT exceeding an applicable threshold of significance may indicate a significant impact. Neither the District nor Monterey County have adopted VMT thresholds, although the 2018 Monterey County Active Transportation Plan includes Policy C-2.4, which encourages a reduction in the number of VMT per person (Transportation Agency of Monterey County 2018). According to CEQA Guidelines Section 15064.3(b)(3), a lead agency may include a qualitative analysis of operational and construction traffic if existing models or methods are not available to estimate VMT for the particular project being considered. Such a qualitative analysis would evaluate factors such as the availability of transit and proximity to other destinations.

A VMT calculation is typically conducted on a daily or annual basis for long-range planning purposes. As discussed under item (a) above, traffic on local roadways would be temporarily increased during project construction due to worker trips and the necessary transport of construction vehicles and equipment to the project site. Increases in VMT from construction would be short-term, minimal, and temporary. In addition, after completion of the proposed project, routine operation and maintenance trips for the project would be less frequent in comparison to existing conditions due to enhanced system functions. Thus, operational VMT would decrease as compared to existing conditions. Therefore, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), and no impact would occur.

NO IMPACT

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

The project would not involve the construction of new roads or reconfiguration of roadways or intersections that could result in a substantial increase in traffic hazards. Construction equipment would be primarily staged within the project site outside of roadways, as shown in Figure 4 in Section 1.9, *Description of Project*. However, pipeline installation would require construction equipment within the Washington Street, Merritt Street/SR 183, and/or Tembladera Street. A traffic control plan would be prepared for work within the Caltrans and County ROW as part of the encroachment permitting process, which would minimize the potential for traffic hazards. As such, the project would not substantially increase hazards due to a geometric design feature or incompatible use, and no impact would occur.

NO IMPACT

d. Would the project result in inadequate emergency access?

During construction, temporary single-lane closures of Washington Street, Merritt Street/SR 183, and Tembladera Street along the project alignment may be required to accommodate trenching and pipeline installation within public rights-of-way. As part of the encroachment permitting process,

traffic control plans would be prepared for work within the Caltrans and County ROW. As described above, construction would not result in a significant increase in traffic, and operation of the improved pipeline would not introduce a new source of vehicle trips. The project site is easily accessible by emergency vehicles via SR 1, Watsonville Road, Washington Street, and Merritt Street/SR 183, and the project would not permanently alter emergency access or traffic congestion in the area. As a result, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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18 Tribal Cultural Resources

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

AB 52 of 2015 expanded CEQA by defining a new resource category, "tribal cultural resources." AB 52 states "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states the lead agency shall establish measures to avoid impacts altering the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). PRC Section 21074 (a)(1)(A-B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is:

1. Listed or eligible for listing in the CRHR or in a local register of historical resources as defined in PRC Section 5020.1(k); or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c). In applying

these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified or adopted. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those having requested notice of projects proposed in the jurisdiction of the lead agency.

Pursuant to PRC 21080.3.1 and AB 52, the District sent notification letters via email on September 26, 2022 to the following nine Native American tribes that are traditionally and culturally affiliated with the project site:

- Amah Mutsun Tribal Band
- Amah Mutsun Tribal Band of Mission San Juan Bautista
- Costanoan Rumsen Carmel Tribe
- Esselen Tribe of Monterey County
- Indian Canyon Mutsun Band of Costanoan (Hollister)
- Indian Canyon Mutsun Band of Costanoan (San Jose)
- Ohlone/Costanoan Esselen Nation
- Wuksache Indian Tribe/Eshom Valley Band
- Rumšen Am:a Tur:ataj Ohlone

The District received a response from Chairperson Dee Ybarra of the Rumšen Am:a Tur:ataj Ohlone Tribe requesting consultation under AB 52. The District held a consultation meeting with Chairperson Ybarra and Daniel Quiroga, Cultural Advisor of the Rumšen Am:a Tur:ataj Ohlone Tribe on October 31, 2022. The results of this meeting are summarized below. The District concluded consultation with consensus on November 14, 2022. No other consultation requests were received.

a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

b. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?

The SLF search was returned on September 27, 2022 with positive results for sacred lands within the project site. As described above, the District sent notification letters via email to nine Native American tribes that are affiliated with the project site. One Native American Tribe, the Rumšen Am:a Tur:ataj Ohlone Tribe, requested consultation under AB 52. During the consultation meeting held on October 31, 2022, Chairperson Ybarra and Mr. Quiroga indicated the cultural importance and sensitivity of the project area to the Rumšen Am:a Tur:ataj Ohlone Tribe. Consequently, impacts to tribal cultural resources would be potentially significant.

During the consultation meeting, the District and representatives from the Rumšen Am:a Tur:ataj Ohlone Tribe came to a consensus about an appropriate mitigation measure for the proposed project. Mitigation Measure TCR-1, Native American Monitoring, is incorporated herein. In addition, Mitigation Measure CR-1 in Section 2.5, *Cultural Resources,* includes procedures for the appropriate

handling of unanticipated discoveries of cultural resources, including tribal cultural resources. Per Mitigation Measure CR-1, if a discovered resource is determined by the qualified archaeologist to be prehistoric, then a Native American representative shall be contacted to participate in the evaluation of the resource.

Mitigation Measures

TCR-1 Native American Monitoring

The District shall retain a Native American consultant to conduct Native American monitoring of project-related ground disturbing activities related to the excavation of the receiving and sending pits that are associated with the jack and bore process. Native American monitoring shall be provided by a locally affiliated tribal member. The monitor shall have the authority to halt and redirect work should any Native American archaeological resources be identified during monitoring. If Native American archaeological resources are encountered during ground-disturbing activities, work within 60 feet of the find shall halt, and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology in either prehistoric or historic archaeology shall be contacted immediately to evaluate the find for inclusion in the CRHR and NRHP.

Native American monitoring may be reduced to spot-checking or eliminated at the discretion of the monitor, in consultation with the District, as warranted by conditions such as encountering bedrock, sediments being excavated are fill, or negative findings during the first 60 percent of rough grading. If monitoring is reduced to spot-checking, spot-checking shall occur when ground-disturbance moves to a new location within the project site and when ground disturbance would extend to depths not previously reached (unless those depths are within bedrock). The Native American monitor will prepare daily monitoring logs that include a description of construction activities, hours worked, and other applicable observations. In the event Native American archaeological resources are identified, they will be described in the daily monitoring log and the District will be notified.

Significance After Mitigation

Mitigation Measure TCR-1 would require Native American monitoring during excavation of the receiving and sending pits associated with the trenchless pipeline installation process. Mitigation Measure CR-1 includes procedures for the appropriate handling of unanticipated discoveries of cultural resources, including tribal cultural resources. Implementation of these measures would reduce potential impacts to tribal cultural resources to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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19 Utilities and Service Systems

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

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

Water

The project would include installation of a sewer line. The project would not require or result in the relocation or construction of new or expanded water facilities; therefore, no impact would occur.

Wastewater Treatment

The proposed project would itself involve installation of a sewer line, the environmental impacts of which are analyzed throughout this document. No additional environmental impacts associated with the construction or relocation of wastewater facilities would occur beyond those analyzed herein.

Stormwater Drainage

As discussed in Section 2.10, *Hydrology and Water Quality*, the project would have no effect on the amount of impervious surfaces within the project site as compared to existing conditions because the project would be located underground. Therefore, the proposed project would not alter the drainage pattern within the project site and would not increase stormwater flow such that new or expanded stormwater drainage systems would be necessary. No impact would occur.

Electricity and Natural Gas

As discussed in Section 2.6, *Energy*, the project would not require electricity in operation. The project would not require natural gas connections. Therefore, the project would not require or result in the relocation or construction of new or expanded electricity or natural gas facilities. No impact would occur.

Telecommunications

The project would not involve components requiring telecommunications infrastructure and is not anticipated to involve the relocation of existing telecommunications facilities. Therefore, no impact would occur.

Summary

In summary, the project would not 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. There would be no impact.

NO IMPACT

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

The project consists of the installation of a sewer line. Small quantities of water would be required during construction for dust suppression, which would be provided by the District. Water consumption associated with dust suppression would be temporary and minimal because only disturbed areas would need to be watered. As described in Section 1.9, *Description of Project,* if temporary dewatering activities are required, groundwater would either be discharged into an on-site infiltration pit, or be treated and then discharged through the new sewer to the M1W pump station. The project does not include development of structures or infrastructure that would directly or indirectly increase the population of Castroville or Monterey County such that water demand would increase. Therefore, impacts to water supplies would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The District collects and processes wastewater from the Castroville area, which is conveyed to the M1W Moss Landing Pump Station and eventually discharged for treatment to the M1W Regional Wastewater Facility, which has a design capacity of 29.6 million gallons per day (M1W 2022).

The proposed project is itself an improvement to the wastewater system, and would upgrade an under-capacity segment of the conveyance infrastructure. As discussed in Section 2.14, *Population and Housing*, the purpose of the project is to provide additional conveyance capacity from the District wastewater collection system to the M1W pump station in order to meet existing and planned demand. The proposed project would not allow development of land which previously could not be developed due to wastewater service constraints, and would not introduce a new demand for wastewater treatment. As such, the project would have a beneficial impact to wastewater infrastructure, and no adverse impact would occur.

NO IMPACT

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

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Construction activities may temporarily generate solid waste, including soils and construction waste, which would be disposed of in accordance with all applicable federal, State, and local statutes and regulations. While most soil is expected to be reused as backfill material within the project area, approximately 100 cubic yards of soil would be exported off-site. Haul trucks would transport debris and soil material to the Monterey Peninsula Landfill near the City of Marina, approximately four miles south of the project site, or another location as determined by the construction contractor. The Monterey Peninsula Landfill had a remaining capacity of 48,560,000 cubic yards as of 2021 (California Department of Resource Recycling and Recovery 2022). Due to the temporary nature of construction and minimal amount of construction waste anticipated to require disposal, the project would not generate quantities of solid waste that would account for a substantial percentage of the total daily regional permitted capacity available at Monterey Peninsula Landfill. Therefore, waste generated by demolition and construction activities would not exceed the available capacity at the landfill serving the project area that would accept debris generated by the project, and impacts would be less than significant.

The project would be required to comply with all applicable laws and regulations related to solid waste generation, collection, and disposal. The project would result in a short-term and temporary increase in solid waste generation during construction but would not substantially affect standard solid waste operations of any landfill accepting waste. Recycling and reuse activities during construction would comply with the California Integrated Waste Management Act of 1989 (AB 939). Once operational, the project would include unmanned facilities that would not generate solid waste. Therefore, solid waste impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	■
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?	☐	☐	☐	■
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?	☐	☐	☐	■
Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	■

a. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

b. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

d. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The project site and surrounding area is located within a Local Responsibility Area for Fire Protection Responsibility and is not within a designated Very High Fire Hazard Severity Zone. The nearest State Responsibility Area is 2.7 miles northeast of the project site (California Department of Forestry and Fire Protection 2007). Therefore, the proposed project would not be located in or near a State Responsibility Area or land classified as a Very High Fire Hazard Severity Zone. No impact related to wildfire would occur.

NO IMPACT

21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. 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. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	■	☐	☐
c. 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?

As discussed in Section 2.4, *Biological Resources*, the proposed project would not 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, or substantially reduce the number or restrict the range of a rare or endangered plant or animal. As discussed in Section 2.5, *Cultural Resources*, and Section 2.18, *Tribal Cultural Resources,* the project would not have the potential to eliminate important examples of the major periods of California history or prehistory with the incorporation of

Mitigation Measures CR-1, TCR-1, and GEO-1. Therefore, impacts would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

As described in Sections 2.1 through 2.20, the proposed project would not result in significant and unmitigable impacts to the environment with respect to all environmental issues. This is largely because project construction activities would be temporary, low-intensity, and would not significantly alter the environmental baseline condition. In addition, upon the completion of construction, there would be a reduction in the operation and maintenance needs of the proposed pipeline as compared to baseline conditions because the project would enhance existing system functions.

Cumulative impacts could occur if the construction of other projects occurs at the same time as the proposed project and in the same geographic scope, such that the effects of similar impacts of multiple projects combine to create greater levels of impact than would occur at the project-level. For example, if the construction of other projects in the area occurs at the same time as project activities, combined air quality and noise impacts may be greater than at the project-level.

Seven planned development projects are in the vicinity of the project site, which are summarized in Table 13. The exact implementation timing of these projects is not known at this time; therefore, it is conservatively assumed that construction of these planned projects could overlap with construction of the proposed project. These planned projects are generally located east of the project site in the unincorporated community of Castroville.

Table 13 Cumulative Development Projects

No.	Project Name	Project Location	Project Components	Status
1	Castroville Oaks Affordable Housing Subdivision	SR 156 and Castroville Boulevard, 1.2 miles east of the project site	90 lot single-family residential subdivision on approximately 29 acres and a 125-unit affordable multi-family apartment building on approximately 16 acres	Application submitted to Monterey County
2	PLN220141	8025 Sombrero Court, 3.6 miles northeast of the project site	Construction of a 2,340 square-foot barn and associated site improvements	Permit approved in May 2022
3	PLN220080	15185 Amaral Court, 4 miles northeast of the project site	Coastal Administrative Permit to construct a 5,000 square-foot boat/RV shop building and an 800 square-foot detached accessory dwelling unit	Under consideration by Monterey County
4	PLN190056-AMD1	2040 Elkhorn Road, 3.4 miles northeast of the project site	Construction of a 2,360 square foot barn and two-story addition to an existing single-family residence	Application incomplete in February 2022
5	PLN220012	11561 Preston Street, 0.7 mile east of the project site	Construction of two duplexes with combined area of 8,440 square feet	Permit approved in January 2022

No.	Project Name	Project Location	Project Components	Status
6	PLN210222	11090 Sanchez Street, 0.4 mile southeast of the project site	Demolition of an existing single-family residence and construction of a new single- family residence	Under consideration by Monterey County
7	PLN210118	11421 Palmer Street	Design Approval to allow the construction of a 1,120 square-foot manufactured dwelling unit with a detached 242 square-foot garage and 1,025 square-foot detached manufactured accessory dwelling unit	Design Approval approved in May 2021

Source: County of Monterey 2022b

Project impacts are primarily temporary, localized effects that would occur during construction activities. Therefore, the potential for the project to contribute to cumulative impacts would be limited to the infrequent periods of project activities and the following issue areas:

- **Air Quality.** Because the NCCAB is designated nonattainment-transitional for the ozone CAAQS and nonattainment for the PM_{10} CAAQS, cumulative air quality impacts currently exist for these pollutants. As discussed in Section 2.3, *Air Quality*, project construction activities would not generate emissions of this air pollutant exceeding MBARD significance thresholds, which are intended to assess whether a project's contribution to existing cumulative air quality impacts is considerable. Therefore, the project's contribution to cumulative air quality impacts would not be cumulatively considerable.
- **Biological Resources.** Most cumulative impacts to biological resources occur when a disproportionate number of development projects occur at once and regionally impact a local population of a special status species, riparian habitat, sensitive natural communities, wetlands, or other locally protected biological resources. In this case, Project Nos. 1, 2, and 7 would occur in undeveloped areas; Project Nos. 2, 3, and 4 would occur within partially developed or previous developed areas; and Project Nos. 5 and 6 would occur in previously developed areas. Project Nos. 1 through 4 and No. 7 would include elements that have the potential to result in significant impacts to special status plant and wildlife species or sensitive natural communities. Due to the nature of these projects and the discretionary approvals required for each one, these development projects would be required to undergo CEQA review to identify the extent of these biological resources impacts and to mitigate those impacts appropriately. Given the uncertainty in the extent of impacts associated with these projects, this analysis conservatively assumes a significant cumulative impact to biological resources would occur. Nevertheless, the proposed project would be required to implement Mitigation Measures BIO-1 through BIO-5 to reduce its impacts to biological resources to a less-than-significant level such that project-level impacts would not result in a cumulatively considerable contribution to this cumulative impact.
- **Cultural and Tribal Cultural Resources.** Cumulative development in the region would continue to disturb areas with the potential to contain cultural and tribal cultural resources. Project Nos. 6 and 7 would occur within developed sites with low potential to impact cultural resources (County of Monterey 2022b). In addition, as mentioned above, the cumulative development projects have undergone or would be required to undergo CEQA review, which would determine the extent of potential cultural and tribal cultural resources impacts and mitigate those impacts appropriately. If these cumulative projects would result in impacts to known or unknown cultural or tribal cultural resources, impacts to such resources would be addressed on a case-by-case basis. Given the uncertainty in the extent of impacts associated with these

projects, this analysis conservatively assumes a significant cumulative impact to cultural and tribal cultural resources would occur. Nevertheless, the proposed project would be required to implement Mitigation Measures CR-1 and TCR-1 to reduce its impacts to cultural and tribal cultural resources to a less-than-significant level such that project-level impacts would not result in a cumulatively considerable contribution to this cumulative impact.

- **Greenhouse Gas Emissions.** GHG emissions and climate change are, by definition, cumulative impacts. As discussed in Section 2.8, *Greenhouse Gas Emissions*, the adverse environmental impacts of cumulative GHG emissions, including sea level rise, increased average temperatures, more drought years, and more large forest fires, are already occurring. As a result, cumulative impacts related to GHG emissions are significant. Thus, the issue of climate change involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. As discussed in Section 2.8, *Greenhouse Gas Emissions*, project emissions would be below the identified threshold of significance and would therefore not be cumulatively considerable.
- **Hazards and Hazardous Materials.** Similar to the proposed project, cumulative projects would be required to comply with regulations applicable to the use, disposal, and transportation of hazardous materials during construction activities, and compliance with applicable regulations would reduce potential cumulative impacts to less-than-significant levels. With respect to the use and accidental release of hazardous materials in the environment at construction, effects are generally limited to site-specific conditions. Therefore, cumulative impacts related to accidental release of hazardous materials would be less than significant.
- **Noise.** Overlapping construction activities associated with cumulative development projects in conjunction with proposed project activities could result in cumulative noise impacts related to a temporary increase in ambient noise levels at the same noise-sensitive receivers located throughout the area, especially during construction activities. However, similar to the proposed project, cumulative development projects would be subject to compliance with the noise level limits established in MCC Chapter 10.60. Therefore, cumulative construction noise impacts would be less than significant.
- **Transportation.** Overlapping construction schedules associated with cumulative development projects in conjunction with proposed project activities could result in cumulative transportation impacts. Similar to the proposed project, cumulative projects would be required to prepare traffic control plans as part of the encroachment permitting process for construction within Caltrans or County ROW, which would minimize impacts to transportation hazards and emergency access. The project would require fewer maintenance trips in operation compared to existing conditions; accordingly, there would be no cumulative operational impact. Therefore, cumulative transportation impacts would be less than significant.

Given the above discussion, the proposed project would not result in a cumulatively considerable contribution to a significant cumulative impact with mitigation incorporated.

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

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. As discussed in Section 2.3, *Air Quality*, the proposed project would not result in significant air quality impacts during construction or operation. As discussed in Section 2.9, *Hazards and Hazardous Materials*, compliance with federal, state, and local laws regulating the

transportation of hazardous materials would minimize the potential for an accidental release of hazardous materials during construction, and the proposed project would not involve the use of hazardous materials during operation. As discussed in Section 2.13, *Noise*, the project would not generate substantial temporary or permanent increases in ambient noise levels in the vicinity of the project site with implementation of Mitigation Measure N-1. Therefore, the proposed project would not adversely affect human beings, directly or indirectly, and impacts would be less than significant with mitigation incorporated.

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3 Federal Cross-Cutting Environmental Regulations Evaluation

The proposed project may receive funding from the CWSRF, which is administered in California by SWRCB on behalf of USEPA. Therefore, to assist in compliance with the federal environmental requirements for the funding program, this document includes analysis pertinent to several federal cross-cutting regulations (also referred to as federal cross-cutters or CEQA-Plus). The basic rules for complying with cross-cutting federal authorities under this program are set-out in the CWSRF regulations at 40 Code of Federal Regulations (CFR) Section 35.3145.

This section describes the project's status of compliance with relevant federal laws, executive orders, and policies, and any consultation that has occurred to date or will occur in the near future. The topics are based in part on the SWRCB's CWSRF Program Evaluation Form for Environmental Review and Federal Coordination.

3.1 Federal Endangered Species Act

Section 7 of the federal Endangered Species Act requires federal agencies, in consultation with the Secretary of the Interior, to ensure their actions do not jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of the critical habitat of these species. Under Section 7, a project that could result in incidental take of a listed threatened or endangered species must consult with the USFWS to obtain a Biological Opinion (BO). If the BO finds that the project could jeopardize the existence of a listed species ("jeopardy opinion"), the agency cannot authorize the project until it is modified to obtain a "nonjeopardy" opinion. For the purpose of this project, the SWRCB would act as the federal lead or responsible agency.

As discussed in Section 2.4, *Biological Resources,* and in the BRA (Appendix B), no federally listed species were determined to have a moderate or greater potential to occur within the project site based on the lack of suitable habitat. Thus, the project would not jeopardize listed species and the lead agency would be in compliance with the federal Endangered Species Act.

3.2 National Historic Preservation Act, Section 106

The purpose of the NHPA is to protect, preserve, rehabilitate, or restore significant historical, archaeological, and cultural resources. Section 106 requires federal agencies to consider effects on historic properties. Section 106 review involves a step-by-step procedure detailed in the implementing regulations found in 36 CFR Part 800.

As discussed in Section 2.5, *Cultural Resources*, and the HPIR prepared for the project (Appendix C), there are no historic properties within the project site. Ground disturbance associated with project construction may result in a substantial adverse change in the significance of these archaeological resources should the project disturb or destroy intact portions of these resources that contribute to their significance. However, the project would be required to implement Mitigation Measure CR-1, which would avoid and minimize the potential for adverse effects to these resources. Therefore, as concluded in the HPIR, the project would result in no adverse effect to historic properties under

Section 106 of NHPA. As discussed in the HPIR, several Tribes requested consultation under Section 106. If the District pursues federal funding, the requests for consultation will be submitted to the SWRCB. As the lead federal agency under Section 106, the SWRCB will be responsible for conducting consultation, pursuant to Section 106, with the Tribes.

3.3 Clean Air Act

The 1990 Amendment to FCAA Section 176 requires USEPA to promulgate rules to ensure federal actions conform to the appropriate State Implementation Plan. This rule, known as the General Conformity Rule (40 CFR Subpart W and 40 CFR Part 93 Subpart B: General Conformity), requires any federal agency responsible for an action in a federal nonattainment or maintenance area to demonstrate conformity with the applicable State Implementation Plan, by determining the action is either exempt from the General Conformity Rule requirements or subject to a formal General Conformity Determination. Actions would be exempt, and thus conform to the State Implementation Plan, if an applicability analysis shows that total direct and indirect project emissions of criteria pollutants for which the project area is designated nonattainment or maintenance would be less than specified emission thresholds, known as *de minimis* rates. If not exempt, an air quality conformity analysis would be required to determine conformity.

As outlined in the Federal Clean Air Act General Conformity Applicability Analysis included as Appendix H, the project site is located within the North Central Coast Air Basin, which is designated attainment or unclassified for all NAAQS. Therefore, no *de minimis* rates are applicable, and general conformity requirements do not apply to the project. A formal conformity determination is not required for the project, and the lead agency would be in compliance with the FCAA.

3.4 Coastal Zone Management Act

The Coastal Zone Management Act (CZMA), passed by Congress in 1972 and managed by the National Oceanic and Atmospheric Administration's Office of Ocean and Coastal Resource Management, is designed to balance competing land and water issues in coastal zones. It also aims to "preserve, protect, develop, and where possible, to restore or enhance the resources of the nation's coastal zone." Within California, the CZMA is administered by the Bay Conservation and Development Commission, the California Coastal Conservancy, and the California Coastal Commission.

The proposed project is located partially within the Coastal Zone. As discussed in Section 1.10, *Coastal Zone,* the County of Monterey maintains an LCP that has been certified by the California Coastal Commission. Because the project would be located within 100 feet of Tembladero Slough, the project site is in the appeals jurisdiction. None of the project site is located within the California Coastal Commission's retained permit jurisdiction. As noted in Table 2, the project would require a Coastal Development Permit from the County of Monterey. Therefore, through required compliance with County of Monterey coastal regulations, the lead agency would be in compliance with the CZMA.

3.5 Farmland Protection Policy Act

The Farmland Protection Policy Act (FPPA) requires a federal agency to consider the effects of its actions and programs on the nation's farmlands. The FPPA is intended to minimize the impact of

federal programs with respect to the conversion of farmland to nonagricultural uses. It assures that, to the extent possible, federal programs are administered to be compatible with State, local, and private programs and policies to protect farmland.

As described in Section 2.2, *Agriculture and Forestry Resources*, the property west of SR 1 that the proposed sewer line would traverse is designated as Prime Farmland by the DOC (DOC 2016a). Open-cut trench installation of the sewer line within this agricultural land would make approximately 0.6 acre of agricultural land temporarily unavailable for use during the seven month construction period. As described in Section 2.2, *Agriculture and Forestry Resources*, agricultural topsoil would be stockpiled separately from other soils and backfill, and would be restored once project construction is complete. Therefore, the proposed project would not permanently convert farmland to nonagricultural uses, and the lead agency would be in compliance with the FPPA.

3.6 Executive Order 11988 – Floodplain Management

Executive Order (EO) 11988 requires federal agencies to recognize the values of floodplains and to consider the public benefits from restoring and preserving floodplains.

As described in Section 3.10, *Hydrology and Water Quality*, portions of the project site are within a regulatory floodway, a one percent annual chance of flood hazard zone, and/or a 0.2 percent annual chance of flood hazard zone, as designated by FEMA (FEMA 2017). However, the proposed sewer line would be located entirely underground. As such, the project would not interfere with floodplain management or expose people or structures to a significant risk of loss, injury or death involving flooding. The lead agency would therefore be in compliance with this EO.

3.7 Federal Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and Executive Order 13168

The Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act prohibit the take of migratory birds (or any part, nest, or eggs of any such bird) and the take and commerce of eagles. EO 13168 (September 22, 2000) requires that any project with federal involvement address impacts of federal actions on migratory birds.

As described in Section 2.4, *Biological Resources*, the proposed project would have a less-than-significant impact on nesting birds with implementation of Mitigation Measure BIO-3 if construction cannot be avoided during nesting season. Thus, the lead agency would be in compliance with this EO.

3.8 Executive Order 11990 – Protection of Wetlands

Under EO 11990 (May 24, 1977), federal agencies must avoid affecting wetlands unless it is determined that no practicable alternative is available.

As described in Section 2.4, *Biological Resources*, the drainage ditch within the project site is likely under the jurisdiction of the RWQCB pursuant to the Porter-Cologne Water Quality Control Act as waters of the State and County of Monterey pursuant to the California Coastal Act and associated Coastal Commission-approved LCP because it meets the one-parameter definition of a wetland. This drainage ditch is manmade, largely devoid of vegetation, and contains little habitat value. However, there is sufficient hydrology to support aquatic invertebrates and mosquito fish.

Implementation of the project would require trenching to install the new pipeline and restoration of the site to previous conditions. Therefore, the project would not result in permanent impacts or substantial adverse effects to the drainage but would require USACE, RWQCB, and CDFW permitting. Compliance with applicable regulations, permitting requirements, and Mitigation Measure BIO-5, *Drainage Mitigation,* would minimize potential effects to the drainage ditch. Impacts would be less than significant with mitigation and thus, the District would be in compliance with EO 11990.

3.9 Wild and Scenic Rivers Act

The Wild and Scenic Rivers Act was passed in 1968 to preserve and protect designated rivers for their natural, cultural, and recreational value.

There are no designated Wild and Scenic Rivers within the project area (National Wild and Scenic Rivers System 2022) and no designated rivers would be adversely affected by the proposed project. As a result, the Wild and Scenic Rivers Act does not apply to the proposed project.

3.10 Safe Drinking Water Act – Source Water Protection

Section 1424(e) of the Safe Drinking Water Act established the USEPA's Sole Source Aquifer Program. This program protects communities from groundwater contamination from federally-funded projects.

Within the USEPA Region 9, which includes California, there are nine sole source aquifers. None of these sole source aquifers are located within the project area (USEPA 2022). Therefore, the Sole Source Aquifer Program does not apply to the proposed project, and the lead agency would be in compliance with Section 1424(e) of the Safe Drinking Water Act.

3.11 Executive Order on Trails for America in the 21st Century

The EO on Trails for America (January 18, 2001) requires federal agencies to protect, connect, promote, and assist trails of all types throughout the United States. No trails exist in the vicinity of the project site with which the proposed project could interfere (County of Monterey 2010). As a result, no adverse effects on trails would occur, and the lead agency would be in compliance with this EO.

3.12 Executive Order 13007 – Indian Sacred Sites

Sacred sites are defined in Executive Order 13007 (May 24, 1996) as "any specific, discrete, narrowly delineated location on federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site."

The proposed project would not be located on or impact any federal lands and therefore would not affect any Native American sacred sites protected under this EO. As a result, the lead agency would be in compliance with this EO.

3.13 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) of 1976, as amended (16 United States Code Section 1801 et seq.), is the primary act governing federal management of fisheries in federal waters, from the three-nautical-mile state territorial sea limit to the outer limit of the United States Exclusive Economic Zone. It establishes exclusive United States management authority over all fishing within the Exclusive Economic Zone, all anadromous fish throughout their migratory range except when in a foreign nation's waters, and all fish on the continental shelf. The Act also requires federal agencies to consult with the National Marine Fisheries Service on actions that could damage Essential Fish Habitat (EFH), as defined in the 1996 Sustainable Fisheries Act (Public Law 104-297).

The proposed project would not be located in or impact any United States federal waters regulated under the Magnuson-Stevens Act. EFH includes those habitats that support the different life stages of each managed species. A single species may use many different habitats throughout its life to support breeding, spawning, nursery, feeding, and protection functions. EFH can consist of both the water column and the underlying surface (e.g., streambed) of a particular area. As described in Section 2.4, *Biological Resources*, the project is not expected to have an adverse effect on resident or migratory fish, wildlife species, or fish habitat in the project area. As a result, the lead agency would be in compliance with this Act.

3.14 Environmental Justice

The USEPA defines environmental justice as: "The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means no group of people, including racial, ethnic, or economic groups should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies" (USEPA 2016). This section describes existing socioeconomic conditions in the project area and the regulatory setting pertaining to environmental justice-related issues. This section also evaluates the potential for the proposed project to disproportionately affect minority or low-income groups.

Minority, Low-Income, and Disadvantaged Communities

According to USEPA guidelines, a minority population is present in a study area if the minority population of the affected area exceeds 50 percent, or if the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. The project site is located just outside of the community of Castroville in unincorporated Monterey County. Demographics for Castroville are provided in the United States Census Bureau's American Community Survey Estimates (United States Census Bureau 2020).

Table 14 summarizes socioeconomic demographic data for Castroville, Monterey County, and California.

Table 14 Socioeconomic Demographics Within and Near Project Area

Community	Percent Minority	Percentage of People in Poverty	Median Household Income
Community of Castroville	94%	10.2%	$66,839
Monterey County	70.6%	11.6%	$76,943
California	63.2%	11.5%	$78,672

Source: United States Census Bureau 2020

As shown in Table 14, 94 percent of the total population in Castroville identify as a race other than Caucasian. Therefore, the project site does have a minority population exceeding 50 percent and is identified as a minority population for the purposes of environmental justice analysis.

USEPA guidelines recommend analyses of low-income communities consider the US Census poverty level definitions, as well as applicable State and regional definitions of low-income and poverty communities. According to US Census estimates, approximately 10.2 percent of the population of Castroville is at or below the poverty level. In comparison, the percentage of persons in poverty in Monterey County is 11.6 percent and the entire state of California is 11.5 percent. Therefore, the community of Castroville has a poverty rate that is below the state average and below the County average.

A Disadvantaged Community (DAC) is defined as a community with a median household income (MHI) less than 80 percent of the California MHI (PRC Section 75005[g]). According to US Census data, the statewide MHI was $78,672 in 2020. A DAC would therefore be defined as a community with a MHI of $62,937 or less. According to the California Department of Water Resources DAC Mapping Tool, the project site is located in a DAC block group, as informed by 2016 to 2020 census data (California Department of Water Resources 2022). As such, the area around the project site would be considered a DAC.

Analysis and Conclusion

For the purposes of this analysis, an impact related to environmental justice would be significant if the proposed project would cause impacts to minority or low-income populations that are disproportionately high and adverse, either directly, indirectly, or cumulatively.

The proposed project would involve installation of a new sewer line. Although project has the potential for short-term effects related to temporary construction activities, the provision of an upgraded wastewater system would have the long-term benefit of increasing the reliability of the wastewater system for all Castroville community members. Construction would generate localized environmental impacts (e.g., dust, traffic, and noise), but such activities would be intermittent and temporary and would cease upon completion of work activities. These activities would also be typical of construction projects occurring throughout the state on an ongoing basis and therefore would not result in disproportionately high impacts to the community of Castroville. Where potential impacts could occur, mitigation measures have been identified throughout this document to reduce such effects to less-than-significant levels. Therefore, the proposed project would not result in any disproportionately high impacts on minority or low-income communities. Thus, no adverse environmental justice impacts would occur.

4 Environmental Alternative Analysis

Although not required by CEQA, CWSRF funding applicants are required to complete an Environmental Alternative Analysis as part of the Environmental Package of the funding application. The following sections provide descriptions of each project alternative; a comparative environmental analysis among the project alternatives for direct, indirect, and cumulative environmental impacts; potential reasonably foreseeable future environmental impacts for each alternative; suggested mitigation measures beyond those already required for the proposed project, if necessary; and a discussion of the environmental reasoning for selection of the proposed project. This Environmental Alternative Analysis provides a range of reasonable alternatives that meet the District's project needs and objectives, including a "no project/no action" alternative. The build alternative (Alternative 2) is based upon an earlier design option for the project prepared by MNS Engineers.

4.1 Alternative 1: No Project/No Action

Description

Under this alternative, the proposed sewer line would not be constructed, and the existing infrastructure would continue to operate in its current condition. Over time, the risk of leaks, breakages, and other system failures would increase due to aging and deteriorating infrastructure. Further, the District identified that development projected in the 2006 Castroville Community Plan will exacerbate capacity issues without implementation of the project.

Environmental Analysis

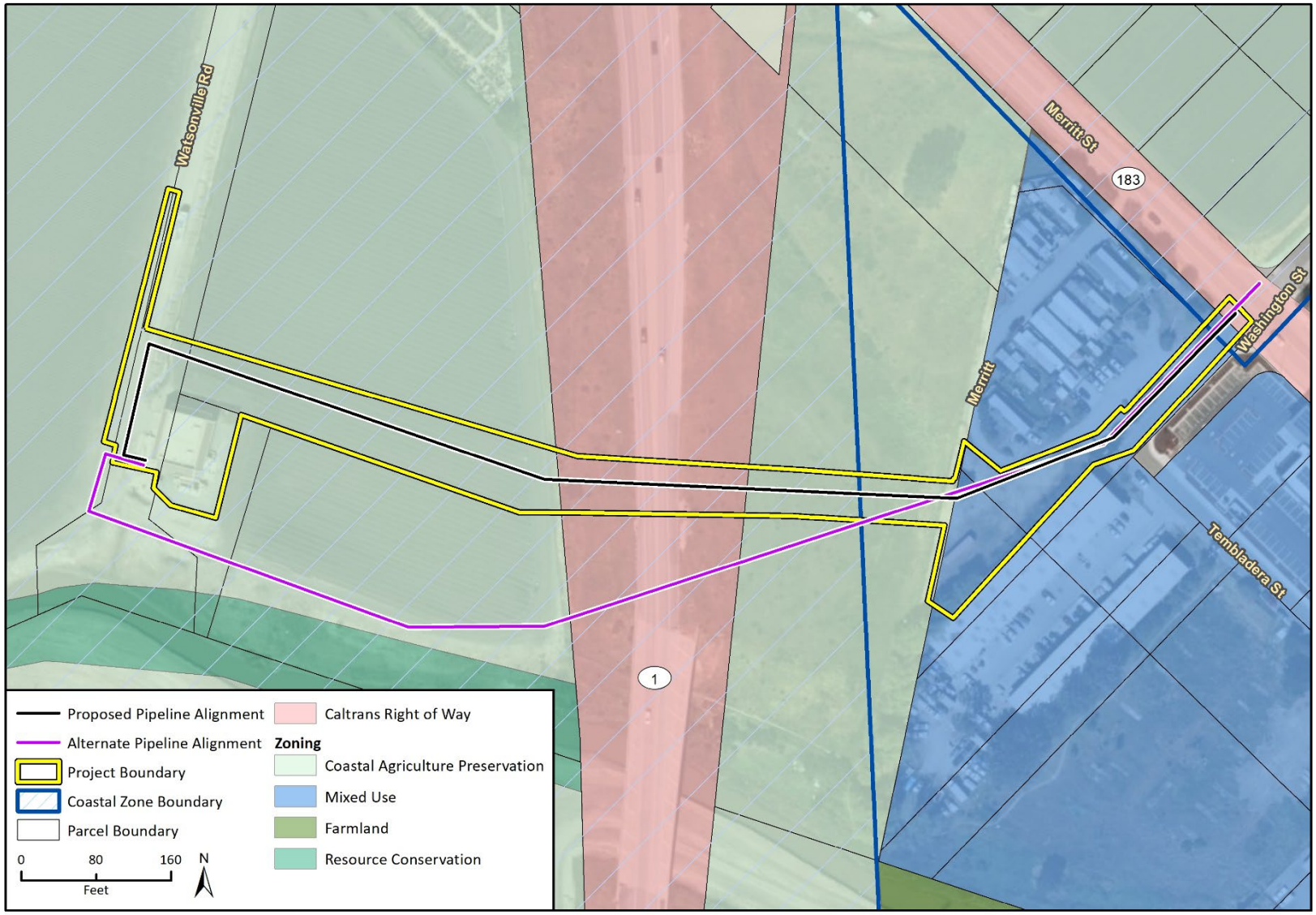
Because this alternative would not require construction activities, none of the proposed project's potentially significant but mitigable construction-related environmental impacts to air quality, biological resources, cultural and tribal cultural resources, paleontological resources, and noise would occur. None of the mitigation measures required for the proposed project would apply. However, the risk of unexpected leaks, breakages, and capacity issues associated with existing infrastructure would increase over time, and depending on the locations of possible infrastructure issues, nearby environmental resources such as Tembladero Slough, the drainage ditch on site, and the Monterey Bay may be adversely affected by unforeseen releases of untreated sewer flows. This alternative would also potentially result in greater impacts to public services, as additional new or improved sewer infrastructure may be required elsewhere so the District can adequately serve the community of Castroville.

4.2 Alternative 2: Alternate Alignment

Description

Under this alternative, the sewer line would be aligned south of the existing pump station at the southern end of Watsonville Road and would travel along the southern edge of the existing agricultural lands west of SR 1. The sewer line would cross beneath SR 1 and the Caltrans ROW, then travel slightly north to follow the proposed alignment. Figure 6 shows the alternate alignment.

Figure 6 Alternate Sewer Line



Similar to the proposed project, this alternative would involve installation of a 24-inch trunk sewer main to connect the existing M1W pump station to the intersection of Washington Street and Merritt Street/SR 183 in the community of Castroville. The Alternative 2 alignment would be approximately 100 feet longer than the proposed project, and would be approximately 1,550 feet in length. Alternative 2 would involve a construction schedule similar to the proposed project, and would be installed via open-cut trench on either side of SR 1 in agricultural fields, undeveloped lands and roadways, and via trenchless installation within the Caltrans ROW. In addition, this alternative would involve demolition and removal of an existing sewer manhole and construction of two new manholes immediately west of the existing M1W pump station. Alternative 2 would also involve replacing five feet of existing sewer line adjacent to the new sewer manholes.

Environmental Analysis

Aesthetics

Under this alternative, the sewer line would be located entirely belowground, and would therefore result in no change to the existing aesthetic environment. This alternative would involve demolition of one sewer manhole and construction of two new sewer manholes; the manholes would be located within and nearby the footprint of the existing manhole, and would be visually consistent with existing utility infrastructure in the project area. Therefore, aesthetic impacts would be less than significant, similar to the proposed project.

Agriculture and Forestry Resources

Alternative 2 would involve construction of the sewer line along the southern boundary of the agricultural land west of SR 1, which is designated as Prime Farmland. The alternative would require a 20-foot easement along the alternate sewer line alignment, similar to the proposed project; however, only the northern half of the easement would fall within the agricultural land. Therefore, this alternative would result in less Prime Farmland being temporarily unavailable than the proposed project. Similar to the proposed project, topsoil would be stockpiled separate from other backfill soils, and the topsoil would be restored after construction. Impacts would be reduced compared to the proposed project and would remain less than significant.

Air Quality

Construction of the Alternative 2 would require generally similar construction equipment and vehicle trips as the proposed project, although additional truck trips and construction equipment would be required for the demolition and construction of manholes west of the M1W pump station. The emissions associated with the proposed project are 91 percent below MBARD thresholds; therefore, the incremental increase in air pollutant emissions associated with this alternative would not be expected to exceed MBARD thresholds for construction activities. Therefore, as with the proposed project, impacts to air quality would be less than significant under this alternative, although construction-related air pollutant emissions would be incrementally greater.

Biological Resources

Similar to the proposed project, Alternative 2 would involve trenching through the drainage ditch alongside the agricultural land, and this ditch is likely under the jurisdiction of the USACE, CDFW, RWQCB and the County of Monterey pursuant to the LCP. As discussed in Section 2.4, *Biological Resources,* trenching associated with project would likely require USACE, RWQCB, and CDFW

permitting, and impacts would be potentially significant. In addition, the Alternative 2 would be located approximately 150 feet closer to Tembladero Slough than the proposed project alignment, and would involve construction immediately adjacent to the bank of the slough. As a result, the project would have an increased risk of erosion, runoff, construction materials, and accidental spills entering the slough. Similar to the proposed project, implementation of PDF-1 and Mitigation Measure BIO-5 would reduce impacts to potentially jurisdictional waters to less than significant, but this alternative would have an increased risk of impacts to the slough compared to the proposed project. Therefore, impacts would be greater than the proposed project but would remain less than significant.

Cultural Resources

Alternative 2 would occur in generally the same area as the proposed project with similar ground disturbance activities, and would therefore have similar impacts to cultural resources as the proposed project. Therefore, as with the proposed project, implementation of Mitigation Measure CR-1 would be required for this alternative to reduce impacts to cultural resources to a less-than-significant level.

Energy

Construction of Alternative 2would require generally similar construction equipment and vehicle trips as the proposed project, although additional truck trips would occur during demolition of the existing sewer manhole and construction of two new sewer manholes. However, the incremental increase in energy consumption associated with this alternative would not be wasteful, inefficient, or unnecessary because demolition and construction of the manholes would only occur for the minimum timeframe needed to complete infrastructure improvements. Therefore, as with the proposed project, impacts to energy would be less than significant under this alternative, although construction-related energy consumption would be incrementally greater.

Geology and Soils

Construction of Alternative 2 would occur in generally the same area as the proposed project, and Alternative 2 would not be located in an area more susceptible to landslides, lateral spreading, subsidence, liquefaction, or collapse than the proposed project. Similar to the proposed project, Alternative 2 would be located entirely belowground about would not include habitable structures; therefore, this alternative would not create substantial direct or indirect risks to life or property beyond existing conditions. Because this alternative would involve ground disturbing activities within geologic units with high paleontological sensitivity, similar to the proposed project, this alternative would involve implementation of Mitigation Measure GEO-1. Therefore, impacts to geology and soils would be less than significant with mitigation under this alternative, similar to the proposed project.

Greenhouse Gas Emissions

Construction of this alternative would require generally similar construction equipment and vehicle trips as the proposed project, although additional truck trips would occur during demolition of the existing sewer manhole and construction of two new sewer manholes. However, the increase in construction-related GHG emissions associated with this alternative would be incremental. Similar to the proposed project, this alternative would result in incremental GHG emissions during operation. Therefore, similar to the proposed project, impacts to GHG emissions would be less than

significant under this alternative, although construction-related GHG emissions would be incrementally greater.

Hazards and Hazardous Materials

Similar to the proposed project, Alternative 2 would require the use, transport, and storage of hazardous materials during construction, which would be regulated by existing laws and requirements. Although Alternative 2 is approximately 150 feet south of the proposed sewer line alignment, this alternative would similarly not be located on a site that is included on a list of hazardous material sites, near an airport, or in an area subject to wildland fire risk because the alternative occurs in the same area as the proposed project. In addition, this alternative would not include features that would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. As with the proposed project, impacts related to hazards and hazardous materials under this alternative would be less than significant.

Hydrology and Water Quality

This alternative would involve generally similar levels of ground disturbance, associated drainage changes, and water quality impacts as the proposed project. This alternative would also install an on-site infiltration pit if groundwater is encountered during project construction, and dewatering activities would be temporary and short-term, similar to the proposed project. Because Alternative 2 would be located closer to Tembladero Slough, this alternative would be located in FEMA flood hazard zones with a higher annual chance of floods; however, similar to the project, the proposed sewer line would be located entirely belowground. As such, this alternative would not substantially alter the existing drainage pattern of the site. Impacts to hydrology and water quality would be less than significant, similar to the proposed project.

Land Use and Planning

As with the proposed project, Alternative 2 would not result in any barriers that would divide an established community. Because this alternative would be located closer to Tembladero Slough, portions of Alternative 2 would be located in areas zoned as Resource Conservation by Monterey County Code. Pursuant to MCC Section 21.36.050, Resource Conservation districts conditionally allow public utility facilities such as pipelines; therefore, Alternative 2 would be consistent with underlying zoning. Similar to the proposed project, this alternative would be subject to compliance with the applicable development standards in the Monterey County Code, and relevant policies of the Castroville Community Plan. Thus, this alternative would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Similar to the proposed project, no land use and planning impacts would occur under this alternative.

Mineral Resources

Alternative 2 is located in generally the same area and the proposed project, which is not underlain by known mineral resources. This alternative would not involve mineral extraction, construction, or changes in land use that could affect the availability of mineral resources. Therefore, similar to the proposed project, no impacts to mineral resources would occur under Alternative 2.

Noise

Construction of Alternative 2 would require generally similar construction methods and associated equipment as the proposed project; therefore, construction noise and vibration levels would be the same as those estimated for the proposed project. Therefore, implementation of Mitigation Measure N-1 would also be required under this alternative to reduce construction noise where the alignment borders residential, commercial, and educational uses on Merritt Street/SR 183 and Washington Street. Similar to the proposed project, this alternative would resume operating in a similar fashion to existing conditions and would not generate substantial amounts of noise. Overall, noise and vibration impacts would be similar to those of the proposed project and would be less than significant with mitigation incorporated.

Population and Housing

As with the proposed project, this alternative would not directly or indirectly induce population growth because this alternative would not increase pipeline conveyance capacity to accommodate future unplanned growth. In addition, Alternative 2 would not involve displacement of existing housing or people. Therefore, similar to the proposed project, no impacts related to population and housing would occur under this alternative.

Public Services

Alternative 2 would not change existing demand for public services (e.g., fire and police protection, schools, parks, or libraries) because neither direct nor indirect population growth would result from construction of this alternative. As with the proposed project, no impacts to public services would occur.

Recreation

Neither direct nor indirect population growth would result from construction of Alternative 2; therefore, this alternative would not increase the use of existing neighborhood and regional parks or other recreational facilities. In addition, this alternative does not propose recreational facilities and would not require their construction or expansion. Therefore, similar to the proposed project, no impacts related to recreation would occur under Alternative 2.

Transportation

Construction of this alternative would require generally similar construction methods and associated vehicle trips as the proposed project. However, additional truck trips would occur during demolition and construction of sewer manholes. Nevertheless, as with the proposed project, construction-related traffic volumes are not expected to be substantial under this alternative. In addition, temporary impacts to the transportation network during construction would occur during sewer line installation within Merritt Street/SR 183 and Washington Street. Similar to the proposed project, this alternative would include preparation of traffic control plans to minimize impacts to the transportation network and emergency access. Therefore, as with the proposed project, transportation impacts under Alternative 2 would be less than significant, although construction-related traffic volumes would be incrementally greater.

Tribal Cultural Resources

Ground disturbing activities under Alternative 2 would occur in generally the same area as the proposed project; therefore, this alternative would have similar impacts to tribal cultural resources

as the proposed project. As with the proposed project, implementation of Mitigation Measure TCR-1 would be required under this alternative to reduce impacts to a less than significant level.

Utilities and Service Systems

Alternative 2 would not require new water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities. This alternative would not increase long-term demand for potable water supplies and would generate minimal quantities of solid waste during construction that would be disposed of in accordance with applicable laws and regulations. Therefore, similar to the proposed project, impacts related to utilities and service systems under this alternative would be less than significant.

Wildfire

As with the proposed project, this alternative would not be located in a State Responsibility Area of Very High Fire Hazard Severity Zone. Therefore, similar to the proposed project, no wildfire impacts would occur.

Cumulative Impacts

As discussed in Section 2.21, *Mandatory Findings of Significance*, seven planned projects are located in the vicinity of the project site. As with the proposed project, the impacts of this alternative would be primarily temporary, localized effects that would occur during construction activities. Similar to the proposed project, this alternative would not contribute cumulatively considerable impacts with implementation of mitigation measures. Therefore, this alternative's contribution to cumulative impacts would be similar to those of the proposed project and would be less than significant with mitigation incorporated.

Conclusion

Alternative 2 would result in incrementally greater construction-related impacts to air quality, biological resources, energy, and GHG emissions as compared to the proposed project and generally similar impacts to all other environmental resources. The same mitigation measures required for the proposed project would be sufficient to mitigate impacts under this alternative to less-than-significant levels. This alternative would meet the objectives of the project.

4.3 Selection of the Chosen Project Alternative

The District has selected the proposed project (preferred alternative) as the chosen alternative to build and operate. The proposed project and Alternative 2 would result in generally similar direct, indirect, and cumulative environmental impacts. Alternative 2 would result in incrementally greater construction-related impacts to air quality, energy, and GHG emissions as compared to the proposed project due to more intensive construction activities, as well as slightly greater impacts to biological resources due to increased proximity to the slough. The District has selected the proposed project as the thorough analysis demonstrated that this alternative is able to provide infrastructure improvements to existing District facilities with its environmental impacts mitigated to a less-than-significant level. As detailed above, Alternative 2 is not environmentally superior as compared to the proposed project.

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Appendix A

Road Construction Emissions Model Output

Appendix B

Biological Resources Assessment

Appendix C

Historic Property Identification Report (CONFIDENTIAL)

** This document contains sensitive and confidential information concerning archaeological sites. Archaeological site locations are exempt from the California Public Records Act, as specified in Government Code 6254.10 and from the Freedom of Information Act (Exemption 3) under the legal authority of both the National Historic Preservation Act (PL 102-574, Section 304[a]) and the Archaeological Resources Protection Act (PL 96-95, Section 9[a]).*

Appendix D

Construction and Operational Energy Fuel Consumption Calculations

Appendix E

Soils Engineering Report

Appendix F

Paleontological Resources Assessment

Appendix G

Vibration Analysis

Appendix H

Federal Clean Air Act Conformity Analysis