



**CITY OF SANTA MARIA  
INITIAL ENVIRONMENTAL STUDY  
MITIGATED NEGATIVE DECLARATION  
MAY 8, 2023**

**STOWELL/BLACK ROAD WATERLINE EXTENSION, SP2023-0004**

The project site encompasses approximately 1.43 miles within the right-of-way of West Stowell and Black Roads in the city of Santa Maria, Santa Barbara County, California.

**PROJECT SUMMARY:**

<b>Project Description</b>	The City of Santa Maria (City) Department of Public Works proposes to construct and install approximately 7,550 linear feet (1.43 miles) of a 12-inch main waterline from an existing waterline connection point on West Stowell Road to the City of Santa Maria wastewater treatment plant (WWTP) in order to provide additional water supply for the WWTP's operations (project). The proposed waterline would tie into the existing 12-inch water line along Stowell Road, extend approximately 2,400 feet westward along the southern dirt shoulder of Stowell Road, turn north at Black Road, and continue approximately 4,200 linear feet along the west side of Black Road. The proposed 12-inch waterline would then reduce to an 8-inch lateral line and extend another approximately 950 linear feet within the WWTP and terminate. All project work would occur within the City's right-of-way (ROW) along West Stowell Road and Black Road and within the City WWTP site.
<b>Location</b>	34° 56' 22.0" N, 120° 29' 24.0" W City Right-of Way along West Stowell Road and Black Road, and 601 Black Road, Santa Maria, Santa Barbara County, CA 93458
<b>Assessor's Parcel No.</b>	N/A - linear
<b>General Plan Designation</b>	Community Facilities (CF)
<b>Zoning</b>	Public Facilities (PF)
<b>Size of Site</b>	Approximately 1.76 acres
<b>Present Use</b>	City of Santa Maria WWTP, roadway shoulder
<b>Proposed Uses</b>	N/A
<b>Access</b>	N/A
<b>Surrounding Uses/Zoning</b>	--
<b>North</b>	Agriculture

<b>South</b>	Agriculture, Industrial
<b>East</b>	Agricultural, Industrial
<b>West</b>	Agricultural, WWTP
<b>Parking</b>	N/A
<b>Setbacks</b>	N/A
<b>Height</b>	N/A
<b>Building Coverage</b>	N/A
<b>Landscape Area</b>	N/A
<b>Storm Water Retardation</b>	N/A
<b>Fencing</b>	N/A
<b>Related files/Actions</b>	N/A
<b>Applicant/Agent/Owner</b>	City of Santa Maria Department of Public Works 110 South Pine Street, Suite #221 Santa Maria, CA 93458
<b>Procedure</b>	The City will adopt the IS/MND as part of the Environmental Determination section of the staff report and with the associated resolution during the construction contract award.

## GENERAL AREA DESCRIPTION:

The project site is located along the western edge of the city of Santa Maria, approximately 1.3 miles west of the urbanized area of the city. The project site consists of 1.43 miles of unpaved roadway shoulder area within the City's right-of-way along West Stowell Road and Black Road, as well as ruderal area within the City WWTP site. The project site is located in an area with minimal development and is generally surrounded by agricultural land uses in all directions and industrial land uses to the southeast.

## ENVIRONMENTAL SETTING:

The proposed waterline would be installed along the southern side of West Stowell Road and the western side of Black Road. All work would occur entirely outside of the paved portions of West Stowell and Black Roads, except where the alignment crosses from the southern side of West Stowell Road to the western side of Black Road, where the two roadways intersect. The project would avoid work within or under the roadside ditch located along the southern side of West Stowell Road and would be located adjacent to the pavement of West Stowell Road. Installation of the waterline segments would not require the removal of any trees, and no existing fire hydrants would be removed or

otherwise be directly affected by project construction or operational activities. The project site and surrounding area are characterized by relatively flat topography and there are four landcover/vegetation types within the project site: developed, landscaped, ruderal/disturbed, and drainage ditch.

## **PROJECT DESCRIPTION:**

The City's WWTP currently relies on non-potable well water for its water supply to facilitate the wastewater treatment process. The purpose of the project is to provide the WWTP with a source of potable water for these uses consistent with California Regional Water Quality Control Board (RWQCB) requirements and to provide added resiliency to the WWTP's treatment operations. It is anticipated that use of potable water brought in from the waterline would ultimately replace use of non-potable well water on-site and the WWTP would eventually be disconnected from the wells on-site; however, no formal plans for disconnection have been made at this time.

The proposed project would result in approximately 1.76 acres of ground disturbance, including 3,500 cubic yards of cut materials, and require approximately 3,460 cubic yards of imported fill materials. Excavated soil material would be exported off-site at the end of each workday and disposed of at the City's WWTP. The proposed pipeline would be installed using conventional cut and cover construction trenching techniques. The maximum depth of the trench would be approximately 5 feet. Following installation of the pipeline, the trenches would be backfilled with approximately 3.5 feet of aggregate fill materials. Following construction activities, proposed work areas would be returned to preconstruction conditions.

The proposed waterline would be installed along the southern side of West Stowell Road and the western side of Black Road. All work would occur entirely outside of the paved portions of West Stowell and Black Roads, except where the alignment crosses from the southern side of West Stowell Road to the western side of Black Road, where the two roadways intersect. The project would avoid work within or under the roadside ditch located along the southern side of West Stowell Road and would be located adjacent to the pavement of West Stowell Road. Installation of the waterline segments would not require the removal of any trees, and no existing fire hydrants would be removed or otherwise be directly affected by project construction or operational activities.

Approximately 150 feet of pipeline would be installed per working day. Project construction is estimated to begin in July 2023 and last approximately 3 to 4 months. Construction activities would occur on weekdays only and on average would generate approximately 15 haul truck trips per day. The project would require one-lane traffic control along both West Stowell and Black Roads during the construction period, in addition to a full lane closure on Black Road for a limited duration. Lane closures are generally anticipated to be approximately 400 feet in length at any given time.

## PROJECT REVIEW:

The environmental impacts associated with the development of the site were determined using the City of Santa Maria Staff Project Environmental Checklist (attached), on-site inspection, various computer models, and consultation with natural resource experts. Potentially significant adverse environmental impacts were identified in the areas of biological resources, cultural and tribal cultural resources, hydrology and water quality, land use and planning, transportation/traffic, and utilities and service systems. Based on implementation of identified mitigation measures, all potential environmental impacts would be reduced to a less than significant level.

## IMPACT SUMMARY TABLE

	Proposed Project
Size of Site	1.76 acres
Size of Buildings	N/A
Water Demand	N/A
Sewage Generation	N/A
Average Daily Trips	0
P.M. Peak Trips	0
Unmitigated Long Term Emissions: <sup>1</sup> Reactive Hydrocarbons Nitrogen Oxides	  0 pounds/day 0 pounds/day

<sup>1</sup> California Emissions Estimator Model version 2022.1.1.5.



The following discussion of the potential adverse environmental impacts includes mitigation measures that would reduce all identified impacts to a level of insignificance and are recommended to be included in the conditions of approval for the project. If the decision makers wish to delete a mitigation measure that is proposed to mitigate a significant impact, an alternative mitigation measure shall be agreed to and made part of the project. Verification that these mitigation measures have been implemented will be monitored as described in Section 8 of the City of Santa Maria's Environmental Procedures. The monitoring checklist is included at the end of this report.

### **Air Quality**

Due to the non-attainment status of the air basin for ozone, the project would be required to implement the following measures recommended by the Santa Barbara County Air Pollution Control District (SBCAPCD) to reduce construction-related emissions of ozone precursors (reactive organic gases [ROG] and nitrogen oxides [NOx]) and measures to reduce diesel particulate matter (DPM) emissions to the maximum extent feasible:

**AQ-1 Fugitive Dust Control Measures.** The City of Santa Maria shall implement the Santa Barbara County Air Pollution Control District's Standard Fugitive Dust Control Measures, where applicable:

- a. During construction, use water trucks or sprinkler systems to keep areas of vehicle movement damp to prevent dust from leaving the site and from exceeding the Santa Barbara County Air Pollution Control District's limit of 20% opacity for greater than 3 minutes in any 60-minute period. At a minimum, this shall include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency shall be required when sustained wind speed exceeds 15 miles per hour. Reclaimed water shall be used whenever possible; however, reclaimed water shall not be used in or around crops for human consumption.
- b. On-site vehicle speeds shall be no greater than 15 miles per hour when traveling on unpaved surfaces.
- c. Install and operate a track-out prevention device where vehicles enter and exit unpaved roads onto paved streets. The track-out prevention device can include any device or combination of devices that are effective at preventing track out of dirt such as gravel pads, pipe-grid track-out control devices, rumble strips, or wheel-washing systems.
- d. If importation, exportation, and stockpiling of fill material is involved, soil stockpiled for more than 1 day shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.
- e. Minimize the amount of disturbed area. After clearing, grading, earthmoving, or excavation is completed, treat the disturbed area by watering, using roll-compaction, revegetating, or spreading soil binders

until the area is paved or otherwise developed so that dust generation will not occur. All roadways, driveways, sidewalks etc. to be paved shall be completed as soon as possible.

- f. Schedule clearing, grading, earthmoving, and excavation activities during periods of low wind speed to the extent feasible. During periods of high winds (>25 miles per hour), clearing, grading, earthmoving, and excavation operations shall be minimized to prevent fugitive dust created by on-site operations from becoming a nuisance or hazard.
- g. The contractor or builder shall designate a person or persons to monitor and document the dust control program requirements to ensure any fugitive dust emissions do not result in a nuisance and to enhance the implementation of the mitigation measures as necessary to prevent transport of dust off-site. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Santa Barbara County Air Pollution Control District prior to grading/building permit issuance and/or map clearance.
- h. For fill material, cover, keep moist, or treat soil stockpiled for more than two days, and tarp trucks transporting fill material to and from the site.
- i. Install gravel pads at access points to prevent tracking of mud onto public roads.
- j. After clearing, grading, earthmoving, or excavation is completed, treat the disturbed area by watering, revegetating, or spreading soil binders until the area is paved or otherwise developed.
- k. Designate a person or persons to monitor the dust control program and to order increased watering, as necessary.

All requirements shall be shown on grading and building plans and/or as a separate information sheet listing the conditions of approval to be recorded with the map. Timing requirements shall be shown on plans prior to grading/building permit issuance and/or recorded with the map during map recordation. Conditions shall be adhered to throughout all grading and construction periods. The Lead Agency shall ensure measures are on project plans and/or recorded with maps. City of Santa Maria staff shall ensure compliance on-site. Santa Barbara County Air Pollution Control District inspectors will respond to nuisance complaints.

**AQ-2 Diesel Particulate and Nitrogen Oxides Emission Reduction Measures.**

The City of Santa Maria shall comply with the requirements of Section 2485 of Title 13 of the California Code of Regulations (CCR), which limits idling from diesel-fueled commercial motor vehicles with gross vehicular weight ratings of more than 10,000 pounds and licensed for operation on highways. Additionally, the following is a list of regulatory requirements and control strategies that shall be implemented to the maximum extent feasible:

- a. All portable diesel-powered construction equipment greater than 50 brake horsepower shall be registered with the state's portable equipment registration program or shall obtain a Santa Barbara County Air Pollution Control District (SBCAPCD) permit.
- b. Fleet owners of diesel-powered mobile construction equipment greater than 25 horsepower are subject to the California Air Resource Board (CARB) In-Use Off-Road Diesel-Fueled Fleets Regulation (13 CCR Section 2449), the purpose of which is to reduce nitrogen oxides (NO<sub>x</sub>), diesel particulate matter (DPM), and other criteria pollutant emissions from in-use off-road diesel-fueled vehicles. Off-road heavy-duty trucks shall comply with the State Off-Road Regulation. For more information, see [www.arb.ca.gov/msprog/ordiesel/ordiesel.htm](http://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm).
- c. Fleet owners of diesel-fueled heavy-duty trucks and buses are subject to the CARB's On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation (13 CCR Section 2025), the purpose of which is to reduce NO<sub>x</sub>, DPM, and other criteria pollutants from in-use (on-road) diesel-fueled vehicles. For more information, see [www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm](http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm).
- d. All commercial off-road and on-road diesel vehicles are subject, respectively, to 13 CCR Sections 2449(d)(3) and 2485, limiting engine idling time. Off-road vehicles subject to the State Off-Road Regulation are limited to idling no more than 5 minutes. Idling of heavy-duty diesel trucks during loading and unloading shall be limited to 5 minutes, unless the truck engine meets the optional low-NO<sub>x</sub> idling emission standard, the truck is labeled with a clean-idle sticker, and it is not operating within 100 feet of a restricted area.
- e. Diesel equipment meeting the CARB Tier 3 or higher emission standards for off-road heavy-duty diesel engines shall be used to the maximum extent feasible.
- f. On-road heavy-duty equipment with model year 2010 engines or newer shall be used to the maximum extent feasible.
- g. Diesel-powered equipment shall be replaced by electric equipment whenever feasible. Electric auxiliary power units shall be used to the maximum extent feasible.
- h. Equipment/vehicles using alternative fuels, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane, or biodiesel, shall be used on-site where feasible.
- i. Catalytic converters shall be installed on gasoline-powered equipment, if feasible.
- j. All construction equipment shall be maintained in tune per the manufacturer's specifications.

- k. The engine size of construction equipment shall be the minimum practical size.
- l. The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
- m. Construction worker trips shall be minimized by requiring carpooling and providing for lunch on-site.
- n. Construction truck trips shall be scheduled during non-peak hours to reduce peak hour emissions whenever feasible.
- o. Proposed truck routes shall minimize to the extent feasible impacts to residential communities and sensitive receptors.
- p. Construction staging areas shall be located away from sensitive receptors such that exhaust and other construction emissions do not enter the fresh air intakes to buildings, air conditioners, and windows.
- q. Prior to grading/building permit issuance and/or map recordation, all requirements shall be shown as conditions of approval on grading/building plans and/or on a separate sheet to be recorded with the map. Conditions shall be adhered to throughout all grading and construction periods. The contractor shall retain the Certificate of Compliance for CARB's In-Use Regulation for Off-Road Diesel Vehicles on-site and have it available for inspection. The Lead Agency shall ensure measures are on project plans and/or recorded with maps. The Lead Agency staff shall ensure compliance on-site. SBCAPCD inspectors will respond to nuisance complaints.

**AQ-3 Portable Diesel-Fired Construction Engines.** All portable diesel-fired construction engines rated at 50 brake horsepower or greater must have either statewide Portable Equipment Registration Program (PERP) certificates or Santa Barbara County Air Pollution Control District (SBCAPCD) permits prior to grading/building permit issuance. Construction engines with PERP certificates are exempt from SBCAPCD permits, provided they will be on-site for less than 12 months.

**AQ-4 Diesel Idling.** At all times, idling of heavy-duty diesel trucks shall be minimized and auxiliary power units shall be used whenever possible. State law requires that:

- a. Drivers of diesel-fueled commercial vehicles shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location.
- b. Drivers of diesel-fueled commercial vehicles shall not idle a diesel-fueled auxiliary power system (APS) for more than 5 minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle. Trucks with 2007 or newer model year engines must meet additional requirements (verified clean APS label required).

- c. These requirements shall be shown on grading/building plans and/or on a separate sheet to be required with the map and shall be adhered to throughout all grading and construction periods.

### **Biological Resources**

The project has the potential to disturb special-status animal species, including California red-legged frog, western spadefoot, Northern California legless lizard, tricolored blackbird, burrowing owl, and other special-status and migratory birds. The following mitigation measures have been identified to reduce the potential to disturb special-status animals:

**BR-1 Worker Environmental Awareness Training.** Prior to the commencement of work, a qualified biologist shall conduct environmental awareness training for all construction personnel. The environmental awareness training shall include discussions of the special-status species that occur or have potential to occur in the project site. At a minimum, topics of discussion shall include:

- a. A description of the sensitive aquatic resources, special-status species potentially present, and the boundaries within which the project may be accomplished;
- b. Measures implemented to protect special-status species and potentially jurisdictional waters;
- c. Review of the project boundaries and special conditions;
- d. The monitor's role in project activities;
- e. Lines of communication; and
- f. Procedures to be implemented in the event a special-status species is observed in the work area.

**BR-2 California Red-legged Frog and Western Spadefoot Toad.** To avoid potential impacts to dispersing California red-legged frog and western spadefoot, all work activities shall be restricted to dry periods or periods of low rainfall (less than 1/4-inch precipitation per 24-hour period).

- a. The City of Santa Maria shall monitor the National Weather Service (NWS) 72-hour forecast for the project site. If a 70% or greater chance of rainfall is predicted within 24 hours of project activity, the project will be delayed until dry conditions resume.
- b. If rain exceeds 1/2 inch during a 24-hour period, all work activities adjacent to the ditch shall cease until it is no longer raining, and no further rain is forecast.
- c. If work activity is stopped for a significant rain event, a qualified biologist shall conduct a preconstruction survey of the work areas prior to construction resuming.

- d. If a California red-legged frog is found in the work area all construction activities shall stop and the U.S. Fish and Wildlife Service shall be contacted immediately for consultation.
- e. If a western spadefoot is found in the project site, the qualified biologist shall capture and relocate the species, and any other amphibians or reptiles found within the work areas, to suitable habitat outside of the area of impact.

**BR-3 Tricolored Blackbird Survey.** Project activities shall be timed to avoid the normal bird breeding season for tricolored blackbirds (February 1–September 15). However, if project activities must take place during that time, a qualified wildlife biologist shall conduct surveys for nesting tricolored blackbirds no more than 10 days prior to the start of implementation to evaluate presence/absence of tricolored blackbird nesting colonies within 300 feet of project activities and to evaluate potential project-related impacts.

**BR-4 Tricolored Blackbird Avoidance.** If an active tricolored blackbird nesting colony is found during preconstruction surveys, a minimum 300-foot no-disturbance buffer in accordance with the California Department of Fish and Wildlife *Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agriculture Fields in 2015* (California Department of Fish and Wildlife 2015). This buffer shall remain in place until the breeding season has ended or until a qualified biologist has determined that nesting has ceased, the birds have fledged, and the birds are no longer reliant upon the colony or parental care for survival. It is important to note that tricolored blackbird colonies can expand over time and for this reason, the colony shall be reassessed to determine the extent of the breeding colony within 10 days of project initiation.

**BR-5 Tricolored Blackbird Take Authorization.** In the event that a tricolored blackbird nesting colony is detected during surveys, the City of Santa Maria shall consult with the California Department of Fish and Wildlife to discuss how to implement the project and avoid take, or if avoidance is not feasible, to acquire an Incidental Take Permit, pursuant to California Fish and Game Code Section 2081(b), prior to any ground-disturbing activities.

**BR-6 Nesting Bird Surveys.** If construction activities involving ground disturbance or vegetation removal are proposed during the typical nesting bird season (February 1–September 15), a nesting bird survey shall be conducted by a qualified biologist no more than 10 days prior to the start of ground disturbance to determine presence/absence of nesting birds. Surveys shall cover all areas potentially affected by the project via direct impacts (e.g., nest destruction) or indirect impacts (e.g., noise, vibration, odors, movement of workers or equipment, etc.). If absence of nesting birds is verified, construction can proceed. If nesting activity is detected, the following measures shall be implemented:

- a. **Buffer Establishment.** If an active bird nest is observed during preconstruction surveys or during construction, the qualified biologist shall determine an appropriate no-disturbance setback based on existing conditions and bird behavior. If an active tricolored blackbird nesting colony is found during preconstruction surveys, a 300-foot no-disturbance buffer shall be implemented. These buffers shall remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.
- b. **Variance of Buffer Distances.** Variance from the no-disturbance buffers established above may be allowable when there is a compelling biological or ecological reason to do so, such as when the construction area would be concealed from a nest site by topography. Any variance from the no-disturbance buffers shall be advised and supported by a qualified biologist. CDFW may be contacted for technical assistance if recommended by the qualified biologist.
- c. **Nesting Monitoring.** If nest buffers are reduced, the biologist shall monitor any construction activities within the pre-determined setback distance. If nesting birds show any signs of disturbance, including changes in behavior, significantly reducing frequency of nests visits, or refusal to visit the nest, the biologist will stop work and increase the nest buffer. If appropriate on a case-by-case basis, as determined by the qualified biologist, nest monitoring may be reduced to weekly spot-check monitoring, at a minimum, if the biologist determines that the nesting birds have shown no signs of disturbance from construction activities and a continuation of the same types of construction activities are unlikely to disturb the nesting birds.
- d. **Nest Removal.** Nests, eggs, or young of birds covered by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGF) shall not be moved or disturbed until a qualified biologist has determined that the nest has become inactive or young have fledged and become independent of the nest.
- e. **Reporting.** A qualified biologist shall document all active nests and submit a letter report to the City of Santa Maria documenting project compliance with the MBTA, CFGF, and applicable project mitigation measures.

### **Cultural and Tribal Cultural Resources**

The project would result in approximately 1.76 acres of ground disturbance within a previously disturbed area, which reduces the potential for intact cultural resources to be located within the project area. The project would be required to comply with California Health and Safety Code Section 7050.5, which outlines the protocol for unanticipated discovery of human remains. The following mitigation measure has been included in the

event that previously unidentified cultural resources are uncovered during proposed ground-disturbing activities:

- CR-1** In the event that cultural resources are encountered during project activities, all ground-disturbing activities within a 25-foot radius of the find shall cease and the City of Santa Maria shall be notified immediately. Work shall not continue until a qualified archaeologist assesses the find and determines the need for further study. If the find includes Native American-affiliated materials, a local Native American tribal representative will be contacted to work in conjunction with the approved archaeologist to determine the need for further study. A standard inadvertent discovery clause shall be included in every grading and construction contract to inform contractors of this requirement.

### **Hydrology and Water Quality**

The project would require ground-disturbing activities and equipment and vehicle use during project construction, which have the potential to result in erosion or other pollutants that could run off from the site to surrounding areas. The following mitigation measure has been identified to require installation of a silt fence along the pipeline alignment between the work areas and the top of the roadway ditch located along the southern side of West Stowell Road to avoid potential erosion and sedimentation impacts or accidental discharge into the ditch:

- WQ-1 Silt Fencing.** Prior to the start of construction adjacent to the drainage ditches, a qualified biologist shall delineate the boundary of the ditch located along the southern side of West Stowell Road and monitor the installation of a silt fence to avoid impacts or accidental discharge into the ditch. A monitor shall conduct weekly inspections of the silt fence to make sure it remains in place along the segment of active work area and functions properly throughout the duration of construction. For each segment of the pipeline installation that is completed, the silt fence may be removed.

### **Transportation**

The project would require one-lane traffic control along both West Stowell and Black Roads during the construction period, in addition to a full lane closure on Black Road for a limited duration. Lane closures are generally anticipated to be approximately 400 feet in length at any given time. Due to the project's location in a rural area, there would be less opportunity to establish detours for West Stowell and Black Roads during lane/road closures. Therefore, the project would have some potential to temporarily impede emergency access. The following mitigation measure has been identified to require notification to be given to local emergency providers prior to any road/lane closures.

- TR-1** Prior to the implementation of any lane/road closures or detour routes, the City of Santa Maria and/or its project contractors shall provide notice to all emergency response providers likely to be affected by the closure and detours,



including, but not limited to, the Santa Maria Fire Department and Santa Maria Police Department. The notice shall include the following information: dates of construction, location and anticipated duration of temporary lane/road closures and detours, and contact information, including the phone number and email address of the City of Santa Maria staff person responsible for responding to and addressing public complaints regarding access. The notice shall be provided at least 2 weeks prior to any planned road closure.

#### ENVIRONMENTAL RECOMMENDATION:

Based on the information available at the time of preparation this report and, without benefit of additional information which may come to light at the public hearing, the Environmental Officer recommends that a Mitigated Negative Declaration be filed for the Stowell/Black Road Waterline Extension Project based on information contained in File SP2023-0004.

PREPARED BY:



City of Santa Maria  
Community Development Department  
110 South Pine Street, #101  
Santa Maria, CA 93458

Cody Graybehl, Environmental Analyst

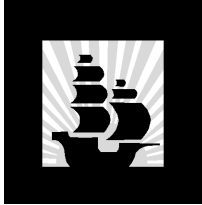
5/8/2023

Date

Chuen Ng, Environmental Officer

5/8/2023

Date



## **CITY OF SANTA MARIA**

**Environmental Checklist / Initial Study**

### **For Stowell/Black Road Waterline Extension (SP2023-0004)**

#### **1. Project Title and Location**

West Stowell Road/Black Road Waterline Extension

34° 56' 22.0" N, 120° 29' 24.0" W

City Right-of-Way along West Stowell Road and Black Road, and 601 Black Road (1.76 acres)  
Santa Maria, Santa Barbara County, CA 93458

#### **2. Lead Agency, Contact and Preparer**

Christos Stoyos, Principal Civil Engineer

Utilities Department

2065 East Main Street

Santa Maria, CA 93454

805-925-0951, x 7256

cstoyos@cityofsantamaria.org

#### **3. Project Sponsor's Name and Address**

City of Santa Maria Department of Public Works

110 South Pine Street, Suite #221

Santa Maria, CA 93458

#### **4. General Plan Designation**

Community Facilities (CF)

#### **5. Zoning Designation**

Public Facilities (PF)

#### **6. Brief Description of Project**

The City of Santa Maria (City) Department of Public Works requests an Encroachment Permit to allow for the construction, installation, and operation of approximately 7,550 linear feet (1.43 miles) of a 12-inch main waterline from an existing waterline connection point on West Stowell Road to the City wastewater treatment plant (WWTP) to provide additional water supply for the WWTP's operations (project). The proposed waterline would tie into the existing 12-inch water line along West Stowell Road, extend approximately 2,400 feet westward along the southern dirt shoulder of West Stowell Road, turn north at Black Road, and continue approximately 4,200 linear feet along the west side of Black Road. The proposed 12-inch waterline would then reduce to an 8-inch lateral line and extend another approximately 950 linear feet within the WWTP and terminate at the WWTP well location. All project work would occur within the City's right-of-way (ROW) along West Stowell Road and Black Road and within the City's WWTP site. The proposed site plans for the project are included in Appendix A.

## **Project Background**

The City Utilities Department Water Resources Division provides water and wastewater services to over 23,000 local residential and commercial accounts. The City has treated and disposed of wastewater at the City's WWTP site located along the western edge of the city at 601 Black Road since 1910. As the community grew and applicable wastewater treatment regulations were updated, the original wastewater treatment facility expanded in several phases beginning in the mid-1930s, with the most recent facility expansion and upgrades occurring in 2009. The 2009 expansion project increased the wastewater treatment capacity of the plant to 13.5 million gallons per day and included construction of new percolation ponds and asphalt sludge drying beds and new equipment and structures, including a primary clarifier, a primary trickling filter, a digester, a digester control building, a percolation pond pump station, and an emergency generator.

In addition to the WWTP, the City's wastewater system includes one small lift station and approximately 218 miles of pipelines that use gravity to convey wastewater to the WWTP (City of Santa Maria n.d.). After approximately 90% of impurities are removed and treated in the WWTP, the remaining treated effluent is percolated back into the groundwater basin via percolation ponds. This process removes any remaining contamination (City of Santa Maria 2023b). A portion of wastewater effluent is also used for pasture irrigation, where a portion of the wastewater is absorbed by an irrigated crop, a portion infiltrates into the ground, and a portion evaporates (Rincon Consultants 2006).

## **Project Purpose**

The City's WWTP currently relies on non-potable well water for its water supply to facilitate the wastewater treatment process. The purpose of the project is to provide the WWTP with a source of potable water for these uses consistent with California Regional Water Quality Control Board (RWQCB) requirements and to provide added resiliency to the WWTP's treatment operations. It is anticipated that use of potable water brought in from the waterline would ultimately replace use of non-potable well water on-site and the WWTP would eventually be disconnected from the wells on-site; however, no formal plans for disconnection have been made at this time. In the meantime, the WWTP will adhere to all applicable RWQCB requirements pertaining to differentiating water facilities that use potable and non-potable sources to ensure cross contamination of the two water sources does not occur.

## **Project Details**

The proposed project would result in approximately 1.76 acres of ground disturbance, including 3,500 cubic yards of cut materials, and would require approximately 3,460 cubic yards of imported fill materials. Excavated soil material would be exported off-site at the end of each workday and disposed of at the City's WWTP. The proposed pipeline would be installed using conventional cut and cover construction trenching techniques. The maximum depth of the trench would be approximately 5 feet. Following installation of the pipeline, the trenches would be backfilled with approximately 3.5 feet of aggregate fill materials. Following construction activities, proposed work areas would be returned to preconstruction conditions.

The proposed waterline would be installed along the southern side of West Stowell Road and the western side of Black Road. All work would occur entirely outside of the paved portions of West Stowell Road and Black Road, except where the alignment crosses from the southern side of West Stowell Road to the western side of Black Road, where the two roadways intersect. The project would avoid work within or under the roadside ditch located along the southern side of West Stowell Road and would be located adjacent to the pavement of West Stowell Road. Installation of the waterline segments would not require the removal of any trees, and no existing fire hydrants would be removed or otherwise be directly affected by project construction or operational activities.

Approximately 150 feet of pipeline would be installed per working day. Project construction is estimated to begin in July 2023 and last approximately 3 to 4 months. Construction activities would occur on weekdays only and on average would generate approximately 15 haul truck trips per day. The project would require one-lane traffic control along both West Stowell Road and Black Road during the construction period, in addition to a full lane closure on Black Road for a limited duration. Lane closures are generally anticipated to be approximately 400 feet in length at any given time.

## **7. Surrounding Land Uses and Setting:**

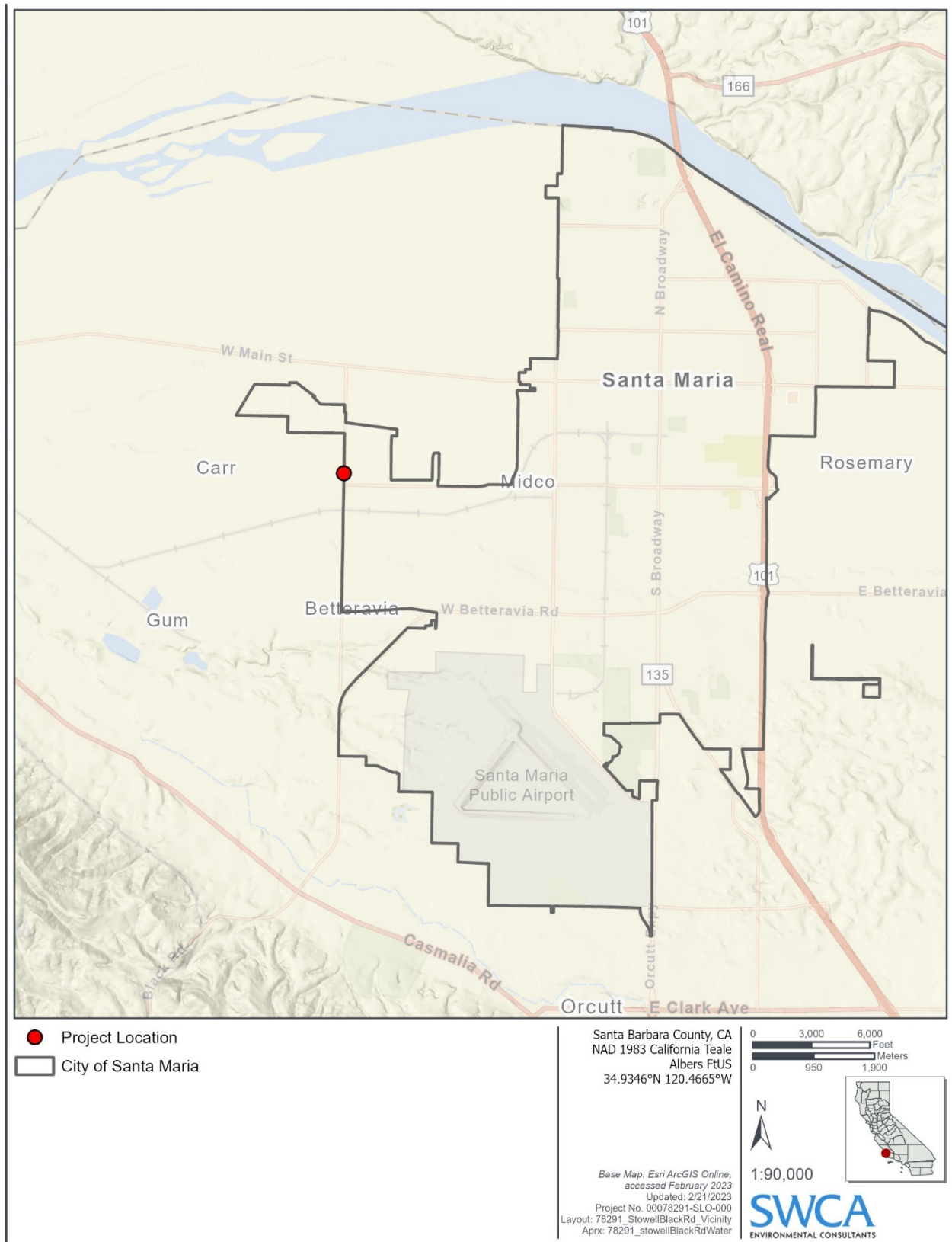
The project site consists of 1.43 linear miles of paved roadway within the City's ROW along Black Road, West Stowell Road, and the City's WWTP. The City's WWTP is located within the Community Facilities (CF) General Plan Land Use Classification and is zoned Public Facilities (PF). Land located adjacent to the proposed pipeline alignment along Black Road and West Stowell Road includes PF-zoned land, as well as General Manufacturing (M-2), Commercial Manufacturing (CM), and land within the unincorporated area of Santa Barbara County. The project site is located in a rural area and is generally surrounded by agricultural land uses in all directions and industrial land uses to the southeast. The City's WWTP is located within and directly northwest of the project site.

## **8. Other Public Agencies Whose Approval is Required**

- Santa Barbara County Air Pollution Control District (construction permits, if necessary)

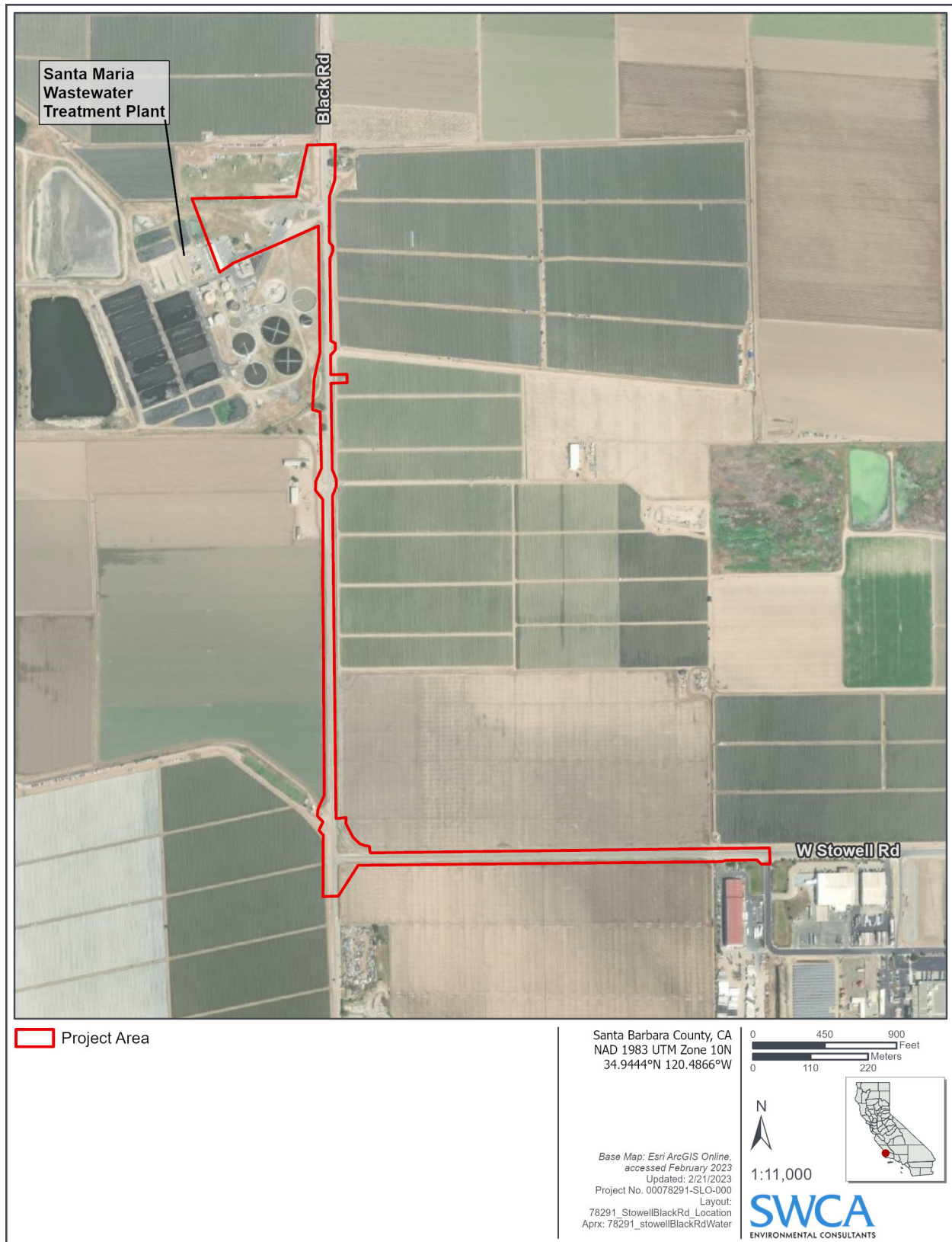
## **9. California Native American Tribes Consultation**

Native American Tribes culturally affiliated with the project area were notified about the project on March 2, 2023, consistent with state and City regulations, including, but not limited to, Assembly Bill 52. No tribes have requested formal consultation as of April 1, 2023, which reflects the close of the 30-day consultation request period deadline per Assembly Bill 52. See Section 18, *Tribal Cultural Resources*, for more information.



**Figure 1. Project Vicinity Map**





**Figure 2. Project Location Map**

## 1. AESTHETICS/VISUAL RESOURCES

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

### Setting

The 1.76-acre project site consists of 1.43 linear miles of paved roadway within the City's ROW along Black Road, West Stowell Road, and the City's WWTP on the western edge of the city of Santa Maria. The project site consists of relatively flat topography with minimal development. The project site is generally surrounded by agricultural land uses in all directions and industrial land uses to the southeast. The City's WWTP is located within and directly to the northwest of the project site.

### Impact Discussion

- a. For purposes of determining significance under the California Environmental Quality Act (CEQA), a scenic vista is defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. According to the *City of Santa Maria General Plan Land Use Element* (LUE) and *City of Santa Maria General Plan Resources Management Element* (RME), the project site is not located within a scenic vista (City of Santa Maria 2011). Further, the proposed project would not result in the construction of any aboveground features within the viewshed of public areas; therefore, the project would not result in any adverse effects on a scenic vista, and *no impacts* would occur.
- b. There are no designated state scenic highways within or in the immediate vicinity of the project site. The nearest eligible scenic highway is U.S. Highway 101 (US 101), located approximately 3.4 miles east of the project site (California Department of Transportation [Caltrans] 2018). Due to the distance and intervening vegetation, development, and topography, the project site would not be visible from US 101. Further, the proposed project would not result in the construction of any aboveground features; therefore, the project would not damage scenic resources within the viewshed of a state scenic highway, and *no impacts* would occur.
- c. The project site is located on the western edge of the city of Santa Maria in a predominantly undeveloped area. The project would be limited to the extension of an existing waterline within Black Road and West Stowell Road to connect to an existing waterline located within the City's WWTP and does not include the construction of aboveground structures or other features that could degrade the existing visual character of the project site. Further, the project does not propose new features that would be subject to the City's building design standards or other visual design standards. During

construction, temporary views of construction vehicles, equipment, and signage would be visible to viewers traveling along Black Road, West Stowell Road, and West Main Street; however, construction-related views would only be limited to the 3- to 4-month construction period. Following construction activities, the site would be returned to preconstruction conditions, which would avoid long-term visual changes to the area. Implementation of the proposed project would not substantially degrade the existing visual character or quality of public views of the site, nor would it conflict with applicable regulations governing scenic quality; therefore, impacts would be *less than significant*.

- d. The project would be limited to the extension of an existing underground waterline and does not include the installation of additional lighting or reflective surfaces that could create additional light or glare within the project site. Construction activities would be short term and limited to daytime hours; therefore, project construction would not result in a long-term source of light or glare within the project site, and *no impacts* would occur.

### Mitigation Measure(s) Incorporated into the Project

Mitigation is not necessary.

## 2. AGRICULTURE AND FOREST RESOURCES

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

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
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))?				X
d. Result in the loss of forest land or conversion of forest land to non-forest use?				X



Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			X	

## Setting

The California Department of Conservation (CDOC) Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data used for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and current land use. The existing WWTP is located on land designated as Urban and Built Up Land and other land per the FMMP, and the proposed pipeline would extend from the WWTP within roadway shoulder areas along Black Road and West Stowell Road (CDOC 2016).

The Land Conservation Act of 1965, commonly referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agriculture or related open space use. In return, landowners receive property tax assessments, which are much lower than normal because they are based on farming and open space uses as opposed to full market value. The project site is not subject to a Williamson Act contract.

According to the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) *Soil Survey of San Luis Obispo County, California* and the NRCS Web Soil Survey, the project site is underlain by the following soil types (NRCS 2023):

- **(CuA) Corralitos loamy sand, 0 to 2 percent slopes.** This somewhat excessively drained soil has a negligible runoff class and a depth to restrictive feature of more than 80 inches. The typical soil profile consists of loamy sand and stratified sand to loamy sand. This soil is designated as Prime Farmland if irrigated by the NRCS.
- **(CuD) Corralitos loamy sand, 9 to 15 percent slopes.** This somewhat excessively drained soil has a very low runoff class and a depth to restrictive feature of more than 80 inches. The typical soil profile consists of loamy sand and stratified sand to loamy sand. This soil is designated as Farmland of statewide importance by the NRCS.
- **(StA) Sorrento sandy loam, 0 to 2 percent slopes, Major Land Resource Area (MLRA) 14.** This well-drained soil has a negligible runoff class and a depth to restrictive feature of more than 80 inches. The typical soil profile consists of sandy loam and stratified sandy loam to loam. This soil is designated as Prime Farmland if irrigated by the NRCS.
- **(SvA) Sorrento loam, 0 to 2 percent slopes, MLRA 14.** This well-drained soil has a negligible runoff class and a depth to restrictive feature of more than 80 inches. The typical soil profile consists of loam and stratified fine sandy loam to loam. This soil is designated as Prime Farmland if irrigated by the NRCS.
- **(TdF) Terrace escarpments, only.** This soil profile consists of escarpments and loamy alluvium. This soil is not designated as Prime Farmland by the NRCS.

Forestland is defined in California Public Resources Code (PRC) Section 12220(g) as land that can support 10% native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. The project site does not consist of forestland.

Timberland is defined in PRC Section 4526 as land, other than land owned by the federal government and land designated by the State Board of Forestry and Fire Protection as experimental forest land, which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees. The project site does not support any timberland.

### Impact Discussion

- a. The existing WWTP is located on land designated as Urban and Built Up Land and other land per the FMMP, and the proposed pipeline would extend from the WWTP within roadway shoulder areas along Black Road and West Stowell Road (CDOC 2016). The proposed waterline would be located underground and directly adjacent to paved roadways for the majority of the proposed alignment. Road ROW and adjacent road shoulders would have little to no potential to be used for agricultural purposes in the future due to the very small square footage and thin shape of the area. Further, public roadways are not mapped within the FMMP land designations, but if they were, these areas would be designated as Urban and Built-Up Land; therefore, implementation of the proposed project would not convert Farmland to non-agricultural use, and *no impacts* would occur.
- b. The City's WWTP is located within the Community Facilities (CF) General Plan Land Use Classification and is zoned Public Facilities (PF). The proposed waterline would tie into the existing 12-inch water line along West Stowell Road, extend approximately 2,400 feet westward along the southern dirt shoulder of West Stowell Road, cross Black Road, and continue north approximately 4,200 linear feet along the west road shoulder of Black Road. The proposed 12-inch waterline would then be reduced to an 8-inch lateral line and extend another approximately 950 linear feet within the WWTP to tie into an existing 4-inch service line at the WWTP well location. Areas within the project site are not zoned for agricultural uses or subject to a Williamson Act contract, nor do they support any existing agricultural uses. Therefore, implementation of the proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract, and *no impacts* would occur.
- c. The project site and surrounding area is not within forest land, timberland, or timberland production land use or zoning designations; therefore, the proposed project would not conflict with the zoning, or cause rezoning of, designated forest land, timberland, or timberland production, and *no impacts* would occur.
- d. The project site and surrounding area is not designated or zoned for forest land uses and does not meet the definition of forest land established in PRC Section 12220(g). In addition, the project does not require the removal of any trees. Since the project site does not support forest land, the project would not result in the loss or conversion of forest land, and *no impacts* would occur.
- e. There are agricultural row crops located directly to the east and west of Black Road and directly north and south of West Stowell Road. As previously evaluated, the project would not result in the conversion of Farmland or forest land and would not interfere with zoning for agricultural or forest land uses. The proposed project would extend an existing waterline within Black Road and West Stowell Road to deliver potable water from the City's water supply to the City's WWTP. The project would not result in an increase in wastewater treatment capacity at the WWTP; therefore, the project would not directly or indirectly result in substantial population growth in the area that could reduce the availability of water for existing agricultural uses in the vicinity of the project site. In addition, the project does not include the construction of new features that could increase long-term dust and other emissions at the project site that could inadvertently adversely affect crops in the vicinity of the project site. Therefore, impacts would be *less than significant*.

### Mitigation Measure(s) Incorporated into the Project

Mitigation is not necessary.

### 3. AIR QUALITY

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

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

#### Setting

The project site is located in the city of Santa Maria, within the South Central Coast Air Basin (SCCAB) and within the jurisdiction of the Santa Barbara County Air Pollution Control District (SBCAPCD). Within the SCCAB, the air pollutants of primary concern, with regard to human health, include ozone (O<sub>3</sub>), suspended particulate matter (PM), and carbon monoxide (CO).

#### Criteria Pollutant Regulation

In accordance with the California Clean Air Act, the California Air Resources Board (CARB) regulates the emission of airborne pollutants and has established ambient air quality standards for the protection of public health. Local control in air quality management is provided by the CARB through multi-county and county-level Air Pollution Control Districts (APCDs). The CARB establishes statewide air quality standards and is responsible for the control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulating stationary sources. The SBCAPCD administers many programs under the CARB review and permit authority over stationary point sources of air pollution.

Federal standards have been established for seven criteria pollutants, including: O<sub>3</sub>, CO, nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), particulate matter less than 10 and 2.5 microns in diameter (PM<sub>10</sub> and PM<sub>2.5</sub>), and lead (Pb) (Table 1). The CARB has made state area designations for 10 criteria pollutants, including the seven federal criteria pollutants and sulfates, hydrogen sulfide, and visibility-reducing particles. California air quality standards are identical to or stricter than federal standards for the seven federal criteria pollutants. Table 1 illustrates the current federal and state ambient air quality standards.

**Table 1. Current Federal and State Ambient Air Quality Standards**

Pollutant	Federal Standard	California Standard
Ozone (O <sub>3</sub> )	0.070 ppm (8-hr avg)	0.09 ppm (1-hr avg) 0.070 ppm (8-hr avg)
Carbon Monoxide (CO)	9.0 ppm (8-hr avg) 35.0 ppm (1-hr avg)	9.0 ppm (8-hr avg) 20.0 ppm (1-hr avg)
Nitrogen Dioxide (NO <sub>2</sub> )	0.053 ppm (annual avg)	0.18 ppm (1-hr avg) 0.030 ppm (annual avg)
Sulfur Dioxide (SO <sub>2</sub> )	0.030 ppm (annual avg) 0.14 ppm (24-hr avg) 0.5 ppm (3-hr avg)	0.04 ppm (24-hr avg) 0.25 ppm (1-hr avg)
Lead (Pb)	1.5 µg/m <sup>3</sup> (calendar quarter)	1.5 µg/m <sup>3</sup> (30-day avg)
Particulate Matter (PM <sub>10</sub> )	150 µg/m <sup>3</sup> (24-hr avg)	20 µg/m <sup>3</sup> (annual avg) 50 µg/m <sup>3</sup> (24-hr avg)
Particulate Matter (PM <sub>2.5</sub> )	12 µg/m <sup>3</sup> (annual avg) 35 µg/m <sup>3</sup> (24-hr avg)	12 µg/m <sup>3</sup> (annual avg)
Sulfates	No National Standards	25 µg/m <sup>3</sup> (24-hr avg)
Hydrogen Sulfide		0.03 ppm (1-hr avg)
Vinyl Chloride		ppm (24-hr avg)

Notes: ppm= parts per million; µg/m<sup>3</sup> = micrograms per cubic meter

Source: California Air Resources Board (2016)

### **Current Ambient Air Quality**

The SBCAPCD monitors air pollutant levels to assure that federal and state air quality standards are met and, if they are not met, to also develop strategies to meet the standards. Depending on whether or not the standards are met or exceeded, the air basin is classified as being in “attainment” or as “non-attainment.”

Table 2 summarizes the annual air quality data for the local airshed. The CARB maintains over 60 air quality monitoring stations throughout California, including 18 stations in Santa Barbara County. Of the 18 stations in Santa Barbara County, eight are managed by SBCAPCD and 10 are managed by the CARB and private industry. The nearest monitoring station to the project site is located at 906 South Broadway in the city of Santa Maria, approximately 2.4 miles northeast of the project site, and is currently managed by the CARB. The monitoring stations record ambient concentrations of O<sub>3</sub>, NO<sub>2</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub>. The most recent ambient monitoring data available includes measurement data from 2018 through 2020 and is summarized in Table 2.

As depicted in Table 2, the federal PM<sub>2.5</sub> standards were exceeded for one day in 2018 and 9 days in 2020. The state PM<sub>10</sub> standards were exceeded for 13 days in 2018, and 15 days in 2019, and 32 days in 2020. Measured 1-hour O<sub>3</sub>, 8-hour O<sub>3</sub>, and NO<sub>2</sub> concentrations did not exceed the state and federal ambient air quality standards in the last 3 years of monitoring.

**Table 2. Summary of Ambient Air Quality Monitoring Data**

Pollutant	Monitoring Year		
	2018	2019	2020
<b>Ozone (O<sub>3</sub>)</b>			
Maximum concentration (1-hour/8-hour average; ppm)	0.052/0.048	0.059/0.052	0.063/0.059
Number of days state/national 1-hour standard exceeded	0/0	0/0	0/0
Number of days state/national 8-hour standard exceeded	0/0	0/0	0/0
<b>Nitrogen Dioxide (NO<sub>2</sub>)</b>			
Maximum concentration (1-hour average; ppb)	40.3	33.7	36.4
Annual average (ppb)	NA	5	5
Number of days state/national standard exceeded	0/0	0/0	0/0
<b>Suspended Particulate Matter (PM<sub>2.5</sub>)</b>			
Maximum 24-hour concentration (national/state; µg/m <sup>3</sup> )	40.4/40.4	14.7/14.7	88.4/88.4
Annual average national/state (µg/m <sup>3</sup> )	6.9/7.0	4.8/4.9	7.9/7.9
Number of days national standard exceeded (estimated/measured) <sup>1</sup>	1/1	0/0	9/9
<b>Suspended Particulate Matter (PM<sub>10</sub>)</b>			
Maximum concentration (national/state; µg/m <sup>3</sup> )	62.3/61.9	132.5/139.5	113.3/116.4
Number of days state standard exceeded (estimated/measured) <sup>1</sup>	13.6/13	15.7/15	32.3/32
Number of days national standard exceeded (estimated/measured) <sup>1</sup>	0.0/0	0.0/0	0.0/0

Notes: ppm = parts per million; ppb = parts per billion; µg/m<sup>3</sup> = micrograms per cubic meter; NA = Not available. All data based on ambient concentrations were obtained from the Santa Maria-906 S Broadway Monitoring Station.

<sup>1</sup> Estimated days are days that measurement would have exceeded the standard had measurements been collected every day. Measured days are those days that an actual measurement was greater than the standard.

The major local sources for particulate matter (PM<sub>10</sub>) are agricultural operations, vehicle dust, grading, and dust produced by high winds. O<sub>3</sub> is a secondary pollutant that is not produced directly by a source, but rather is formed by a reaction in the presence of sunlight between NO<sub>x</sub> and reactive organic gases (ROG). Reductions in O<sub>3</sub> concentrations are dependent on reducing the amount of these precursors. In Santa Barbara County, the major sources of ROG are coating and solvent operations, oil and gas operations, and pesticide and fertilizer usage. For NO<sub>x</sub>, 69% of the inventory is attributed to ocean-going vessels. An estimated 13% of the NO<sub>x</sub> emissions in the baseline inventory are from on-road motor vehicles. Areawide sources, stationary sources, and the remaining other mobile sources contribute the remaining 18% of the baseline NO<sub>x</sub> emissions.

The SBCAPCD's 2022 Ozone Plan is the tenth triennial update to the Air Quality Attainment Plan adopted by the SBCAPCD Board of Directors in 1991 (other updates were done in 1994, 1998, 2001, 2004, 2007, 2010, 2013, 2016, and 2019). In the past, the SBAPCD has prepared air quality attainment plans that have addressed both federal and state ozone standards. This 2022 Ozone Plan addresses the state ozone standards only because the SBAPCD is currently designated "attainment" for the federal 8-hour ozone standards, including the most recent standard of 0.070 parts per million (ppm) promulgated by the U.S. Environmental Protection Agency (USEPA) in 2015 (SBCAPCD 2022). The 2022 Ozone Plan includes previously adopted and proposed stationary source emission control measures as well as on-road transportation control measures intended to reduce ROG and NO<sub>x</sub> emissions throughout the county and achieve attainment for the state ozone ambient air quality standards.

It is also important to note that in January 2023, the CARB will hold a public hearing to change Santa Barbara County's current designation from "nonattainment" to "nonattainment-transitional" for the state ozone standards based on monitoring data collected in 2021 and 2022. The change in designation becomes official after it is finalized by the California Office of Administrative Law (OAL), which is expected to occur in Summer 2023.

### ***Sensitive Receptors***

Certain population groups are considered more sensitive to air pollution than others. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardio-respiratory diseases. Sensitive receptor locations include residences, schools, hospitals, playgrounds, nursing homes, and other areas where these sensitive groups may congregate/reside. There are no sensitive receptor locations located within 1,000 feet of the project site. The nearest sensitive receptor location is an off-site residence located approximately 1,540 feet north of the project site boundary located along West Stowell Road.

### **Impact Discussion**

- a. The SBCAPCD's *2022 Ozone Plan* addresses the attainment and maintenance of federal and state ambient air quality standards within the SCCAB. In order to be consistent with the *2022 Ozone Plan*, a project's direct and indirect emissions must be accounted for in the growth assumptions of the *2022 Ozone Plan*, and the project must be consistent with the stationary source emissions control measures and/or transportation control measures in the *2022 Ozone Plan* (SBCAPCD 2022).

The project includes the extension of an existing waterline approximately 1.43 miles along West Stowell Road and Black Road to the City's WWTP. The project would not result in an increase in wastewater treatment capacity at the WWTP; therefore, the project would not expand wastewater treatment capabilities in a manner that could induce unplanned or substantial population growth in the city. In addition, following project construction activities, the project would not generate additional long-term vehicle trips to or from the site beyond existing conditions, with the exception of periodic maintenance checks and/or repairs as needed. The project would not include a stationary source of air pollutant emissions or generate regular vehicle trips that would be applicable for implementation of Transportation Control Measures identified in the *2022 Ozone Plan*. Therefore, the project would not affect the growth assumptions of or otherwise result in a potential conflict with the *2022 Ozone Plan*; therefore, impacts would be *less than significant*.

- b. Santa Barbara County is currently designated as nonattainment for the state standards established for 8-hour O<sub>3</sub> and PM<sub>10</sub> emissions (SBCAPCD 2023b). The project would primarily generate emissions of O<sub>3</sub> precursors and PM<sub>10</sub> during construction and installation of the proposed waterline extension.

Construction Emissions. Construction of the proposed project would result in approximately 1.76 acres of site disturbance. Project construction activities have the potential to generate short-term air pollutant emissions and fugitive dust. Emissions of O<sub>3</sub> precursors (ROG and NO<sub>x</sub>) during project construction would result primarily from the on-site use of heavy construction equipment and construction vehicle trips. Estimated construction air pollutant emissions were calculated for the proposed project using the California Emissions Estimator Model (CalEEMod; version 2022.1.1.5). The results of the CalEEMod are included in Appendix B.

As shown, construction emissions would not exceed SBCAPCD's recommended thresholds of significance of 25 tons per year for either ROG or NO<sub>x</sub>. The SBCAPCD has not adopted significance thresholds for other construction-related emissions, such as fugitive dust. However, the SBCAPCD recommends that lead agencies using the 25 tons per year construction emission threshold for ROG and NO<sub>x</sub> apply that threshold to sulfur oxides (SO<sub>x</sub>), PM<sub>10</sub>, and PM<sub>2.5</sub> as well. As shown in Table 3, construction emissions of these other criteria pollutants would not exceed 25 tons per year.

**Table 3. Estimated Annual Construction Emissions**

Year	Annual Emissions (tons/year)					
	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
2023	0.08	0.60	0.58	<0.005	0.02	0.02
SBCAPCD Recommended Threshold:	25	25	N/A	25	25	25
Exceeds Threshold?	No	No	N/A	No	No	No

Source: AMBIENT Air Quality & Noise Consulting (2023) (see Appendix B)

Because the Santa Barbara County portion of the SCCAB is a nonattainment area for the state PM<sub>10</sub> threshold, standard construction dust and emission control measures would be required for all projects involving earthmoving activities regardless of size or duration (SBCAPCD 2023a). The SBCAPCD requires dust control measures for all discretionary construction activities; therefore, the SBCAPCD's standard fugitive dust control measures have been identified in Mitigation Measure AQ-1 to reduce fugitive dust generated during construction.

The *Santa Barbara County Environmental Thresholds and Guidelines Manual* states that the SBCAPCD has not established short-term thresholds for ROG or NO<sub>x</sub> emissions generated by construction equipment. Due to the non-attainment status of the air basin for ozone, the project would also be required to implement measures recommended by the SBCAPCD to reduce construction-related emissions of ozone precursors (ROG and NO<sub>x</sub>) and measures to reduce diesel particulate matter (DPM) emissions to the maximum extent feasible. Compliance with these measures is part of the standard regulatory process, routinely required for all new development in the county, and serves to reduce adverse but less-than-significant air quality impacts during the short-term construction period. Construction emissions would not violate any SBCAPCD air quality standard, and compliance with the SBCAPCD's standard mitigation, included as Mitigation Measures AQ-1 through AQ-4, for fugitive dust and ozone precursors would ensure the project would not cumulatively contribute substantially to the county's non-attainment status; therefore, construction impacts would be *less than significant with mitigation*.

Operational Emissions. The project would be limited to the operation of an underground waterline and does not include the establishment of new land uses or activities that could generate long-term air pollutant emissions in the county; therefore, the project would not have the potential to exceed SBCAPCD operational thresholds. Estimated operational air pollutant emissions were calculated using CalEEMod (version 2022.1.1.5; see Appendix B). Based on the CalEEMod results, the project would not result in operational air pollutant emissions and would not exceed SBCAPCD significance thresholds. The project would not generate regular vehicle trips to or from the project site that could increase emissions of ozone precursors, including ROG and NO<sub>x</sub>. Operational emissions generated by the project would not violate any applicable air quality standard or contribute substantially to the county's non-attainment status; therefore, operational impacts would be *less than significant*.

- c. As discussed in Threshold Discussion 3.b, construction and operational emissions would not exceed SBCAPCD thresholds. Further, the nearest sensitive receptor is an off-site residence located approximately 1,540 feet north of project activities that would occur on West Stowell Road. Therefore, short-term construction activities would not expose sensitive receptors to substantial pollutant concentrations, and impacts would be *less than significant*.
- d. According to the CDOC, the project is not located in an area with known potential for naturally occurring asbestos (NOA; CDOC 2011). Therefore, construction activities would not have the potential to expose workers or surrounding land use occupants to harmful levels of NOA.

Construction activities generally have the potential to emit odors from diesel equipment, paints, solvents, fugitive dust, and adhesives. Any odors generated by construction activities would be

intermittent and temporary, and generally would not extend beyond the construction area. Any construction odors would be temporary and limited to the construction phase of the proposed project. The project does not include the establishment of new land uses or other activities that could generate long-term odors within the immediate project vicinity; therefore, impacts would be *less than significant*.

### **Mitigation Measure(s) Incorporated into the Project**

**AQ-1 Fugitive Dust Control Measures.** The City of Santa Maria shall implement the Santa Barbara County Air Pollution Control District's Standard Fugitive Dust Control Measures, where applicable:

- a. During construction, use water trucks or sprinkler systems to keep areas of vehicle movement damp to prevent dust from leaving the site and from exceeding the Santa Barbara County Air Pollution Control District's limit of 20% opacity for greater than 3 minutes in any 60-minute period. At a minimum, this shall include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency shall be required when sustained wind speed exceeds 15 miles per hour. Reclaimed water shall be used whenever possible; however, reclaimed water shall not be used in or around crops for human consumption.
- b. On-site vehicle speeds shall be no greater than 15 miles per hour when traveling on unpaved surfaces.
- c. Install and operate a track-out prevention device where vehicles enter and exit unpaved roads onto paved streets. The track-out prevention device can include any device or combination of devices that are effective at preventing track out of dirt such as gravel pads, pipe-grid track-out control devices, rumble strips, or wheel-washing systems.
- d. If importation, exportation, and stockpiling of fill material is involved, soil stockpiled for more than 1 day shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.
- e. Minimize the amount of disturbed area. After clearing, grading, earthmoving, or excavation is completed, treat the disturbed area by watering, using roll-compaction, revegetating, or spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur. All roadways, driveways, sidewalks etc. to be paved shall be completed as soon as possible.
- f. Schedule clearing, grading, earthmoving, and excavation activities during periods of low wind speed to the extent feasible. During periods of high winds (>25 miles per hour), clearing, grading, earthmoving, and excavation operations shall be minimized to prevent fugitive dust created by on-site operations from becoming a nuisance or hazard.
- g. The contractor or builder shall designate a person or persons to monitor and document the dust control program requirements to ensure any fugitive dust emissions do not result in a nuisance and to enhance the implementation of the mitigation measures as necessary to prevent transport of dust off-site. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Santa Barbara County Air Pollution Control District prior to grading/building permit issuance and/or map clearance.
- h. For fill material, cover, keep moist, or treat soil stockpiled for more than two days, and tarp trucks transporting fill material to and from the site.
- i. Install gravel pads at access points to prevent tracking of mud onto public roads.
- j. After clearing, grading, earthmoving, or excavation is completed, treat the disturbed area by watering, revegetating, or spreading soil binders until the area is paved or otherwise developed.



- k. Designate a person or persons to monitor the dust control program and to order increased watering, as necessary.

All requirements shall be shown on grading and building plans and/or as a separate information sheet listing the conditions of approval to be recorded with the map. Timing requirements shall be shown on plans prior to grading/building permit issuance and/or recorded with the map during map recordation. Conditions shall be adhered to throughout all grading and construction periods. The Lead Agency shall ensure measures are on project plans and/or recorded with maps. City of Santa Maria staff shall ensure compliance on-site. Santa Barbara County Air Pollution Control District inspectors will respond to nuisance complaints.

## **AQ-2**

**Diesel Particulate and Nitrogen Oxides Emission Reduction Measures.** The City of Santa Maria shall comply with the requirements of Section 2485 of Title 13 of the California Code of Regulations (CCR), which limits idling from diesel-fueled commercial motor vehicles with gross vehicular weight ratings of more than 10,000 pounds and licensed for operation on highways. Additionally, the following is a list of regulatory requirements and control strategies that shall be implemented to the maximum extent feasible:

- a. All portable diesel-powered construction equipment greater than 50 brake horsepower shall be registered with the state's portable equipment registration program or shall obtain a Santa Barbara County Air Pollution Control District (SBCAPCD) permit.
- b. Fleet owners of diesel-powered mobile construction equipment greater than 25 horsepower are subject to the California Air Resource Board (CARB) In-Use Off-Road Diesel-Fueled Fleets Regulation (13 CCR Section 2449), the purpose of which is to reduce nitrogen oxides (NOx), diesel particulate matter (DPM), and other criteria pollutant emissions from in-use off-road diesel-fueled vehicles. Off-road heavy-duty trucks shall comply with the State Off-Road Regulation. For more information, see [www.arb.ca.gov/msprog/ordiesel/ordiesel.htm](http://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm).
- c. Fleet owners of diesel-fueled heavy-duty trucks and buses are subject to the CARB's On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation (13 CCR Section 2025), the purpose of which is to reduce Nox, DPM, and other criteria pollutants from in-use (on-road) diesel-fueled vehicles. For more information, see [www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm](http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm).
- d. All commercial off-road and on-road diesel vehicles are subject, respectively, to 13 CCR Sections 2449(d)(3) and 2485, limiting engine idling time. Off-road vehicles subject to the State Off-Road Regulation are limited to idling no more than 5 minutes. Idling of heavy-duty diesel trucks during loading and unloading shall be limited to 5 minutes, unless the truck engine meets the optional low-NOx idling emission standard, the truck is labeled with a clean-idle sticker, and it is not operating within 100 feet of a restricted area.
- e. Diesel equipment meeting the CARB Tier 3 or higher emission standards for off-road heavy-duty diesel engines shall be used to the maximum extent feasible.
- f. On-road heavy-duty equipment with model year 2010 engines or newer shall be used to the maximum extent feasible.
- g. Diesel-powered equipment shall be replaced by electric equipment whenever feasible. Electric auxiliary power units shall be used to the maximum extent feasible.
- h. Equipment/vehicles using alternative fuels, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane, or biodiesel, shall be used on-site where feasible.
- i. Catalytic converters shall be installed on gasoline-powered equipment, if feasible.
- j. All construction equipment shall be maintained in tune per the manufacturer's specifications.
- k. The engine size of construction equipment shall be the minimum practical size.

- l. The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
- m. Construction worker trips shall be minimized by requiring carpooling and providing for lunch on-site.
- n. Construction truck trips shall be scheduled during non-peak hours to reduce peak hour emissions whenever feasible.
- o. Proposed truck routes shall minimize to the extent feasible impacts to residential communities and sensitive receptors.
- p. Construction staging areas shall be located away from sensitive receptors such that exhaust and other construction emissions do not enter the fresh air intakes to buildings, air conditioners, and windows.
- q. Prior to grading/building permit issuance and/or map recordation, all requirements shall be shown as conditions of approval on grading/building plans and/or on a separate sheet to be recorded with the map. Conditions shall be adhered to throughout all grading and construction periods. The contractor shall retain the Certificate of Compliance for CARB's In-Use Regulation for Off-Road Diesel Vehicles on-site and have it available for inspection. The Lead Agency shall ensure measures are on project plans and/or recorded with maps. The Lead Agency staff shall ensure compliance on-site. SBCAPCD inspectors will respond to nuisance complaints.

**AQ-3 Portable Diesel-Fired Construction Engines.** All portable diesel-fired construction engines rated at 50 brake horsepower or greater must have either statewide Portable Equipment Registration Program (PERP) certificates or Santa Barbara County Air Pollution Control District (SBCAPCD) permits prior to grading/building permit issuance. Construction engines with PERP certificates are exempt from SBCAPCD permits, provided they will be on-site for less than 12 months.

**AQ-4 Diesel Idling.** At all times, idling of heavy-duty diesel trucks should be minimized and auxiliary power units should be used whenever possible. State law requires that:

- a. Drivers of diesel-fueled commercial vehicles shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location.
- b. Drivers of diesel-fueled commercial vehicles shall not idle a diesel-fueled auxiliary power system (APS) for more than 5 minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle. Trucks with 2007 or newer model year engines must meet additional requirements (verified clean APS label required).
- c. These requirements shall be shown on grading/building plans and/or on a separate sheet to be required with the map and adhered to throughout all grading and construction periods.

#### 4. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?		X		
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				X
c. Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means		X		
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?				X
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		X		
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?				X

#### Setting

The *City of Santa Maria General Plan Resources Management Element* (RME) was adopted by the City Council on April 4, 1981, updated and re-adopted in 1996, and contains amendments through January 16, 2001. The Biological Resources section of the RME identifies biological resources as vegetation and wildlife in the city inclusive of plant species, wildlife species, and their habitats. The RME recognizes biological resources to provide ecological, educational, historic, scientific, and aesthetic value to the people of the Santa Maria Valley.

#### Project Site Setting

The project site is located along the western edge of the city of Santa Maria, approximately 1.3 miles west of the urbanized area of the city. The surrounding land uses consist of the northeast corner of the City's WWTP, row crops, an unplanted agricultural field, and commercial development.

As described in Section 2, *Agriculture and Forest Resources*, the project site encompasses five soil types: Corralitos loamy sand, 0 to 2 percent slopes; Corralitos loamy sand, 9 to 15 percent slopes; Sorrento sandy loam, 0 to 2 percent slopes, MLRA 14; Sorrento loam, 0 to 2 percent slopes, MLRA 14; and terrace

escarpments, loamy. All soil types present within the project site, except the terrace escarpments, loamy, range from well-drained to somewhat excessively drained soil types.

### **Special-Status Species**

SWCA Environmental Consultants (SWCA) performed a literature review to assess which special-status species have known occurrences in the project vicinity. The review was initiated with a query of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) to identify special-status plant and animal species that have reported occurrences within 5 miles of the project site (CNDDDB 2023). The U.S. Fish and Wildlife Service (USFWS) Information Planning and Consultation (IPaC) tool was consulted to determine which federally listed species the USFWS considers having potential to occur in the area (USFWS 2023a). Additionally, the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Plants of California (CNPS 2023) was reviewed to provide additional information on rare plants that are known to occur in the Santa Maria and Guadalupe, California U.S. Geological Survey (USGS) 7.5-minute quadrangles. In addition to these databases, SWCA has extensive experience with natural resources in the Santa Maria area; the literature review for this document also included environmental documents and reports previously prepared by SWCA and others for projects in the vicinity.

A focused botanical survey for La Graciosa thistle (*Cirsium loncholepis*) was conducted by Rincon Consultants botanist Nicole Argueta on August 30, 2022, for the project site with a focus on the agricultural ditch along the southern side of West Stowell Road. The survey was conducted within the bloom period of the target species. No other focused species surveys were conducted for the project. A reconnaissance-level site assessment was conducted by SWCA Senior Biologist Rebecca Doubledee on February 10, 2023. For the reconnaissance-level site assessment, the project site was assessed for potentially suitable habitat for sensitive natural resources. Plant and wildlife species were documented based on visual observation, auditory cues (*i.e.*, calls and songs), and indirect signs (e.g., tracks, scat, skeletal remains, burrows, etc.).

### **Landcover and Vegetation Types**

There are four landcover/vegetation types within the project site: developed, landscaped, ruderal / disturbed, and drainage ditch.

#### ***Developed***

The developed category encompasses the existing paved roadways and parking lot area at the WWTP and offers no habitat value.

#### ***Landscaped***

There are two distinct landscaped areas along the alignment route. The first is near the entrance/exit area of the WWTP and the second is around the parking lot of the commercial building near the eastern end of the pipeline alignment on West Stowell Road. The landscaped area around the WWTP consists primarily of myrtle-leaf milkwort (*Polygala myrtifolia*), sugarbush (*Protea* sp.), sago palm (*Cycas* sp.), geranium (*Geranium* sp.), trailing iceplant (*Delosperma cooperi*), and a few other cultivated plant species. The landscaped area at the end of the pipeline alignment along West Stowell Drive is dominated by rosemary (*Salvia rosmariunus*), coastal rosemary (*Westringia fruticose*), bigleaf lantana (*Lantana camara*), a few planted coast live oak (*Quercus agrifolia*), and other cultivated plant species.

#### ***Ruderal / Disturbed***

The remaining vegetated areas are best classified as ruderal / disturbed because they are dominated by non-native species and occur in areas where the soil has been disturbed in the past and appear to be regularly disturbed. The most species-rich area is located within the northern portion of the pipeline alignment within the WWTP property. With the exception of a fire break along the northern fence line, most of the vegetation in this area had not been recently mowed or disturbed at the time of the site visit on February 10, 2023. Vegetation in this area was dominated by ripgut brome (*Bromus diandrus*), smooth barley (*Hordeum murinum*), wild oat (*Avena fatua*), mallow (*Malva* sp.), bur clover (*Medicago polymorpha*), and white stemmed filaree (*Erodium*

*moschatum*). The northern end of the alignment passes under a planted Monterey pine (*Pinus radiata*), where the understory is dominated by annual stinging nettle (*Urtica urens*) and nettle-leaved goosefoot (*Chenopodium murale*). Other weedy species in this portion of the alignment include London rocket (*Sisymbrium irio*), wild radish (*Raphanus raphanistrum* L.), and black mustard (*Brassica nigra*).

The northern end of the project site within the WWTP facility abuts the eastern edge of one of the existing settling ponds. The open water habitat coupled with the adjacent field of tall vegetation attracted large populations of birds, specifically killdeer (*Charadrius vociferus*) and red-winged blackbird (*Agelaius phoeniceus*), which were aggregated around the settling basin and/or perched along the fence line during the reconnaissance survey. Other bird species observed in this area include song sparrow (*Melospiza melodia*), brown-headed cowbird (*Molothrus ater*), Say's phoebe (*Sayornis saya*), and red-tailed hawk (*Buteo jamaicensis*). The red-tailed hawk was seen perching in a cell tower immediately north of the WWTP property adjacent to the alignment area.

The portion of the alignment along Black Road adjacent to the WWTP contained similar species to those found on the northern portion of the alignment, except this area had been recently mowed, which meant the dominant grass species could not be fully identified. Additional weedy species in this area include common sow thistle (*Sonchus arvensis*) and poison hemlock (*Conium maculatum*), which dominated the eastern side of Black Road. Based on a "Flooded During Storm" sign, this area is prone to seasonal flooding; however, the soil was not saturated nor was there ponded water during the site visit. There was an abundance of birds in the field immediately west of the fence line that mainly included brown-headed cowbird, American crow (*Corvus brachyrhynchos*), and mourning dove (*Zenaida macroura*). There is another planted Monterey pine at the southern edge of the WWTP property adjacent to a field dominated by wild radish.

Immediately south of the WWTP property, the vegetation cover declined sharply and was better characterized as bare ground. The soil also changes abruptly from a loam to sandy soil. The dominant plant species along the roadside switched to veldt grass (*Ehrhart* sp.). There was a large berm of loose sandy soil that separated the road from the barren dirt parking lot on the adjacent property. A field worker was observed piling dirt along the top of the berm with a hand shovel during the site visit, and the entire area looked like it had been recently disturbed.

#### *Drainage Ditches*

There are two drainage ditches located within the project development area. The first one is located along the western portion of Black Road stretching approximately 2,000 feet of the total 4,200-foot alignment along Black Road (Figures 3 and 4). This ditch had been recently disturbed by excavation on the adjacent property and was mostly devoid of vegetation. Surface water was present, flowing the last 500 feet of the southern end of the ditch.



**Figure 3. Photograph of Black Road and western road shoulder area near northern portion of proposed pipeline alignment, facing south (February 16, 2023).**



**Figure 4. Photograph of Black Road and western roadside ditch approximately halfway between WWTP and Black Road/Stowell Road intersection, facing north (February 16, 2023).**

The second ditch is located along the southern side of West Stowell Road, running approximately 2,360 feet within the proposed pipeline alignment before turning south along the commercial development (Figures 5 and 6). The ditch along West Stowell Road was more defined, likely from the recent major storm activity in January 2023, and the main bed of the ditch was dominated by sandy soil and lacked significant vegetation. Vegetation in the ditch included patches of Bermuda grass (*Cynodon dactylon*), common sow thistle, and chickweed (*Stellaria media*), while the banks were dominated by smooth barley and veldt grass. Other weedy species that dominated the banks include Shepherd's purse (*Capsella bursa-pastoris*), bur clover, and wild oats. There was no water in the ditch at the time of the reconnaissance survey, and there were only a few places where the soil was damp, typically around the patches of Bermuda grass. Soils appear to be well drained and did not show any wetland characteristics. The area adjacent to the road outside of the ditch was highly compacted and lacked vegetation.





**Figure 5. Photograph of West Stowell Road and southern roadside ditch, facing northwest (February 16, 2023).**



**Figure 6. Photograph of West Stowell Road and southern roadside ditch, facing east (February 16, 2023).**

## Impact Discussion

- a. The project would result in construction-related impacts to areas within the proposed pipeline alignment that may have the potential to affect special-status plant and/or animal species and their habitats. Potential impacts are discussed in detail below.

### ***Special Status Plant Species***

For the purposes of this section, special-status plant species are defined as the following:

- Plants listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (FESA; Code of Federal Regulations [CFR] Title 50, Section 17.12 for listed plants and various notices in the *Federal Register* for proposed species).

- Plants that are candidates for possible future listing as threatened or endangered under the FESA.
- Plants that meet the definitions of rare or endangered species under CEQA (State CEQA Guidelines Section 15380).
- Plants considered by CNPS to be “rare, threatened, or endangered” in California (CNPS Ranks 1, 2, and 3).
- Plants listed by CNPS as plants about which we need more information and plants of limited distribution (CNPS Rank 4).
- Plants listed or proposed for listing by the State of California as threatened or endangered under the CESA (14 CCR Section 670.5).
- Plants listed as rare under the California Native Plant Protection Act (NPPA; California Fish and Game Code [CFG] Section 1900 et seq.).

The background review identified 24 special-status plant species that have the potential to occur in the vicinity of the project site (Appendix C). The project site has been heavily modified by agricultural land uses for several decades and no longer contains native vegetation suitable to support populations of rare plants. The majority of the special-status plant species from the database searches occur in undisturbed habitats in areas with vernal pool wetlands, alkaline soils, serpentine soils, valley and foothill grassland habitat, riparian areas, seeps, and vernal mesic areas (see Appendix C), all of which do not occur within the footprint of the project. There are only two CNDDDB records for plant species within 3 miles of the project site: dune larkspur (*Delphinium parryi* ssp. *blochmaniae*) and Blochman’s leafy daisy (*Erigeron blochmaniae*), both with a California Rare Plant Rank of 1B.2. The record for dune larkspur is a historic record (1943) in the vicinity of Santa Maria Union High School, and the project site no longer supports suitable habitat for this species. There is a CNDDDB occurrence for Blochman’s leafy daisy approximately 0.4 mile south in an oil field grazed by horses adjacent to Black Road from 1991. The site contained low, fairly stable dunes with native plant species, conditions that do not occur within the project site.

The ditch along West Stowell Road was identified as being marginally suitable habitat for La Graciosa thistle (*Cirsium scariosum* var. *loncholepis*), a species listed as endangered under the FESA and Threatened under the California Endangered Species Act (CESA). The closest CNDDDB record for the species is approximately 5.4 miles west of the project site in the city of Guadalupe. An appropriately timed survey was conducted by Rincon Consultants botanist Nicole Argueta on August 30, 2022, and the species was not observed (Rincon Consultants 2022).

Given the lack of native vegetation within the project site, previous land use disturbance, and negative survey results, it was determined that the project site does not provide suitable habitat for special-status plant species. Therefore, the project would not result in impacts to any special-status plant species, and *no impacts* would occur.

### ***Special Status Wildlife Species***

For the purposes of this section, special-status animal species are defined as the following:

- Animals listed or proposed for listing as threatened or endangered under the FESA (50 CFR 17.11 for listed animals and various notices in the *Federal Register* for proposed species).
- Animals that are candidates for possible future listing as threatened or endangered under the FESA.
- Animals that meet the definitions of rare or endangered species under CEQA (State CEQA Guidelines Section 15380).
- Animals listed or proposed for listing by the State of California as threatened and endangered under the CESA (14 CCR Section 670.5).



- Animal Species of Special Concern (SSC) to CDFW.
- Animal species that are fully protected in California (FGC Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).

The background review identified 15 special-status animal species that have the potential to occur in the vicinity of the project site (see Appendix C). Seven species are formally listed under the FESA and one (monarch butterfly [*Danaus plexippus*]) is a candidate for listing. Six species are formally listed under the CESA (five of which are also federally listed). The remainder are CDFW SSC. Special-status wildlife species known to occur within the project vicinity were evaluated for their potential to occur within the project site. There is only marginally suitable habitat for five of these species: California red-legged frogs (*Rana draytonii*), western spadefoot (*Spea hammondi*), Northern California legless lizard (*Anniella pulchra*), tricolored blackbird (*Agelaius tricolor*), and burrowing owls (*Athene cunicularia*). There is also suitable habitat on-site to support nesting birds protected under the Federal Migratory Bird Treaty Act (MBTA) and CFGC Sections 3503, 3503.5, and 3513.

### *California Red-Legged Frog*

The California red-legged frog is federally listed as threatened and listed as an SSC by the CDFW (CDFW 2023). This species occupies both aquatic and terrestrial habitats during different stages of its life and during different seasons of the year. For example, adults can be found within streams or ponds over 1.8 miles from breeding habitat and within dense riparian vegetation more than 328 feet from water (USFWS 2001). In addition, frogs have been tracked making long distance (1- and 2-mile) over land movements without regard to topography (USFWS 2001). However, most adult California red-legged frogs remain immediately adjacent to or within aquatic breeding habitat, only dispersing from these areas during significant rain events. The species prefers aquatic habitats with little or no flow, surface water depths greater than 2 feet, and the presence of sturdy underwater supports such as cattails (*Typha* spp.) to escape potential predators (USFWS 2001).

There are several CNDDDB occurrences of California red-legged frog within a 5-mile radius of the project site. The closest are three occurrences in a drainage canal just south of West Main Street approximately 0.6, 0.9, and 1.2 miles northeast of the WWTP. There is also an occurrence record in an agricultural pond approximately 1 mile northwest of the WWTP. There are several agricultural water features in the area, approximately 0.4, 0.92, 1.0, and 1.25 miles from the project site, that may provide suitable aquatic habitat for the species.

There is no suitable aquatic breeding habitat present within the project site. The very northern edge of the project site abuts one of the settling ponds within the WWTP but based on annual maintenance of this feature, which includes regular draining and dredging, as visible through an assessment of historic aerial imagery (Google Earth 2023), this feature is unlikely to support California red-legged frog. No direct impacts will occur to this settling pond as part of project related activities. The ditches within the project site provide marginally suitable dispersal habitat, but due to the regular agricultural disturbance and high traffic volumes along the roads, their use by California red-legged frog is highly unlikely. Nevertheless, there are several CNDDDB records and potential aquatic habitat features within the known upland dispersal range of the frog; therefore, it cannot be completely ruled out as marginal dispersal habitat. If California red-legged frog is still present in the surrounding agricultural lands, there is a potential that California red-legged frog may be present in the project site while dispersing through during and immediately after significant rain events. With implementation of Mitigation Measures BR-1 and BR-2, which would avoid construction during significant rain events and require a preconstruction survey prior to work resuming after such events, any potential impacts would be *less than significant with mitigation*.

### *Western Spadefoot*

The western spadefoot is listed as a CDFW SSC. This species is a terrestrial species that is rarely seen, spending most of its life buried underground in earth-filled burrows. It is only active aboveground for a short period each year, typically between October and May, depending on rainfall. Most of the

year it inhabits underground burrows, primarily in washes, floodplains, alluvial fans, playas, alkali flats, and foothills and mountains. Optimal habitat consists of open vegetation and short grasses, with sandy or gravelly soils. The western spadefoot digs a burrow in loose soil or uses small mammal burrows, and typically becomes active after rains in the fall or early spring. For breeding, the species uses temporary rain pools (vernal pools) that persist for more than three weeks.

There is one historic CNDDDB occurrence from 1923 that overlaps the project site, but the breeding habitat that the record refers to likely no longer exists. The project site does not currently contain suitable aquatic breeding habitat for this species and the upland habitat is highly disturbed by agriculture significantly decreasing their continued presence in the area. However, the ditch along the southern side of West Stowell Road provides marginally suitable aquatic dispersal habitat for this species. If the species continues to persist in the area, implementation of Mitigation Measures BR-1 and BR-2, which would avoid construction during significant rain events, would avoid impacts to western spadefoot, and impacts would be *less than significant with mitigation*.

#### *Northern California Legless Lizard*

The Northern California legless lizard is listed as an SSC by the CDFW (CDFW 2023). The preferred habitat of this species, like other *Anniella* species, is sandy or loose loamy moist substrates that allow for burrowing and shedding (Thomson et al. 2016; Stebbins 2003). Lizard population densities have been reported associated with certain plant species that provide leaf litter and strong root structures attracting preferred prey and offering cover. Large lupines (*Lupinus arboreus*, *L. chamissonis*, and *L. albifrons*), mock heather (*Ericameria ericoides*), and coast live oak are among the most common indicators for this species of *Anniella* (Kuhn 2005).

The species is known to occur in the area and there is a CNDDDB occurrence south of the project site adjacent to Black Road where four individuals were unearthed and relocated during construction of a sedimentation basin. This occurrence is located away from the road and in an area with native vegetation and plant species (i.e., lupines, etc.) that legless lizards are known to be associated with. The soils adjacent to the roadway have been heavily compacted and lack native plant species, making the presence of this species within the impact area unlikely. Nevertheless, its presence cannot be completely ruled out. Given the low probability of occurrence, environmental awareness training prior to the start of construction is proposed in Mitigation Measure BR-1 to avoid potential impacts to Northern California legless lizards; *therefore*, impacts would be *less than significant with mitigation*.

#### *Tricolored Blackbird*

Tricolored blackbird is a state threatened species protected under the CESA. This species typically nests within or adjacent to open water aquatic habitats in protected nesting substrate such as cattails (*Typha* spp.) or tules (*Schoenoplectus* spp.). This species is also known to nest in agricultural areas in tall stands of vegetation, such as thickets of willow (*Salix* spp.), blackberry (*Rubus ursinus*), wild rose (*Rosa californica*), and tall forbs. Nests are bulky open cups lashed to standing vegetation, made of grass, reeds, leaves, and rootlets, and lined with fine grass. A colony of red-winged blackbird (*Agelaius phoeniceus*) were observed around the northern settling pond and using the adjacent ruderal vegetation in the northern portion of the project site within the WWTP facility. While the red-winged blackbird is more common than the tricolored blackbird, these species are often seen together in mixed flocks. The presence of the red-winged blackbird also indicates that the area provides potentially suitable nesting habitat for the tricolored blackbird.

Populations of tricolored blackbird in coastal counties between Alameda and Santa Barbara have dropped significantly and, based on the 2022 Statewide Survey results, their populations remain low in coastal counties (Colibri Ecological Consulting 2022). While tricolored blackbird did not show up in the 5-mile CNDDDB search, there is a CNDDDB record approximately 14 miles east of the project site along the Sisquoc River. In addition to the CNDDDB, tricolored blackbird survey results from the University of California, Davis Tricolored Blackbird Portal were referenced to determine if there were additional records in the vicinity of the project site. Based on this data, there are two colony records southwest of Orcutt Creek along State Route 1 less than 5 miles from the project site and a colony

record at Twitchell Reservoir approximately 11 miles northeast of the project site. Based on these additional records and the potentially suitable nesting habitat on-site, the presence of tricolored blackbird could not be ruled out. In the event tricolored blackbird is nesting within 300 feet of the project site, implementation of Mitigation Measures BR-3 through BR-5 would avoid impacts to tricolored blackbird, and impacts would be *less than significant with mitigation*.

#### *Burrowing Owl*

The burrowing owl is protected by the federal MBTA and considered an SSC by the CDFW. This species is found in open, dry grasslands, agricultural and range lands, and desert habitats often associated with burrowing animals. The project site is located outside of the current breeding range of this species, but it may still overwinter in the area. There is a CNDDDB occurrence adjacent to Black Road where one adult was occupying a California ground squirrel (*Otospermophilus beecheyi*) burrow. The species was not observed during the January site visit, nor were any ground squirrel burrows displaying signs of the species observed. Marginal habitat occurs in the ruderal vegetation in the northwestern section of the project within the WWTP facilities. However, the small size and height of the vegetation is sufficient to limit the likelihood of burrowing owl presence. The ruderal habitat along the roadways generally lacked large ground squirrel burrows suitable for this species, and the close proximity to traffic further reduces the likelihood that the species will occur within the project footprint. Because it is outside of their breeding range, project activities will not disturb active nests. Preconstruction nesting bird surveys will also survey for signs of burrowing owls.

The burrowing owl is not anticipated to occur within the proposed project site, but preconstruction surveys are recommended to reverify absence (Mitigation Measure BR-2); if burrowing owl is observed during preconstruction surveys or during construction, Mitigation Measures BR-3 and MM BR-4 have been recommended to avoid impacts; therefore, impacts to burrowing owl would be *less than significant with mitigation*.

#### *Other Special-Status Bird Species and Nesting Migratory Birds*

All of the vegetation within the project site has the potential to support nesting birds protected by the MBTA and CFGC. Several bird species were observed along the alignment, particularly in the dense ruderal vegetation in the northern portion within the WWTP facility. Additionally, a red-tailed hawk was observed perched adjacent to the property in a communications tower. To avoid impacts to nesting migratory birds, Mitigation Measure BR-4, which would require nesting bird surveys, has been included. Therefore, impacts would be *less than significant with mitigation*.

- b. The CNDDDB search identified two sensitive natural communities within the Santa Maria and Guadalupe, California USGS 7.5-minute quadrangles. These are southern vernal pools and central dune scrub. Neither of these sensitive natural communities were observed within the project site. The project site does not support any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations. Therefore, the project would not result in disturbance to these resources, and *no impacts* would occur.
- c. There were two drainage ditches along the alignment path. The first one was along the southern portion of Black Road stretching approximately 2,000 feet. The second ditch was along West Stowell Road, running approximately 2,360 feet before turning south along the commercial development. Neither ditch showed signs of an ordinary high-water mark (OHWM) nor did they appear to carry a relatively permanent flow of water. Ditches (including roadside ditches) excavated wholly in and draining only uplands are not typically considered Waters of the United States (WOTUS) by the U.S. Army Corps of Engineers (USACE). The existing drainage ditches do not have a defined bed and bank, are regularly disturbed by agricultural practices, and provide little to no habitat value to wildlife. These ditches would not be considered jurisdictional by the CDFW. These drainages would not be regulated under the Porter-Cologne Water Quality Control Act but would be regulated by the Central Coast RWQCB under the Irrigated Lands Program, which is related to water quality and not biological resources.

The project proposes to avoid work within or under roadside ditches located along Black Road and West Stowell Road by limiting the extent of excavation between the edge of the road and the ditch. Mitigation Measure WQ-1 has been identified to require the City to install a silt fence to prevent impacts and discharge into the ditch located on the southern side of West Stowell Road. Therefore, potential impacts would be *less than significant with mitigation*.

- d. The project site is located along existing roads and all project-related improvements would be underground. The project would not create any new barriers to wildlife movements or exacerbate existing wildlife movement barriers; *therefore, no impacts* would occur.
- e. Based on the City's RME (City of Santa Maria 2001), the significant wildlife habitat areas within the city are the fields surrounding the airport, riparian vegetation within the Santa Maria River and Orcutt Creek, and the Vernal Pool complex located southwest of the airport. The RME also identifies Central Coast Riparian Scrub and Coastal and Valley Freshwater Marsh as sensitive plant communities. The project site is located approximately 2.3 miles northwest of the airport, is not adjacent to either the Santa Maria River or Orcutt Creek, and, based on the site evaluation, does not contain vernal pools. The proposed project does not propose to remove any trees, nor will excavation occur within the Critical Root Zone of protected trees (City of Santa Maria 2016). Additionally, mitigation measures have been identified to ensure the project does not result in significant impacts to any special-status species. Therefore, the proposed project would not conflict with any policies related to the protection of biological resources; therefore, potential impacts would be *less than significant with mitigation*.
- f. There are no adopted habitat conservation plans, natural community conservation plans, or other approved local, regional, or state habitat conservation plans applicable to or near the project site. The project would comply with the City's General Plan and local ordinances pertaining to the protection of biological resources; therefore, *no impacts* would occur.

#### **Mitigation Measure(s) Incorporated into the Project**

**BR-1 Worker Environmental Awareness Training.** Prior to the commencement of work, a qualified biologist shall conduct environmental awareness training for all construction personnel. The environmental awareness training shall include discussions of the special-status species that occur or have potential to occur in the project site. At a minimum, topics of discussion shall include:

- a. A description of the sensitive aquatic resources, special-status species potentially present, and the boundaries within which the project may be accomplished;
- b. Measures implemented to protect special-status species and potentially jurisdictional waters;
- c. Review of the project boundaries and special conditions;
- d. The monitor's role in project activities;
- e. Lines of communication; and
- f. Procedures to be implemented in the event a special-status species is observed in the work area.

**BR-2 California Red-legged Frog and Western Spadefoot Toad.** To avoid potential impacts to dispersing California red-legged frog and western spadefoot, all work activities shall be restricted to dry periods or periods of low rainfall (less than 1/4-inch precipitation per 24-hour period).

- a. The City of Santa Maria shall monitor the National Weather Service (NWS) 72-hour forecast for the project site. If a 70% or greater chance of rainfall is predicted within 24 hours of project activity, the project will be delayed until dry conditions resume.
- b. If rain exceeds 1/2 inch during a 24-hour period, all work activities adjacent to the ditch shall cease until it is no longer raining, and no further rain is forecast.

- c. If work activity is stopped for a significant rain event, a qualified biologist shall conduct a preconstruction survey of the work areas prior to construction resuming.
- d. If a California red-legged frog is found in the work area all construction activities shall stop and the U.S. Fish and Wildlife Service shall be contacted immediately for consultation.
- e. If a western spadefoot is found in the project site, the qualified biologist shall capture and relocate the species, and any other amphibians or reptiles found within the work areas, to suitable habitat outside of the area of impact.

**BR-3 Tricolored Blackbird Survey.** Project activities shall be timed to avoid the normal bird breeding season for tricolored blackbirds (February 1–September 15). However, if project activities must take place during that time, a qualified wildlife biologist shall conduct surveys for nesting tricolored blackbirds no more than 10 days prior to the start of implementation to evaluate presence/absence of tricolored blackbird nesting colonies within 300 feet of project activities and to evaluate potential project-related impacts.

**BR-4 Tricolored Blackbird Avoidance.** If an active tricolored blackbird nesting colony is found during preconstruction surveys, a minimum 300-foot no-disturbance buffer in accordance with the California Department of Fish and Wildlife *Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agriculture Fields in 2015* (California Department of Fish and Wildlife 2015). This buffer shall remain in place until the breeding season has ended or until a qualified biologist has determined that nesting has ceased, the birds have fledged, and the birds are no longer reliant upon the colony or parental care for survival. It is important to note that tricolored blackbird colonies can expand over time and for this reason, the colony should be reassessed to determine the extent of the breeding colony within 10 days of project initiation.

**BR-5 Tricolored Blackbird Take Authorization.** In the event that a tricolored blackbird nesting colony is detected during surveys, the City of Santa Maria shall consult with the California Department of Fish and Wildlife to discuss how to implement the project and avoid take, or if avoidance is not feasible, to acquire an Incidental Take Permit, pursuant to California Fish and Game Code Section 2081(b), prior to any ground-disturbing activities.

**BR-6 Nesting Bird Surveys.** If construction activities involving ground disturbance or vegetation removal are proposed during the typical nesting bird season (February 1–September 15), a nesting bird survey shall be conducted by a qualified biologist no more than 10 days prior to the start of ground disturbance to determine presence/absence of nesting birds. Surveys shall cover all areas potentially affected by the project via direct impacts (e.g., nest destruction) or indirect impacts (e.g., noise, vibration, odors, movement of workers or equipment, etc.). If absence of nesting birds is verified, construction can proceed. If nesting activity is detected, the following measures shall be implemented:

- a. **Buffer Establishment.** If an active bird nest is observed during preconstruction surveys or during construction, the qualified biologist shall determine an appropriate no-disturbance setback based on existing conditions and bird behavior. If an active tricolored blackbird nesting colony is found during preconstruction surveys, a 300-foot no-disturbance buffer shall be implemented. These buffers shall remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.
- b. **Variance of Buffer Distances.** Variance from the no-disturbance buffers established above may be allowable when there is a compelling biological or ecological reason to do so, such as when the construction area would be concealed from a nest site by topography. Any variance from the no-disturbance buffers shall be advised and supported by a qualified biologist. CDFW may be contacted for technical assistance if recommended by the qualified biologist.
- c. **Nesting Monitoring.** If nest buffers are reduced, the biologist shall monitor any construction activities within the pre-determined setback distance. If nesting birds show

any signs of disturbance, including changes in behavior, significantly reducing frequency of nests visits, or refusal to visit the nest, the biologist will stop work and increase the nest buffer. If appropriate on a case-by-case basis, as determined by the qualified biologist, nest monitoring may be reduced to weekly spot-check monitoring, at a minimum, if the biologist determines that the nesting birds have shown no signs of disturbance from construction activities and a continuation of the same types of construction activities are unlikely to disturb the nesting birds.

- d. **Nest Removal.** Nests, eggs, or young of birds covered by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGF) shall not be moved or disturbed until a qualified biologist has determined that the nest has become inactive or young have fledged and become independent of the nest.
- e. **Reporting.** A qualified biologist shall document all active nests and submit a letter report to the City of Santa Maria documenting project compliance with the MBTA, CFGF, and applicable project mitigation measures.

## 5. CULTURAL RESOURCES

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

### Setting

The Santa Maria Valley is within lands traditionally occupied by the Chumash until European contact in the mid-eighteenth century. Areas within close proximity to perennial water sources tend to have higher archaeological sensitivity. The project site is not located within close proximity to any blue-line streams or bodies of water. According to the City's RME, the project site is located in an area designated to have low sensitivity for archaeological resources.

The establishment of Mission San Luis Obispo de Tolosa to the north and Mission La Purísima Concepción near the city of Lompoc was the beginning of development and settlement in the Santa Maria area. Industrialization and the connection of the Pacific Coast Railroad to the city of Santa Maria further stimulated commercial and residential growth in the area. Historical resources in Santa Maria consist of several landmarks and structures. The City has officially designated 10 historic structures and landmarks, with additional sites designated by the Landmark Committee, none of which are located on-site.

### Impact Discussion

- a. The project would be limited to the extension of an existing waterline along Black Road and West Stowell Road and within the existing WWTP. The project does not include the demolition or alteration of any existing buildings or structures that could be eligible for listing in the California Register of Historical Resources (CRHR); therefore, *no impacts* would occur.

- b. The project site is located within the footprint of the survey area identified in the *Cultural Resources Identification Report: Phillips 66 Line 300 Replacement Project Santa Barbara & San Luis Obispo Counties, California* (Glenn 2019), in which no resources were identified. The project would result in approximately 1.76 acres of ground disturbance within a previously disturbed area, which further reduces the potential for intact cultural archaeological resources to be located within the project site. While the potential to encounter cultural archaeological resources within the project site is low, in the event that resources are uncovered during ground-disturbing activities, Mitigation Measure CR-1 requires work within the vicinity of the find to cease until a qualified archaeologist assesses the significance of the find. Based on the low potential to uncover archaeological resources within the project site and implementation of Mitigation Measure CR-1, impacts related to an adverse change in the significance of a cultural archaeological resource would be *less than significant with mitigation*.
- c. The project would require ground-disturbing activities within a previously disturbed area. The project would be required to comply with California Health and Safety Code Section 7050.5, which outlines the protocol for unanticipated discovery of human remains. Section 7050.5 states that no further disturbance shall occur until the Santa Barbara County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. The Santa Barbara County Coroner must be notified of the find immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Based on required compliance with Health and Safety Code Section 7050.5, impacts related to disturbance of human remains would be *less than significant*.

#### Mitigation Measure(s) Incorporated into the Project

- CR-1** In the event that cultural resources are encountered during project activities, all ground-disturbing activities within a 25-foot radius of the find shall cease and the City of Santa Maria shall be notified immediately. Work shall not continue until a qualified archaeologist assesses the find and determines the need for further study. If the find includes Native American-affiliated materials, a local Native American tribal representative will be contacted to work in conjunction with the approved archaeologist to determine the need for further study. A standard inadvertent discovery clause shall be included in every grading and construction contract to inform contractors of this requirement.

## 6. ENERGY

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

#### Setting

Energy service providers for the city of Santa Maria primarily include electricity provided by the Pacific Gas and Electric Company (PG&E) and Central Coast Community Energy (3CE) and natural gas provided by PG&E

and the Southern California Gas Company (SoCalGas). In 2021 PG&E's energy supply mix was sourced from approximately 50% renewable energy sources (i.e., biomass and waste, geothermal, small hydroelectric, solar, and wind), 4% large hydroelectric sources, 39% from nuclear sources, and 7% from natural gas (PG&E 2021). Having PG&E as an electricity provider is mandatory in the city of Santa Maria.

3CE is a locally controlled public agency supplying clean and renewable electricity for residents and businesses in Monterey, San Benito, parts of San Luis Obispo, Santa Barbara, and Santa Cruz Counties. 3CE is based on a local energy model called Community Choice Energy that partners with the local utility (i.e., PG&E), which continues to provide consolidated billing, electricity transmission and distribution, customer service, and grid maintenance services. 3CE provides customers with a choice for clean and renewable energy and community reinvestment through rate benefits and local greenhouse gas (GHG)-reducing energy programs for residential, commercial, and agricultural customers. 3CE is currently on track to source 60% of its energy supply from clean and renewable energy resources by 2025 and has committed to sourcing 100% of its energy supply from clean and renewable resources by the year 2030, which is 15 years ahead of California's energy goal. Participation in 3CE as an electricity provider is voluntary (3CE 2023).

The City has not adopted a climate action plan; however, the City's RME includes goals for achieving increased energy conservation use within the city through increasing the energy efficiency of buildings and appliances, as well as encouraging development and the use of alternative forms of energy. Current measures applied in the city include energy-conserving building standards, recycling, and transportation system improvements. The RME also identifies energy conservation policies, including encouraging the use of innovative site and building orientation and landscaping to maximize energy efficiency (City of Santa Maria 2001).

### Impact Discussion

- a. During construction, fossil fuels, electricity, and natural gas would be used by construction vehicles and equipment. The energy consumed during construction would be temporary in nature and would be typical of other similar construction activities in the city. Federal and state regulations in place require the use of fuel-efficient equipment and vehicles and require wasteful activities, such as diesel idling, to be limited. Construction contractors, in an effort to ensure cost efficiency, would not be expected to engage in wasteful or unnecessary energy and fuel practices. Energy consumption during construction would not conflict with a state or local plan for renewable energy and would not be wasteful, unnecessary, or inefficient; therefore, construction-related impacts would be *less than significant*.

Following construction, the project would require a marginal increase in energy consumption for operation of water conveyance infrastructure. The project does not include the installation of a new pump, lighting, or other components that would require additional energy use. Electricity would be provided by PG&E, which consists of 50% renewable energy sources and 43% GHG-free energy sources (PG&E 2021). By using electricity from PG&E, the project would reduce the long-term use of non-renewable energy resources. Based on the limited amount of electricity use required for operation of the project, the project would not cause a substantial increase in energy use; therefore, operational impacts would be *less than significant*.

- b. The City's RME includes goals, policies, objectives, and programs to address the conservation and preservation of energy resources by increasing energy efficiency of buildings and appliances by using alternative forms of energy. The project would be limited to the extension of water conveyance infrastructure and does not include the construction of new buildings or other infrastructure that would be subject to energy efficiency standards. Therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be *less than significant*.

### Mitigation Measure(s) Incorporated into the Project

Mitigation is not necessary.



## 7. GEOLOGY AND SOILS

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

### Setting

Ground shaking refers to the motion that occurs in response to regional and local earthquakes. Seismic ground shaking is influenced by the proximity of the site to an earthquake fault, the intensity of the seismic event, and the underlying soil composition. Ground shaking can endanger life and safety due to damage or collapse of structures or lifeline facilities. Liquefaction is the sudden loss of soil strength due to a rapid increase in soil pore water pressure resulting from ground shaking during an earthquake. Landslides and slope instability can occur as a result of wet weather, weak soils, improper grading, improper drainage, steep slopes, adverse geologic structure, earthquakes, or a combination of these factors.

The city of Santa Maria is not located in an Alquist-Priolo Special Fault Study Zone. According to the CDOC Fault Activity Map of California, the nearest fault to the project site is the quaternary Santa Maria Fault, located approximately 2.3 miles east of the project site (CDOC 2015b). Other mapped faults include the Santa Maria River and Bradley Faults, located approximately 6.25 miles east of the project site, and the Casmalia Fault, located approximately 5.5 miles southwest of the project site (CDOC 2015b). According to the *City of Santa*

*Maria General Plan Safety Element*, there is low potential for landslides, liquefaction, and subsidence at the project site (City of Santa Maria 1995).

Highly erodible soils are those that are easily carried by water and, to a lesser extent, by wind. Surface erosion is more commonly visible, but subsurface erosion can lead to damage to pipes, roads, foundations, and other structural elements. Expansive soils are largely comprised of clays, which expand in volume when water is absorbed and shrink as the soil dries. Expansion is measured by shrink-swell potential, which is the volume change in soil with a gain in moisture. If the shrink-swell potential is rated moderate to high, then damage to buildings, roads, structural foundations, and pipes can occur. In the northern portion of the city, there are some areas of expansive clay soil that require special construction standards for foundations and infrastructure. Expansive clay problems can be surmounted by appropriate engineering design and construction techniques. According to the City's Safety Element, there is low potential for expansion at the project site (City of Santa Maria 1995).

The project site is underlain by quaternary alluvium (Qa), which has a low paleontological sensitivity due to its relatively young age (CDOC 2015a; SWCA 2003).

## Impact Discussion

- a.i-a.iv. The city of Santa Maria is not located in an Alquist-Priolo Special Fault Study Zone and there are no active faults within the city (City of Santa Maria 1995). The nearest fault to the project site is the quaternary Santa Maria Fault, located approximately 2.3 miles east of the project site (CDOC 2015b). According to the City's Safety Element, there is low potential for landslides and liquefaction at the project site (City of Santa Maria 1995). The project site and surrounding area are characterized by relatively flat topography, which further reduces the potential for landslide to occur. Further, the project does not include the construction of new buildings or structures for human occupancy that could result in risk of loss, injury, or death as a result of seismic-related risk; therefore, *no impacts* would occur.
- b. The project would require approximately 1.76 acres of ground disturbance, including 3,500 cubic yards of cut materials, and would require approximately 3,460 cubic yards of imported aggregate base fill materials. Proposed ground-disturbing activities have the potential to increase erosion and loss of topsoil at the project site that could runoff into surrounding areas. The project would be required to comply with the RWQCB General Construction Permit and prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) to be administered throughout project construction. The SWPPP would incorporate Best Management Practices (BMPs) to ensure that potential water quality impacts during construction from soil erosion would be minimized. In addition, the project qualifies as a Type 1 Linear Underground Project (LUP), as defined by the State Water Resources Control Board (SWRCB). Because the project footprint is between 1 and 5 acres in area, it would be eligible for the USEPA's Small Construction Erosivity Waiver, so long as the erosivity factor (R factor) for the proposed construction site soil type(s) is less than five. Further, if the project construction window falls entirely between April 1 and November 1 and is 6 months or less in duration, the project would be compliant with the USEPA's Small Construction Erosivity Waiver and would not be subject to the SWRCB LUP permit requirements. Following construction activities, the project site would be returned to preconstruction conditions, which would preclude the potential to increase long-term erosion at the project site. Based on required compliance with RWQCB requirements, the project would not result in substantial erosion or loss of topsoil; therefore, impacts would be *less than significant*.
- c. According to the City's Safety Element, there is low potential for landslides, liquefaction, and subsidence at the project site (City of Santa Maria 1995). The project site and surrounding area are characterized by relatively flat topography, which further reduces the potential for landslide to occur. Further, the project does not include the construction of new buildings or structures that could result in risk related to potential ground-failure events; therefore, *no impacts* would occur.
- d. According to the City's Safety Element, there is low potential for soil expansion at the project site (City of Santa Maria 1995). In addition, the project does not include the construction of new buildings or

structures that could result in risk to life or property as a result of development on expansive soils; therefore, *no impacts* would occur.

- e. The project would be limited to the extension of an existing waterline to convey potable water from the City's water supply to the City's WWTP. The project does not include the installation of septic tanks or alternative wastewater disposal systems; therefore, *no impacts* would occur.
- f. The project site is underlain by quaternary alluvium (Qa), which has a low paleontological sensitivity due to its relatively young age (CDOC 2015a; SWCA 2003). In addition, the project site primarily consists of previously disturbed areas; therefore, there is low potential for intact paleontological resources to be present within the proposed area of disturbance. The maximum depth of the trench would be approximately 5 feet. Soils at the project site have a depth to restrictive feature of over 6 feet; therefore, proposed excavation activities would not be expected to disturb the underlying bedrock. Based on the low paleontological sensitivity of the underlying geologic unit and limited excavation activity, the project would not disturb paleontological resources; therefore, impacts would be *less than significant*.

#### Mitigation Measure(s) Incorporated into the Project

Mitigation is not necessary.

## 8. GREENHOUSE GAS EMISSIONS

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

#### Setting

GHGs are any gases that absorb infrared radiation in the atmosphere and are different from the criteria pollutants discussed in Section 3, *Air Quality*. The primary GHGs that are emitted into the atmosphere as a result of human activities are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and fluorinated gases.

#### California Global Warming Solutions Act

Under the California Global Warming Solutions Act, also known as AB 32, the CARB established statewide GHG emissions cap for 2020, adopted mandatory reporting cards for significant sources of GHG, and adopted a comprehensive plan, known as the Climate Change Scoping Plan, identifying how emission reductions would be achieved from significant GHG sources.

In 2016 Senate Bill (SB) 32 was signed into law, amending the California Global Warming Solutions Act. SB 32, and accompanying Executive Order B-30-15, requires CARB to ensure that statewide GHG emissions are reduced to 40% below the 1990 level by 2030. The CARB updated its Climate Change Scoping Plan in December 2017 to express the 2030 statewide target in terms of million metric tons of CO<sub>2</sub> equivalent (MMTCO<sub>2</sub>e). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 MMTCO<sub>2</sub>e.

## ***Sustainable Communities Strategy and Climate Protection Act***

The Sustainable Communities Strategy and Climate Protection Act (SB 375) was signed into law in September 2008. SB 375 builds upon AB 32 by requiring CARB to develop regional GHG reduction targets for automobile and light truck sectors for 2020 and 2035, as compared to 2005 emissions levels. Regional metropolitan planning organizations (MPOs) will be responsible for preparing a Sustainable Communities Strategy (SCS) with their Regional Transportation Plans (RTPs).

## ***Fast Forward 2040 Regional Transportation Plan and Sustainable Communities Strategy***

*Fast Forward 2040 Regional Transportation Plan and Sustainable Communities Strategy* (Fast Forward 2040; adopted in 2017) is the most recent update to the RTP/SCS adopted in 2013 by the Santa Barbara County Association of Governments (SBCAG). Fast Forward 2040 demonstrates how the region will achieve the region's passenger vehicle GHG emission targets per capita in compliance with SB 375.

Fast Forward 2040 identifies regional transportation needs, prioritizes those needs, and presents an implementation plan for maintaining and improving the regional transportation network. Fast Forward 2040 also contains a multi-modal transportation investment package that, when implemented, will advance the region's goals, satisfy the planning objectives, and, as a result, meet the needs of the traveling public into the future.

## ***City of Santa Maria***

The City has not adopted a climate action plan or GHG reduction plan. The City is currently in the process of preparing an update to the City's General Plan. The updated General Plan will include goals and policies to address climate adaptation and resilience, as well as to help reduce GHGs associated with transportation and non-transportation emission sources.

## **Impact Discussion**

- a. During construction, fossil fuels, electricity, and natural gas would be used by construction vehicles and equipment. Federal and state regulations in place require fuel-efficient equipment and vehicles and prohibit wasteful activities, such as diesel idling. Construction contractors, in an effort to ensure cost efficiency, would not be expected to engage in wasteful or unnecessary energy and fuel practices. Any increase in GHG emissions from vehicle idling would be temporary in nature and would not result in a new, permanent source of GHG emissions in the area. Therefore, construction activities are not anticipated to result in significant emissions, and construction-related impacts would be *less than significant*.

Operation of the project has the potential to generate GHG emissions from a minor increase in electricity use associated with water conveyance. Electricity use for the project would be limited to the operation of water conveyance infrastructure, which would be provided by PG&E. The PG&E power mix consists of 50% renewable energy sources and 43% GHG-free energy sources (PG&E 2021). By using electricity from PG&E, the project would reduce the long-term use of non-renewable energy resources and associated GHG emissions. Operation of the project would not generate new regular vehicle trips to and from the project site in a manner that would require the long-term use of fossil fuels, with the exception of trips associated with periodic maintenance checks and/or repairs. Based on the limited amount of electricity and negligible amount of vehicle trips required for operation of the project, the project would not generate a substantial amount of GHG emissions that may have a significant impact on the environment; therefore, operational impacts would be *less than significant*.

- b. As discussed above, operation of the project would not generate new regular vehicle trips and would result in a negligible increase in energy use. Goals and policies identified in the City's RME and Fast Forward 2040 pertaining to reductions in vehicle miles traveled (VMT), use of alternative fuels and energy sources, incentivizing alternative transportation modes, building energy efficiency, and water conservation would generally not be applicable to the project. Therefore, implementation of the

proposed project would not conflict with any applicable state and local goals, policies, and programs adopted to reduce GHG emissions, and impacts would be *less than significant*.

#### Mitigation Measure(s) Incorporated into the Project

Mitigation is not necessary.

## 9. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
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?			X	
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
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?				X
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	

#### Setting

The Hazardous Waste and Substances Site (Cortese) List is a planning tool used by the state, local agencies, and developers to comply with CEQA requirements related to the disclosure of information about the location of hazardous materials release sites. California Government Code Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to develop at least annually an updated Cortese List. Various state and local government agencies are required to track and document hazardous material release information for the Cortese List. The California Department of Toxic Substance Control (DTSC) EnviroStor database tracks DTSC cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known contamination, such as federal superfund sites, state response sites, voluntary cleanup sites, school cleanup sites, school investigation sites, and military evaluation sites (DTSC 2023). The SWRCB GeoTracker

database contains records for sites that impact, or have the potential to impact, water in California, such as Leaking Underground Storage Tank (LUST) sites, U.S. Department of Defense sites, and Cleanup Program Sites (SWRCB 2023). The remaining data regarding facilities or sites identified as meeting the “Cortese List” requirements can be located on the CalEPA website: <https://calepa.ca.gov/sitecleanup/corteselist/>.

Based on a query of the DTSC EnviroStor and SWRCB GeoTracker databases, there are no hazardous materials sites located within or adjacent to the project site (DTSC 2023; SWRCB 2023). The nearest mapped hazardous materials site is a closed cleanup program site located approximately 200 feet south of Stowell Road (SWRCB 2023).

## Impact Discussion

- a. During construction, the project would require limited quantities of hazardous substances, including gasoline, diesel fuel, hydraulic fluid, solvents, oils, and paints, which has the potential to result in an accidental spill or release. Construction contractors would be required to comply with applicable federal and state environmental and workplace safety laws for the handling, transport, and storage of hazardous materials, including 22 CCR Division 4.5. Operation of the project would be limited to the operation of an underground waterline and would not require the use of hazardous or acutely hazardous materials. Therefore, impacts associated with the routine transport, use, or disposal of hazardous materials would be *less than significant*.
- b. As previously discussed, temporary construction activities would include the use of construction equipment, vehicles, and commonly used hazardous substances, including, but not limited to, paint, solvents, oils, fuel, and gasoline. Commonly used hazardous substances within the project site would be transported, stored, and used according to regulatory requirements and existing procedures for the handling of hazardous materials, which would reduce the risk of accidental spill or upset conditions during project construction.

Proposed construction activities would occur entirely outside of the paved portions of West Stowell Road and Black Road, except where the alignment crosses to the western side of Black Road. According to the CDOC, the project is not located in an area with known potential for NOA (CDOC 2011). Therefore, construction activities would not have the potential to expose workers or surrounding land use occupants to harmful levels of NOA. The project does not include the demolition of existing structures that could release asbestos-containing material (ACM) or lead-based paint.

The project would allow for ground-disturbing activities on a project site located adjacent to Black Road, a north-to-south primary arterial road, and West Stowell Road, an east-to-west secondary arterial road. Aerially deposited lead (ADL) from the historical use of leaded gasoline, exists along roadways throughout California. Black Road and West Stowell Road are not classified as Principal Arterial roadways, freeways, or expressways. Historical aerial imagery shows that these roadways historically consisted of a two-lane roadway in a predominantly undeveloped area supporting past agricultural activities. Based on the classification of Black Road and West Stowell Road, the lack of adjacent land uses that would have generated a high level of traffic trips during the time when leaded gasoline was being used, and historical roadway configuration, historical traffic levels along Black Road and West Stowell Road prior to the ban on leaded gasoline would not be substantial enough to result in hazardous levels of ADL along the roadway. Therefore, proposed ground-disturbing activities located within 30 feet of Black Road and West Stowell Road would not be expected to disturb or release ADL.

Based on the analysis provided above, the project would not result in significant hazard to the public or the environment; therefore, impacts would be *less than significant*.

- c. The nearest school to the project site is Bonita Elementary School located approximately 1.3 miles northwest of the project site. Therefore, the proposed project would not emit hazardous emissions or

handle acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school; therefore, *no impacts* would occur.

- d. Based on a query of the DTSC EnviroStor and SWRCB GeoTracker databases, there are no previously recorded hazardous materials sites located within or adjacent to the project site (DTSC 2023; SWRCB 2023). The project site is not located on or adjacent to a site that is on a list of hazardous materials site pursuant to California Government Code Section 65962.5; therefore, the project would not create a significant hazard to the public or the environment related to disturbance in a hazardous materials site, and *no impacts* would occur.
- e. The project site is located 2 miles northwest of Santa Maria Public Airport. The project does not include the construction of new residences, buildings, or other aboveground structures; therefore, the project would not result in airport-related safety or noise hazards, and *no impacts* would occur.
- f. The project includes extension of an existing underground water pipeline within a developed roadway and is expected to require temporary traffic controls along Black Road and West Stowell Road during the approximate 3- to 4-month construction period. The project would be required to comply with Chapter 7 (Traffic Regulations) provided in the City of Santa Maria Municipal Code to facilitate traffic flow through the area during construction. The project site is located in a rural agricultural area and is not located in close proximity to residential communities; therefore, partial or full road closure would not impede any primary or secondary evacuation routes. Following project construction, temporary traffic controls would be removed, and the roadway would be returned to preconstruction conditions. Therefore, the project would not result in long-term effects on emergency response and evacuation efforts in the project vicinity, which would be consistent with the City's *General Plan Safety Element*, and impacts would be *less than significant*.
- g. The project site is characterized by relatively flat topography within an urban area with a low potential for wildfire occurrence. The project does not propose the development of any structures or buildings that could increase the potential for a wildfire to occur in the immediate or surrounding area; therefore, the project would not expose nearby residents to wildfire, and impacts would be *less than significant*.

#### Mitigation Measure(s) Incorporated into the Project

Mitigation is not necessary.

## 10. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		X		
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
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:				

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
i. Result in a substantial erosion or siltation on- or off-site;			X	
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			X	
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			X	
iv. Impede or redirect flood flows?			X	
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			x	

### Setting

The project site is located within the Santa Maria Watershed, one of the largest coastal drainage basins in California, and includes all areas tributary to the Cuyama, Sisquoc, and Santa Maria Rivers. The Santa Maria Watershed overlies the Santa Maria River Valley Groundwater Basin (SMRVGB), covering more than 280 square miles in the southwestern corner of San Luis Obispo County and the northwestern corner of Santa Barbara County. Historically, the City pumped water from the SMRVGB as its sole water supply until the City began receiving State Water Project (SWP) water from the Central Coast Water Authority (CCWA) in 1997. The SMRVGB is currently under a court-ordered stipulation that allows the City to derive its water supply from local groundwater, associated return flows from imported SWP water that may be recaptured in the SMRVGB, and a share of the yield of Twitchell Reservoir operations.

According to the USFWS NWI Surface Waters and Wetlands mapper, there are no mapped drainages or wetland areas located within the project site; however, there is a freshwater pond located approximately 50 feet west of Black Road, approximately 190 feet north of the Black Road and West Stowell Road intersection (USFWS 2023b). However, the pond has since been destroyed and used as a staging area for agricultural purposes.

According to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) 06083C0180F (effective date 9/30/2005), the project site is within Zone X, an area of minimal flood hazard (FEMA 2023).

### Impact Discussion

- a. There are no mapped drainages or surface water features located within or adjacent to the project site (USFWS 2023b). The project would not result in direct disturbances to any mapped surface water features. The project would require ground-disturbing activities and equipment and vehicle use during project construction, which has the potential to result in erosion or other pollutants that could run off from the site to surrounding areas. Construction of the proposed project would result in approximately 1.76 acres of site disturbance. The project would disturb more than 1 acre of area and would be



required to comply with the Central Coast RWQCB General Construction Permit requirements, which requires the preparation of a SWPPP. The SWPPP would include BMPs to control and reduce the discharge of pollutants, including sediment and erosion, into local surface water drainages. In addition, Mitigation Measure WQ-1 has been identified to require installation of a silt fence along the pipeline alignment between the work areas and the top of the roadway ditch located along the southern side of West Stowell Road to avoid potential erosion and sedimentation impacts or accidental discharge into the ditch.

The project would further be required to comply with the adopted standards contained within City Municipal Code Section 8-12A (Stormwater). Section 8-12A.04 also incorporates the Post-Construction Stormwater Management Requirements for Development Projects in the Central Coast Region (Central Coast RWQCB, Resolution No. R3-2013-0032). Following construction activities, the project site would be returned to preconstruction conditions, which would preclude the potential to increase long-term erosion at the project site. Based on required compliance with RWQCB and City requirements and implementation of Mitigation Measure WQ-1, the project would not substantially degrade surface or ground water quality; therefore, impacts would be *less than significant with mitigation*.

- b. The project includes the extension of an existing underground water pipeline within Black Road and West Stowell Road to connect within the City's WWTP. Following construction activities, the project site would be returned to preconstruction conditions; therefore, implementation of the proposed project would not increase the amount of impervious surface area within the project site in a manner that could interfere with long-term ground water recharge. The purpose of the project is to provide the WWTP with a source of potable water for these uses consistent with RWQCB requirements and to provide added resiliency to the plant's treatment operations. It is anticipated that use of potable water brought in from the waterline would ultimately replace use of non-potable well water on-site and the WWTP would eventually be disconnected from the wells on-site; however, no formal plans for disconnection have been made at this time. The City utilizes the following available water supply sources: local groundwater, purchased water from the SWP, associated return flows recaptured from the SMRVGB, assigned rights to water from the SMRVGB, and assigned rights to augmented yield from Twitchell Reservoir. The City's water supply is expected to reliably meet the projected city water demands and have an available supply in excess through 2040, with the majority of this demand being met by imported state water (City of Santa Maria 2021a). Implementation of the project would ultimately reduce the WWTP's reliance on groundwater; therefore, the project would not increase groundwater usage in a manner that could substantially deplete groundwater supplies, and impacts would be *less than significant*.
- c.i-c.iv. The project includes extension of an existing water line approximately 1.43 miles along Black Road and West Stowell Road. Construction of the proposed project would result in approximately 1.76 acres of site disturbance, including 3,500 cubic yards of cut materials, and would require approximately 3,460 cubic yards of imported aggregate base fill materials. During construction, the project would be required to comply with City Municipal Code Section 8-12A (Stormwater) and the Central Coast RWQCB general permit requirements, which requires the preparation of a SWPPP with BMPs to control the discharge of pollutants, including sediment and erosion, into local surface water drainages during project construction. Following construction activities, the project site would be returned to preconstruction conditions; therefore, implementation of the proposed project would not interfere with existing drainage conditions or increase impervious surface area in the project site in a manner that could increase runoff. In addition, the project site is located in an area of minimal flood hazard; therefore, the project would not impede or redirect flood flows. Implementation of the proposed project would maintain existing drainage conditions within the project site; therefore, impacts would be *less than significant*.
- d. According to the FEMA FIRM 06083C0180F (effective date 9/30/2005), the project site is within Zone X, an area of minimal flood hazard (FEMA 2023). According to the Santa Barbara County Tsunami Hazard Areas, the project site is not located in an area with risk of tsunami inundation (CDOC 2019). Further, the project site is not located within the proximity of any impounded or standing bodies of

water that could result in risk of a seiche. Therefore, the project would not risk the release of pollutants due to inundation, and *no impacts* would occur.

- e. The project site is located within the SMRVGB. As previously identified, the project would ultimately replace use of non-potable well water on-site with potable water from the City's water supply. The WWTP would eventually be disconnected from the wells on-site; however, no formal plans for disconnection have been made at this time. The City's water supply consists of diverse sources and would not be limited to groundwater; therefore, implementation of the project would ultimately reduce the WWTP's reliance on groundwater and would not increase groundwater usage in a manner that could interfere with sustainable groundwater management practices. The project site is under the jurisdiction of the Central Coast RWQCB and would be subject to the Water Quality Control Plan for the Central Coast Region (RWQCB 2019), which establishes water quality objectives for beneficial uses of water resources within the Central Coast region. The project would be required to comply with the City Municipal Code Section 8-12A (Stormwater) and the Central Coast RWQCB General Construction Permit requirements, which requires the preparation of a SWPPP with BMPs to control the discharge of pollutants, including sediment and erosion, into local surface water drainages. Based on required compliance with RWQCB and City requirements, the project would not violate any RWQCB water quality standards or waste discharge requirements; therefore, impacts would be *less than significant*.

### Mitigation Measure(s) Incorporated into the Project

- WQ-1 Silt Fencing.** Prior to the start of construction adjacent to the drainage ditches, a qualified biologist shall delineate the boundary of the ditch located along the southern side of West Stowell Road and monitor the installation of a silt fence to avoid impacts or accidental discharge into the ditch. A monitor shall conduct weekly inspections of the silt fence to make sure it remains in place along the segment of active work area and functions properly throughout the duration of construction. For each segment of the pipeline installation that is completed, the silt fence may be removed.

## 11. LAND USE AND PLANNING

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

### Setting

Pursuant to California Government Code Section 65300, the City adopted a General Plan consisting of seven elements, including the Land Use, Circulation, Noise, Safety, Resources Management, Housing, and Economic Development Elements. The City's LUE designates the placement and distribution of future development and allows orderly growth to occur in the city.

The City's RME was adopted by the City Council on April 4, 1981, updated and re-adopted in 1996, and contains amendments through January 16, 2001. The Biological Resources section of the RME identifies biological resources as vegetation and wildlife in the city inclusive of plant species, wildlife species, and their habitats. The RME recognizes biological resources to provide ecological, educational, historic, scientific, and

aesthetic value to the people of the Santa Maria Valley. The RME also discusses and identifies goals, policies, objectives, and implementation programs pertaining to providing high-quality water resources to meet existing and future water demands, improving and maintaining healthful air quality, preservation of cultural and archaeological resources, preservation of high quality soils and agricultural resources, conservation of non-renewable resources, promotion of energy efficiency and conservation practices, and provision of open spaces areas for conservation, recreation, and agricultural uses.

## Impact Discussion

- a. The project includes the extension of an existing waterline within Black Road and West Stowell Road to provide potable water from the City's water supply to the City's WWTP. The project would require temporary traffic controls during the 3- to 4-month construction period; however, the roadway would remain open during project construction and temporary traffic controls would be removed following completion of the construction period. The project does not include the construction of any aboveground structures or other features that could physically divide an established community; therefore, *no impacts* would occur.
- b. As evaluated throughout this Initial Study, the project would be generally consistent with standards and policies set forth in the City's General Plan and other applicable planning documents. The project would be required to implement Mitigation Measures AQ-1 through AQ-4, BR-1 through BR-6, CR-1, WQ-1, and TR-1 to mitigate potential impacts associated with Air Quality, Biological Resources, Cultural and Tribal Cultural Resources, Hydrology and Water Quality, and Transportation, consistent with the City's RME, which establishes goals, policies, and objectives intended to guide growth management while preserving natural and community resources. Upon implementation of the identified mitigation measures, the project would not conflict with other local policies or regulations adopted for the purpose of avoiding or mitigating environmental effects; therefore, impacts would be *less than significant with mitigation*.

## Mitigation Measure(s) Incorporated into the Project

Implement Mitigation Measures AQ-1 through AQ-4, BR-1 through BR-6, CR-1, WQ-1, and TR-1.

## 12. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				X
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?				X

## Setting

A mineral is any naturally occurring chemical element or compound, or groups of elements and compounds, formed from inorganic processes and organic substances, including but not limited to coal, peat, bituminous rock, but excluding geothermal resources, natural gas, and petroleum. The Santa Maria River channel is considered to be a valuable mineral resource. The river contains the largest resources of Portland Cement Concrete-grade aggregate and almost 90% of the available alluvial sand and gravel resources in the Santa

Barbara-San Luis Obispo County region. In addition, the State of California classifies portions of the Santa Maria River as Mineral Resource Zone (MRZ-) 2, which is described as an area with adequate information to indicate that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists. Based on the City's RME, the project site is located in an MRZ-1 zone, which is described as an area where no significant mineral deposits are present (City of Santa Maria 2001).

## Impact Discussion

- a-b. The project site is located in an MRZ-1 zone, which is described as an area where no significant mineral deposits are present (City of Santa Maria 2001). In addition, the project site is located adjacent to an existing roadway, agricultural crop land, and otherwise developed areas, which further reduces the likelihood that intact mineral resources of value occur within the proposed area of disturbance. The project site is not located in an area with known mineral resources; therefore, the project would not result in the loss of availability of known or locally important mineral resources, and *no impacts* would occur.

## Mitigation Measure(s) Incorporated into the Project

Mitigation is not necessary.

## 13. NOISE

Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			X	
b. Generation of excessive ground borne vibration or ground borne noise levels?			X	
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?				X

## Setting

Community noise levels are typically measured in terms of A-weighted decibels (dBA). A-weighting is a frequency correction that correlates overall sound pressure levels with the frequency response of the human ear. Equivalent noise level (Leq) is the average noise level on an energy basis for a specific time period. The duration of noise and the time of day at which it occurs are important factors in determining the impact of noise on communities. The Community Noise Equivalent Level (CNEL) and Day-Night Average Level (Ldn) account for the time of day and duration of noise generation. These indices are time-weighted average values equal to the amount of acoustic energy equivalent to a time-varying sound over a 24-hour period. The project site is subject to elevated CNEL noise levels ranging from 60 to 65 dB due to its proximity to US 101 (City of Santa Maria 2009).

Based on the City's LUE, the project is not located within a Major Noise Impact Area or within the Airport Safety Zone. The *City of Santa Maria General Plan Noise Element* includes noise compatibility standards for noise exposure by land use. These include interior and exterior noise standards as shown in Table 4.

**Table 4. Interior and Exterior Noise Standards**

Land Use Categories		Standard dB CNEL	
Category	Uses	Interior	Exterior
Residential	Single Family, Duplex, Multiple Family, Mobile Home	45	60
Noise-Sensitive Land Uses	Motel, Hospital, School, Nursing Home, Church, Library, and Other	45	60
Commercial	Retail, Restaurant, Professional Offices	55	65
Industrial	Manufacturing, Utilities, Warehousing, Agriculture	65	70
Open Space	Passive Outdoor Recreation	--	65

Source: City of Santa Maria General Plan Noise Element, Table N-4

## Impact Discussion

- a. Existing ambient noise levels in the immediate project vicinity consist of vehicle noise and noise from surrounding industrial and agricultural uses. During project construction, noise from construction activities may intermittently dominate the noise environment in the immediate project vicinity. The project would require the use of typical construction equipment (e.g., dozers, excavators, etc.) during proposed construction activities. According to the City Municipal Code Section 5-5.06 (Unmeasurable Nuisance Noise), noise from construction equipment is allowable between the hours of 7:00 a.m. and 6:00 p.m. Monday through Friday and 8:00 a.m. and 5:00 p.m. Saturday and Sunday. Construction activities to be limited to the hours specified in the City's Municipal Code. Further, there are no noise-sensitive land uses within close proximity of the project site that could be adversely affected by short-term construction noise. Following construction activities, the project would be limited to the operation of underground water conveyance infrastructure and would not result in new stationary or mobile sources of noise. Therefore, the project would not exceed noise thresholds established by the City, and impacts would *be less than significant*.
- b. The project does not include pile-driving or other high-impact activities that would generate substantial groundborne noise or vibration during construction. Standard construction equipment would generate some groundborne noise and vibration during ground-disturbing activities; however, these activities would be limited in duration and consistent with other standard construction activities. In addition, any groundborne noise or vibration generated by short-term construction activities would be limited to the immediate work area. Operation of the project does not include new features that could generate substantial groundborne noise. Therefore, impacts related to exposure of persons to or generation of excessive groundborne noise or vibration levels would be *less than significant*.
- c. The project site is located approximately 2 miles northwest of Santa Maria Public Airport. The project does not include the construction of new residences or other noise-sensitive land uses that could expose people residing or working in the project site to excessive noise levels; therefore, *no impacts* would occur.

## Mitigation Measure(s) Incorporated into the Project

Mitigation is not necessary.

## 14. POPULATION AND HOUSING

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

### Setting

Since the early 1990s, Santa Maria has experienced a consistent increase in population, largely due to a growing migrant workforce for nearby agriculture. The city of Santa Maria is one of the fastest growing areas in Santa Barbara County, due in part to the affordable housing it provides relative to the cities of Santa Barbara and San Luis Obispo Counties. The City has also developed a number of programs and policies to further encourage growth and development. As of 2021, the city had a population of approximately 109,700 people (U.S. Census Bureau 2021).

### Impact Discussion

- a. The project includes the extension of water conveyance infrastructure within Black Road and West Stowell Road to provide a source of potable water to the City's WWTP. The project would be necessary to replace the WWTP's current non-potable water supply with potable water from the City's water supply. Therefore, the project would not expand wastewater treatment capabilities in a manner that could induce unplanned or substantial population growth in the city. Proposed construction activities have the potential to generate short-term employment opportunities; however, project construction would be limited in nature and is expected to use workers from the local employment force and would not require workers to relocate to the project region. Therefore, the project would not result in unplanned or substantial population growth, and impacts would be *less than significant*.
- b. The project does not include the removal or demolition of any existing housing; therefore, the project would not displace existing people or housing, and *no impacts* would occur.

### Mitigation Measure(s) Incorporated into the Project

Mitigation is not necessary.

## 15. PUBLIC SERVICES

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

### Setting

Fire protection services within the Santa Maria city limits are provided by the Santa Maria Fire Department (SMFD), which operates out of six fire stations located throughout the city. The nearest SMFD station to the project site is the Fire Department Headquarters located at 314 West Cook Street, approximately 2 miles northeast of the project site. The Santa Maria Police Department (SMPD) provides police protection services to the city of Santa Maria. The SMPD operates out of a single building located at 1111 Betteravia Road in the east-central portion of the city, approximately 17 miles southeast of the project site. The city is located in the Santa Maria-Bonita School District and Santa Maria Joint Union High School District. The City operates a total of 234 acres of developed parkland in 27 neighborhood and community parks.

### Impact Discussion

- a.i. The project does not include the construction of new buildings or structures that would directly increase demand on existing fire protection services. The project would extend water conveyance infrastructure within Black Road and West Stowell Road to provide an additional water source to the City's WWTP. The proposed additional water source would not result in an increase in the WWTP's wastewater treatment or conveyance capacity; therefore, the project would not facilitate unplanned or substantial population growth in a manner that would increase demand on existing fire protection services. The project would not require new or physically altered governmental facilities for fire protection services; therefore, *no impacts* related to fire protection would occur.
- a.ii. The project does not include the construction of new residences, businesses, or other uses that would directly increase demand on existing police protection services. The project would be limited to the extension of an existing waterline and would not facilitate unplanned or substantial population growth in a manner that would increase demand on existing police protection services. The project would not require new or physically altered governmental facilities for police protection services; therefore, *no impacts* would occur.
- a.iii. As discussed in Section 14, *Population and Housing*, the project would not induce direct or indirect population growth. The project would not result in an increase of school-aged children in the area;

therefore, the project would not create an increased demand on local schools, and *no impacts* would occur.

- a.iv. As discussed in Section 14, *Population and Housing*, the project would not induce direct population growth. The project would not result in a population increase that could result in deterioration of existing recreation facilities or require the expansion of new facilities; therefore, the project would not create an increased demand on public recreation facilities, and *no impacts* would occur.
- a.v. As discussed in Section 14, *Population and Housing*, the project would not induce direct population growth. The project does not propose features that would significantly increase the demand on public facilities, such as libraries or post offices, or result in the need for new or physically altered governmental facilities; therefore, *no impacts* would occur.

#### Mitigation Measure(s) Incorporated into the Project

Mitigation is not necessary.

## 16. RECREATION

Would the project:	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?				X
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?				X

#### Setting

The City's recreation system is comprised of several local parks and recreational facilities, which are managed by the City Department of Recreation and Parks. The City Department of Recreation and Parks operates 234 acres of developed parkland in 27 neighborhood and community parks. The nearest City-operated park is Minami Park, located approximately 1.6 miles east of the project site.

#### Impact Discussion

- a. As discussed in Section 14, *Population and Housing*, the project would be limited to the extension of an existing waterline and would not induce substantial or unplanned population growth in the city. The project would not increase the use of existing recreational facilities in a manner that would lead to substantial deterioration of existing recreational facilities; therefore, *no impacts* would occur.
- b. The project does not include the construction of any recreational facilities that could result in an adverse physical effect on the environment; therefore, *no impacts* would occur.

#### Mitigation Measure(s) Incorporated into the Project

Mitigation is not necessary.



## 17. TRANSPORTATION

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

### Setting

The *City of Santa Maria General Plan Circulation Element* evaluates the transportation needs of the City and presents a comprehensive transportation plan to accommodate those needs. The intent of the Circulation Element is to provide for public mobility and access necessary to support the existing and anticipated population of the city.

In 2013 SB 743 was signed into law with the intent to “promote the state’s goals of reducing greenhouse gas emissions and traffic-related air pollution, promoting the development of a multimodal transportation system, and providing clean, efficient access to destinations” and required the California Governor’s Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within CEQA. The metrics developed were required to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. As a result, in December 2018, the California Natural Resources Agency certified and adopted updates to the State CEQA Guidelines. The revisions included new requirements related to the implementation of SB 743 and identified VMT per capita, VMT per employee, and net VMT as new metrics for transportation analysis under CEQA (as detailed in Section 15064.3(b)) and these metrics have been implemented statewide since July 1, 2020.

The project site consists of a 1.43-mile-long segment of Black Road and West Stowell Road in a predominantly agricultural and industrial area on the western edge of the city of Santa Maria. According to the City’s Circulation Element, Black Road is classified as a north-to-south primary arterial road and West Stowell Road is classified as an east-to-west secondary arterial road. A primary arterial provides mobility with intermittent access to arterials, other streets, and freeways and with minimal direct land access. A secondary arterial provides mobility with access to collectors, some local streets, and major traffic-generating land uses. These portions of Black Road and West Stowell Road do not currently include pedestrian, bicycle, or transit facilities.

### Impact Discussion

- a. The project would be limited to the extension of an existing water pipeline within Black Road and West Stowell Road. Short-term construction activities are expected to require temporary traffic controls during the approximate 3- to 4-month construction period. However, these impacts would be short-term and minimized to the extent feasible through adherence to City Municipal Code Chapter 7 (Traffic Regulations). Following construction, the roadways would be returned to preconstruction conditions; therefore, the project would not result in any long-term impacts on the transportation system. In addition, the project would be limited to the operation of a water pipeline and would not generate long-

term vehicle trips within the project site, which would be consistent with the City's Circulation Element; therefore, impacts would be *less than significant*.

- b. Based on the *City of Santa Maria Environmental Procedures and Guidelines* (City of Santa Maria 2021a), discretionary projects that would generate or attract fewer than 110 daily trips would generally not result in potentially significant impacts on the environment associated with VMT. The project does not propose features that would increase long-term vehicle trips to or from the project site. During operation, the project would be limited to the operation of a water pipeline and would not generate long-term vehicle trips within the local project site. The project would not result in or exceed 110 trips per day and would not generate a significant increase in VMT; therefore, project impacts would be *less than significant*.
- c. The project does not include the construction of any new roadways or other roadway features that could increase hazard within the project site. During construction, the project would work adjacent to the pavement of Black Road and West Stowell Road. Following construction, the pipeline would be located underground, and the project site would be returned to preconstruction conditions, which would avoid the creation of roadway hazards along Black Road and West Stowell Road. In addition, the project would not result in any new land uses that could introduce hazards as a result of incompatible uses. Therefore, impacts would be *less than significant*.
- d. The project includes the extension of underground water conveyance infrastructure within Black Road and West Stowell Road and is expected to require temporary traffic controls during the approximate 3- to 4-month construction period planned to begin in June 2023. The project would require one-lane traffic control along both Black Road and West Stowell Road during the construction period, in addition to a full lane closure on Black Road for a limited duration. Lane closures are generally anticipated to be approximately 400 feet in length at any given time.

As previously identified, the project would be required to comply with City Municipal Code Chapter 7 (Traffic Regulations) to reduce potential impacts associated with short-term traffic controls. Due to the project's location in a rural area, there would be less opportunity to establish detours for Black Road and West Stowell Road. Mitigation Measure TR-1 requires notification to be given to local emergency providers prior to any road/lane closures. Following project construction, temporary traffic controls would be removed, and the project site would be returned to preconstruction conditions, which would avoid long-term impacts related to emergency access within the immediate project site. Therefore, impacts would be *less than significant with mitigation*.

#### **Mitigation Measure(s) Incorporated into the Project**

- TR-1** Prior to the implementation of any lane/road closures or detour routes, the City of Santa Maria and/or its project contractors shall provide notice to all emergency response providers likely to be affected by the closure and detours, including, but not limited to, the Santa Maria Fire Department and Santa Maria Police Department. The notice shall include the following information: dates of construction, location and anticipated duration of temporary lane/road closures and detours, and contact information, including the phone number and email address of the City of Santa Maria staff person responsible for responding to and addressing public complaints regarding access. The notice shall be provided at least 2 weeks prior to any planned road closure.

## 18. TRIBAL CULTURAL RESOURCES

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

### Setting

Approved in 2014, AB 52 added tribal cultural resources to the categories of resources that must be evaluated under CEQA. Tribal cultural resources are defined as either of the following:

1. Sites, features, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
  - a. Included or determined to be eligible for inclusion in the CRHR; or
  - b. Included in a local register of historical resources as defined in PRC Section 5020.1(k).
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 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American Tribe.

Recognizing that tribes have expertise with regard to their tribal history and practices, AB 52 requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if they have requested notice of projects proposed within that area. If the tribe requests consultation within 30 days upon receipt of the notice, the lead agency must consult with the tribe regarding the potential for adverse impacts on tribal cultural resources as a result of a project. Consultation may include discussing the type of environmental review necessary, the presence and/or significance of tribal cultural resources, the level of significance of a project's impacts on the tribal cultural resources, and available project alternatives and mitigation measures recommended by the tribe to avoid or lessen potential impacts on tribal cultural resources.

## Impact Discussion

- a.i-a.ii. Pursuant to AB 52, the City provided notice to local California native tribes with geographic and/or cultural ties to the project region. Referral letters were sent to tribal representatives on March 2, 2023. No tribes requested consultation or provided information regarding significant tribal cultural resources to date.

The project would require approximately 1.76 acres of ground disturbance. The project site is located within the footprint of a previous cultural resources survey area in which no resources were identified. Since there are no known resources located within the project site, implementation of the proposed project would not result in an adverse change in the significance of a known tribal cultural resource. The project includes ground disturbance within a previously disturbed area, which further reduces the potential for intact cultural archaeological resources to be located within the project site. Further, Mitigation Measure CR-1 has been included in Section 5, *Cultural Resources*, in the unlikely event that previously unidentified cultural resources are uncovered during proposed ground-disturbing activities. Based on the low potential to uncover tribal cultural resources within the project site and implementation of Mitigation Measure CR-1, the project would not result in adverse impacts to known or unknown tribal cultural resources; therefore, impacts would be *less than significant with mitigation*.

## Mitigation Measure(s) Incorporated into the Project

Implement Mitigation Measure CR-1.

## 19. UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?		X		
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c. Result in a determination by the waste water 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?			X	
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?			X	
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

## Setting

The City provides water services to residents within the city. According to the *City of Santa Maria 2020 Urban Water Management Plan* (UWMP), the City's water portfolio consists of local groundwater, purchased water from the SWP, associated return flows recaptured from the SMRVGB, assigned rights to water from the SMRVGB, and assigned rights to augmented yield from Twitchell Reservoir. The City's water supply is expected to reliably meet the projected demands through 2045 (City of Santa Maria 2021a).

The City operates its own wastewater collection and treatment system. The City's wastewater collection system consists of eight wastewater basins with associated trunk sewers and one treatment plant. Each improved lot in the city has a privately maintained sewer lateral connection to the city-maintained sewer line located in the public street or alley fronting the properties. The sewage discharged into the lateral is conveyed by the City sewer to a "trunk sewer." The main trunks discharge to a state-of-the-art WWTP operated by the City in conformance with all regulatory standards (City of Santa Maria 2023a).

The City's Solid Waste Collection and Disposal Services consist of six distinct areas: refuse collection/residential; refuse collection/commercial; landfill disposal operations; street sweeping; recycling operations; and regulatory compliance. Solid waste is disposed of at the Santa Maria Regional Landfill located at 2065 E. Main Street. According to the California Department of Resources Recycling and Recovery (CalRecycle), Santa Maria Landfill has a maximum permitted capacity of 13,998,400 cubic yards and a maximum permitted throughput of 6,006 tons per week. As of 2021, the landfill had a remaining capacity of 1,477,580 cubic yards with an estimated closure date of 2028 (CalRecycle 2021).

The City has also permitted the Los Flores Integrated Waste Management Facility (IWMF) for its future solid waste disposal needs. The Los Flores IWMF would be a Class III Landfill and would receive waste from urban and rural areas of northern Santa Barbara County, with the capacity to receive waste from southern Santa Barbara County as necessary. The area where waste will be disposed of is expected to cover 255 acres during its 90 years or greater operational life (City of Santa Maria 2019). The finalization of the plans and specifications for construction of the infrastructure to open the IWMF is expected to be complete in 2024 or 2025 (City of Santa Maria 2021b).

## Impact Discussion

- a. The project includes the extension of an existing water pipeline approximately 1.43 miles to convey an additional water source to the City's WWTP. Proposed utility infrastructure would be installed within the footprint of the proposed project. As evaluated throughout this document, the project has the potential to result in adverse impacts related to Air Quality, Biological Resources, Cultural and Tribal Cultural Resources, Hydrology and Water Quality, and Transportation. Mitigation Measures AQ-1 through AQ-4, BR-1 through BR-6, CR-1, WQ-1, and TR-1 have been included to avoid and/or minimize adverse impacts to less-than-significant levels. Therefore, upon implementation of the identified mitigation measures, adjustment and relocation of utility infrastructure would not result in adverse impacts to the environment; therefore, potential impacts would be *less than significant with mitigation*.
- b. The project includes the extension of an existing waterline to deliver potable water to the City's WWTP. The purpose of the project is to provide the WWTP with a source of potable water from the City's water supply for these uses consistent with RWQCB requirements and to provide added resiliency to the plant's treatment operations. The City utilizes the following available water supply sources: local groundwater, purchased water from the SWP, associated return flows recaptured from the SMRVGB, assigned rights to water from the SMRVGB, and assigned rights to augmented yield from Twitchell Reservoir. The City's water supply is expected to reliably meet the projected city water demands and have an available supply in excess through 2040, with the majority of this demand being met by imported state water (City of Santa Maria 2020). In addition, the project would not result in substantial growth that could otherwise deplete the City's water supply. Therefore, impacts would be *less than significant*.

- c. The project includes the extension of an existing waterline to deliver an additional source of water to the City' WWTP. The project is intended to meet the needs of existing city residents and does not include components that could generate additional wastewater in a manner that could exceed the WWTP's capacity. Therefore, impacts would be *less than significant*.
- d. Construction of the project may result in a temporary increase in solid waste (i.e., excavated soils), which would be disposed of in accordance with applicable state and local laws and regulations, such as California Green Building Standards Code (CALGreen) Sections 4.408 and 5.408, which require diversion of at least 75% of construction waste. Based on required compliance with CALGreen regulations, construction of the project would not generate solid waste in excess of local infrastructure capacity. Solid waste generated by the proposed project would be disposed of at the Santa Maria Landfill, which has adequate capacity to dispose of the marginal amount of solid waste generated by the proposed project. Following construction activities, the project would be limited to the operation of an underground water line and would not generate waste in excess of state or local standards or in excess of the capacity of local infrastructure; therefore, impacts would be *less than significant*.
- e. As previously described, operation of the project would not result in the long-term generation of solid waste. Construction-related waste (i.e., excavated soils) would be disposed of according to federal and state regulations, including CALGreen standards for diversion of construction waste. The project would not generate long-term solid waste and would be compliant with solid waste reduction statutes and regulations. Therefore, impacts would be *less than significant*.

#### Mitigation Measure(s) Incorporated into the Project

Implement Mitigation Measures AQ-1 through AQ-4, BR-1 through BR-6, CR-1, WQ-1, and TR-1.

## 20. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			X	
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			X	
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			X	

#### Setting

According to the California Department of Forestry and Fire Protection (CAL FIRE) Fire Hazard Severity Zone (FHSZ) Viewer, the project site and surrounding areas are located in a local responsibility area (LRA) (CAL

FIRE 2023). According to the City's Safety Element, the most significant wildland fire hazards in the city of Santa Maria are associated with the Casmalia and Solomon Hills to the south of the city, the hillsides to the east of US 101, the hillsides to the north of Clark Avenue, and the Santa Maria Valley Oil Field. The remaining areas of Santa Maria are generally protected from wildfire risk (City of Santa Maria 1995). The project site is not located within an area of the city identified as having high risk of wildfire.

### Impact Discussion

- a. The project site is not located in a high or very high FHSZ or in a state responsibility area (SRA) (CAL FIRE 2023). The project includes the extension of an underground water pipeline within a developed roadway and is expected to require temporary traffic controls along Black Road and West Stowell Road during the approximate 3- to 4-month construction period. The project would be required to comply with City Municipal Code Chapter 7 (Traffic Regulations) to reduce potential impacts associated with short-term traffic controls. The project site is located in a rural agricultural area and is not located in close proximity to residential communities; therefore, partial or full road closure would not impede any primary or secondary evacuation routes. Following project construction, temporary traffic controls would be removed, and the roadway would be returned to preconstruction conditions. Therefore, the project would not result in long-term effects on emergency response and evacuation efforts in the local project site, which would be consistent with the City's Safety Element, and impacts would be *less than significant*.
- b. The project site is characterized by relatively flat topography within an urban area with a low potential for wildfire occurrence. The project does not propose the development of any structures or buildings that could increase the potential for a wildfire to occur in the immediate or surrounding area; therefore, the project would not expose nearby residents to wildfire, and impacts would be *less than significant*.
- c. The project includes the extension of an underground water pipeline within a developed roadway in an area with low risk for wildfire. Construction of the proposed waterline would be conducted in accordance with City Public Works Department and California Fire Code requirements, which would reduce the potential to increase wildfire risk within the project site. Following construction activities, the proposed waterline would be located underground, which would reduce the potential for wildfire ignition within the project site. In addition, the site would be maintained by the City to reduce the risk of wildfire ignition; therefore, impacts would be *less than significant*.
- d. The project site is not located in an area designated as a high or very high fire hazard area. Based on the low risk of wildfire within the project site, hazards associated with wildfire, including post-fire instability or drainage changes, have a low potential to occur. Further, the project does not include the development of structures that could be damaged or create a hazard for nearby residents; therefore, impacts would be *less than significant*.

### Mitigation Measure(s) Incorporated into the Project

Mitigation is not necessary.

## CONSULTATION AND DATA SOURCES

### CONSULTATION SOURCES

#### ***City Departments Consulted***

<input type="checkbox"/>	Administrative Services
<input type="checkbox"/>	Attorney
<input type="checkbox"/>	Fire
<input type="checkbox"/>	Library
<input type="checkbox"/>	City Manager
<input type="checkbox"/>	Police
<input checked="" type="checkbox"/>	Public Works
<input checked="" type="checkbox"/>	Utilities
<input type="checkbox"/>	Recreation and Parks

#### ***County Agencies/Departments Consulted***

<input type="checkbox"/>	Air Pollution Control District
<input type="checkbox"/>	Association of Governments
<input type="checkbox"/>	Flood Control District
<input type="checkbox"/>	Environmental Health
<input type="checkbox"/>	Fire (Hazardous Materials)
<input type="checkbox"/>	LAFCO
<input type="checkbox"/>	Public Works
<input type="checkbox"/>	Planning and Development
<input type="checkbox"/>	Other (list)

#### ***Special Districts Consulted***

<input type="checkbox"/>	Santa Maria Public Airport
<input type="checkbox"/>	Airport Land Use Commission
<input type="checkbox"/>	Cemetery
<input type="checkbox"/>	Santa-Maria Bonita School District
<input type="checkbox"/>	Santa Maria Joint Union High School
<input type="checkbox"/>	Laguna County Sanitation District
<input type="checkbox"/>	Cal Cities Water Company

#### ***State/Federal Agencies Consulted***

<input type="checkbox"/>	Army Corps of Engineers
<input type="checkbox"/>	Caltrans
<input type="checkbox"/>	CA Fish and Wildlife
<input type="checkbox"/>	Federal Fish and Wildlife
<input type="checkbox"/>	FAA
<input type="checkbox"/>	Regional Water Quality Control Bd.
<input type="checkbox"/>	Integrated Waste Management Bd.

### DATA SOURCES

#### ***General Plan***

<input checked="" type="checkbox"/>	Land Use Element
<input checked="" type="checkbox"/>	Circulation Element
<input checked="" type="checkbox"/>	Safety Element
<input checked="" type="checkbox"/>	Noise Element
<input type="checkbox"/>	Housing Element
<input checked="" type="checkbox"/>	Resources Management Element

#### ***Other***

<input type="checkbox"/>	Agricultural Preserve Maps
<input checked="" type="checkbox"/>	Archaeological Maps/Reports
<input type="checkbox"/>	Architectural Elevations
<input type="checkbox"/>	Biology Reports
<input type="checkbox"/>	CA Oil and Gas Maps
<input checked="" type="checkbox"/>	FEMA Maps (Flood)
<input type="checkbox"/>	Grading Plans
<input checked="" type="checkbox"/>	Site Plan
<input type="checkbox"/>	Topographic Maps
<input checked="" type="checkbox"/>	Aerial Photos
<input type="checkbox"/>	Traffic Studies
<input type="checkbox"/>	Trip Generation Manual (ITE)
<input type="checkbox"/>	URBEMIS Air Quality Model
<input checked="" type="checkbox"/>	Zoning Maps



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## MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. 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?		X		
2. 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.)		X		
3. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

### Impact Discussion

- As discussed in the preceding sections, the project has the potential to significantly degrade the quality of the environment, including effects on biological and cultural resources. Mitigation Measures BR-1 through BR-6 and CR-1 have been identified to reduce potential impacts a less-than-significant level.
- When project impacts are considered along or in combination with other impacts, the project-related impacts may be significant. Construction and operation of the project would contribute to cumulative impacts related to air quality, biological resources, cultural and tribal cultural resources, and transportation. Mitigation measures have been incorporated into the project to reduce project-related impacts to a less-than-significant level. Based on implementation of Mitigation Measures AQ-1 through AQ-4, BR-1 through BR-6, CR-1, WQ-1, and TR-1, the cumulative effects of the proposed project would be less than significant.
- Based on required compliance with existing regulations, the project would not result in significant impacts related to hazardous substances or materials during construction of the project. Therefore, the project would not result in substantial, adverse environmental effects to human beings, either directly or indirectly.

### Mitigation Measure(s) incorporated into the project:

Implement Mitigation Measures AQ-1 through AQ-4, BR-1 through BR-6, CR-1, WQ-1, and TR-1.

## SUMMARY OF POTENTIALLY SIGNIFICANT IMPACTS

	Aesthetics/Visual Resources	X	Land Use Planning
	Agriculture and Forest Resources		Mineral Resources
X	Air Quality		Noise
X	Biological Resources		Population and Housing
X	Cultural Resources		Public Services
	Energy		Recreation
	Geology and Soils	X	Transportation/Traffic
	Greenhouse Gas Emissions	X	Tribal Cultural Resources
	Hazards and Hazardous Materials	X	Utilities and Service Systems
X	Hydrology and Water Quality		Wildfire


## DETERMINATION

On the basis of the Initial Study, the staff of the Community Development Department:

- \_\_\_\_\_ Finds that the proposed project is a Class \_\_\_\_ **CATEGORICAL EXEMPTION** and no further environmental review is required.
- \_\_\_\_\_ Finds that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- X  
\_\_\_\_\_ Finds that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- \_\_\_\_\_ Finds that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- \_\_\_\_\_ Finds that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to acceptable standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on the attached sheets. An **ENVIRONMENTAL IMPACT REPORT (EIR)/SUBSEQUENT EIR/SUPPLEMENTAL EIR/ADDENDUM** is required, but it must analyze only the effects that remain to be addressed.
- \_\_\_\_\_ Finds that although the proposed project could have a significant effect on the environment, because all significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to acceptable 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.

  
Cody Graybehl  
Environmental Analyst

5/8/2023  
\_\_\_\_\_  
Date

  
Chuen Ng  
Environmental Officer

5/8/2023  
\_\_\_\_\_  
Date



City of Santa Maria  
Community Development Department  
110 South Pine Street, Suite #101  
Santa Maria, CA 93458  
805-925-0951

019

**APPENDIX A**

**PROJECT SITE PLANS**



SHEET INDEX

SHEET DESCRIPTION	SHEET NOS.
TITLE SHEET	1
GENERAL NOTES	2
SURVEY CONTROL DIAGRAM	3
TYPICAL SECTION	4
HYDRANT DETAILS	5
PLAN AND PROFILE	6-15
GEOMETRIC LAYOUT	16
STOWELL/BLACK CROSS SECTIONS	17-20
STANDARD DETAILS	21-25

CITY OF SANTA MARIA  
DEPARTMENT OF PUBLIC WORKS

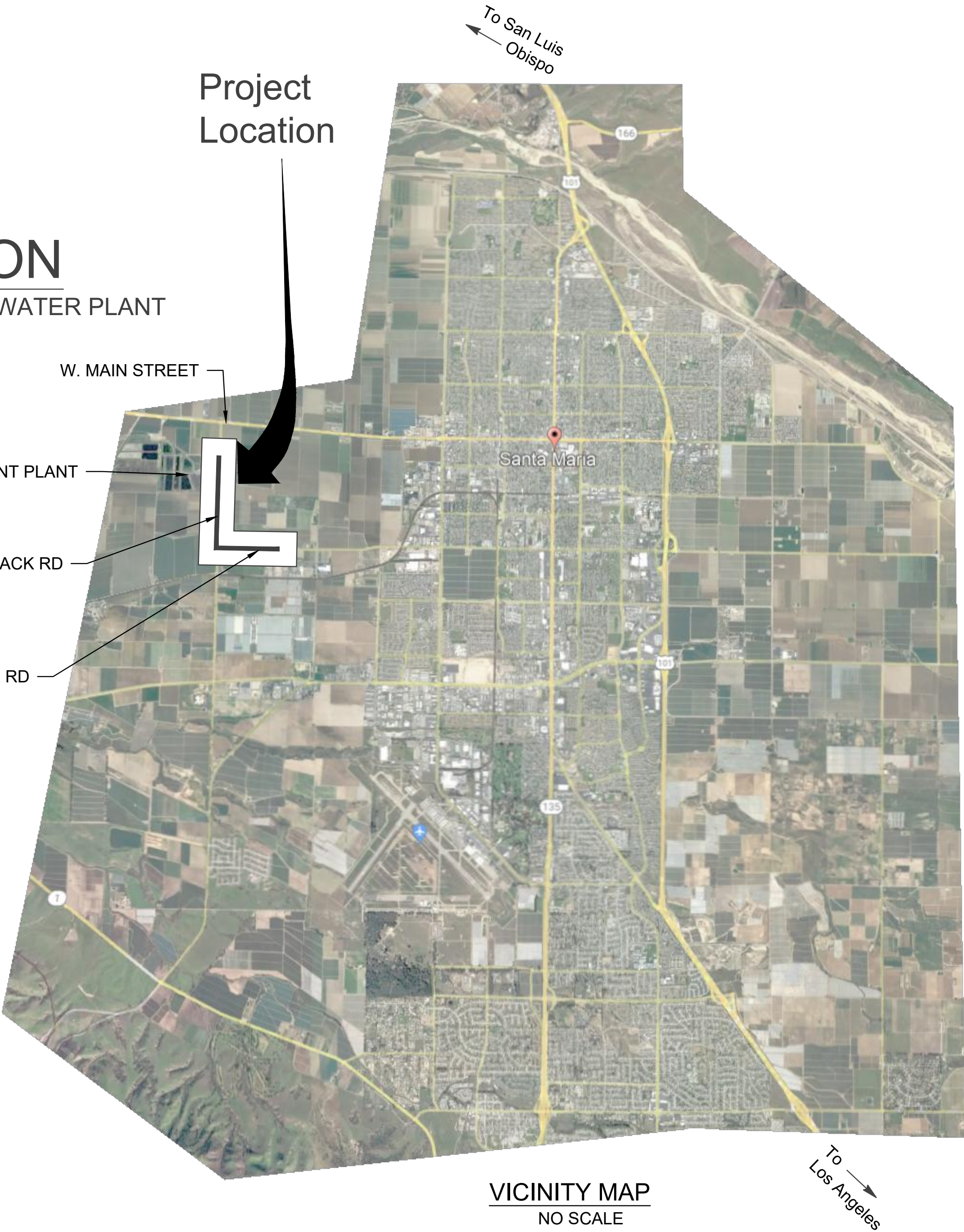
PROJECT PLANS FOR CONSTRUCTION OF THE

12" MAIN WATERLINE EXTENSION  
WESTWARD ON STOWELL RD & NORTHWARD ON BLACK RD TO CITY WASTEWATER PLANT

CITY OF SANTA MARIA BID NO. 2022-10

To be supplemented by Caltrans Standard Plans and Specifications, dated 2018, as revised  
and the most current City of Santa Maria Standard Drawings and Specifications.

Project  
Location

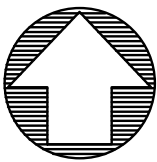


*S. Onishuk*  
PROJECT ENGINEER

DATE 2/3/2023

DIRECTOR OF PUBLIC WORKS/CITY ENGINEER

DATE



LOCATION MAP  
SCALE: 1" = 500'



DESIGN CONSULTANT:  
BENGAL ENGINEERING  
360 S HOPE AVE STE C-110  
SANTA BARBARA, CA 93105  
(805) 563-0788



D					
C					
B					
A					
LETTER	DATE	BY	APPROVED	REVISION	

CITY OF SANTA MARIA DEPARTMENT OF PUBLIC WORKS	
T-1	TITLE
12" MAIN WATERLINE EXTENSION	

DRAWN BY	Daniel Hunt
CHECKED BY	SO
DATE	2/3/23
SHEET	1 OF 25 SHEETS
REFERENCES	
FILE NUMBER	I-2138.01



GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND PLANS OF THE CITY OF SANTA MARIA, AND THE STANDARD SPECIFICATIONS AND PLANS OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS), LATEST EDITION, WHERE NOT COVERED BY THE FORMER, AND SHALL BE COMPLETED TO THE SATISFACTION OF THE CITY ENGINEER.
2. THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT AT LEAST ONE WORKING DAY PRIOR TO BEGINNING OF CONSTRUCTION AT 1-805-925-0951.
3. THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (U.S.A.) AT LEAST TWO WORKING DAYS PRIOR TO BEGINNING OF CONSTRUCTION AT 811. (GOVERNMENT CODE SECTION 4216/4217). THE CONTRACTOR SHALL TEMPORARILY RELOCATE CONFLICTING EXISTING UTILITIES AT TIE-IN/CONNECTION LOCATIONS AND REINSTALL THEM AS REQUIRED TO ELIMINATE THE CONFLICT AT NO ADDITIONAL COST TO THE OWNER.
4. THREE WEEKS PRIOR TO COMMENCEMENT OF WORK, TRAFFIC CONTROL PLANS SHALL BE SUBMITTED TO THE CITY DEPARTMENT OF PUBLIC WORKS FOR REVIEW AND APPROVAL.
5. EXISTING FACILITY AND UTILITY INFORMATION SHOWN ON THE DRAWINGS WAS OBTAINED FROM AVAILABLE RECORDS OR ELECTRONIC FILES. NEITHER THE OWNER NOR ENGINEER ASSUMES ANY RESPONSIBILITY FOR FACILITIES AND UTILITIES NOT SHOWN OR NOT IN THE LOCATION SHOWN. THE CONTRACTOR SHALL FIELD VERIFY ALL LOCATIONS, SIZES, MATERIAL TYPES, AND ELEVATIONS SHOWN AROUND OR NEAR AREAS OF NEW CONSTRUCTION PRIOR TO START OF CONSTRUCTION.
6. THE CONTRACTOR SHALL PRACTICE SAFETY AT ALL TIMES AND SHALL FURNISH, ERECT AND MAINTAIN SUCH FENCES, BARRICADES, LIGHTS AND SIGNS NECESSARY TO GIVE ADEQUATE PROTECTION TO THE PUBLIC AT ALL TIMES. THE USE OF TEMPORARY TRAFFIC CONTROL SHALL BE APPROVED PRIOR TO INSTALLATION AND SHALL CONFORM TO SECTION 12, "TEMPORARY TRAFFIC CONTROL." OF THE CALTRANS STANDARD SPECIFICATIONS.
7. ALL EXCAVATIONS OR TRENCHES IN EXISTING PAVEMENT SHALL REQUIRE SAWCUTTING OF PAVEMENT IN A NEAT AND UNIFORM MANNER AND SHALL CONFORM TO SECTION 19, "EARTHWORK" OF THE CAL TRANS STANDARD SPECIFICATIONS AND ALL APPLICABLE CITY STANDARDS.
8. ALL PIPELINES 12" AND LARGER SHALL HAVE A MINIMUM COVER OF 36" UNLESS THE COVER DEPTH IS SPECIFICALLY INDICATED ON THE DRAWINGS. PIPE SMALLER THAN 12" SHALL HAVE A MINIMUM COVER OF 30" UNLESS NOTED OTHERWISE. PIPES SHALL BE ROUTED AS SHOWN UNLESS MINOR REVISIONS ARE NECESSARY TO MISS EXISTING PIPES, STRUCTURES, ETC. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL FITTINGS, ADAPTERS, APPURTENANCES, THRUST BLOCKS, ETC. REQUIRED TO MAKE THE ROUTING CHANGES AT NO ADDITIONAL COST TO THE OWNER (CONTRACTOR SHALL INCLUDE COST FOR THIS IN THE BID).
9. CONTRACTOR TO LOCATE, PROTECT, AND REPAIR, AT HIS EXPENSE, ANY UTILITIES DAMAGED BY HIS FORCES.
10. CONTRACTOR SHALL COMPLY WITH LOCAL CONSTRUCTION STORM WATER DISCHARGE REGULATIONS AND REQUIREMENTS.
11. THE CONTRACTOR SHALL TAKE SPECIAL PRECAUTIONS IN THE VICINITY OF ANY OVERHEAD ELECTRIC LINES. CONTRACTOR SHALL ABIDE BY THE NATIONAL ELECTRIC CODE AND ANY REQUIREMENT BY THE OWNER OF THE ELECTRIC LINES. OVERHEAD UTILITIES ARE NOT INDICATED IN ARCHITECTURAL ELEVATIONS, PROFILE OR SECTION DRAWINGS.
12. ALL STREETS, ALLEYS, VEHICULAR WAYS, SIDEWALKS, AND HAUL ROUTES SHALL BE KEPT CLEAN AND CLEAR OF DEBRIS, DIRT AND DUST IN A MANNER ACCEPTABLE TO THE CITY. AT A MINIMUM THESE AREAS SHALL BE CLEANED AT THE END OF EACH WORKDAY. FAILURE TO DO SO WILL RESULT IN A "STOP WORK" NOTICE. SAID NOTICE WILL NOT BE RELEASED UNTIL THE AREA HAS BEEN ADEQUATELY CLEANED.
13. THE CONTRACTOR SHALL HAVE COPIES OF THE APPROVED PLANS AND SPECIFICATIONS FOR THIS PROJECT ON THE SITE AT ALL TIMES, AND CONTRACTOR SHALL BE FAMILIAR WITH ALL APPLICABLE STANDARDS AND SPECIFICATIONS.
14. ALL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED AND CONFORM TO THE LATEST EDITIONS OF THE MUTCD AND CALIFORNIA SUPPLEMENT.
15. PAVEMENT DELINEATION MATERIAL, MANUFACTURING, PACKAGING, LABELING, AND APPLICATION SHALL CONFORM TO STATE OF CALIFORNIA STANDARD SPECIFICATIONS, LATEST ADDITION. ALL TRAFFIC STRIPES AND PAVEMENT MARKINGS SHALL BE PAINTED UNLESS OTHERWISE SPECIFIED. ALL STRIPING WIDTHS AND LAYOUT SHALL BE PER 2021 CA MUTCD.
16. CONTRACTOR IS RESPONSIBLE FOR PRESERVATION AND/OR PERPETUATION OF ALL EXISTING MONUMENTS WHICH CONTROL SUBDIVISIONS, TRACT BOUNDARIES, STREETS EASEMENTS, HIGHWAYS, OR OTHER RIGHTS-OF-WAY OR PROVIDE SURVEY CONTROL WHICH WILL BE DISTURBED OR REMOVED DUE TO CONTRACTOR'S WORK. CONTRACTOR SHALL PROVIDE A MINIMUM OF 10 WORKING DAYS NOTICE TO PROJECT ENGINEER/SURVEYOR PRIOR TO DISTURBANCE OR REMOVAL OF EXISTING MONUMENTS. PROJECT ENGINEER/SURVEYOR SHALL COORDINATE WITH CONTRACTOR TO RESET MONUMENTS OR PROVIDE PERMANENT WITNESS MONUMENTS AND FILE THE REQUIRED DOCUMENTATION WITH THE COUNTY SURVEYOR PURSUANT BUSINESS AND PROFESSIONS CODE SECTION 8771.
17. CONTRACTOR SHALL BE SOLELY RESPONSIBLE TO RESTORE (NEW AND/OR IN KIND) ALL EXISTING SURFACE IMPROVEMENTS DISTURBED DURING THE PROJECT WORK REGARDLESS OF WHETHER OR NOT THE EXISTING IMPROVEMENT OR CONDITION IS SHOWN, OR OTHERWISE DEPICTED, ON THESE DRAWINGS. IT SHALL BE AGREED THAT ALL EXISTING SITE SURFACE IMPROVEMENTS, CITY FACILITIES, UTILITY FACILITIES, SITE CONDITIONS OF ANY TYPE, PUBLIC OR PRIVATE, ARE CONSIDERED KNOWN AT THE TIME OF BID AND SUBJECT TO THIS SITE RESTORATION NOTE.
18. ALL VALVES AND MANHOLE COVERS TO BE ADJUSTED TO GRADE PER CITY STANDARDS.
19. ALL PLANS MUST BE SIGNED BY THE CITY ENGINEER WITHIN THE PAST YEAR AND ALL WORK MUST BE PERFORMED TO THE SATISFACTION OF THE CITY ENGINEER.

GENERAL PIPELINE NOTES

1. WHERE CROSSING A SEWER PIPELINE, THE WATER PIPELINE SHALL BE A FULL, CONTINUOUS PIECE CENTERED AT THE SEWER CROSSING.
2. IN ALL LOCATIONS WHERE TRENCH PLATE IS USED FOR VEHICULAR OR PEDESTRIAN TRAFFIC, THE CONTRACTOR SHALL APPLY SKID RESISTANT COATING ON THE TRENCH PLATES AND COLD MIX ASPHALT CONCRETE TAPER AT THE EDGES. THE TRENCH PLATES SHALL BE NOTCHED INTO THE ASPHALT, CONCRETE, OR TRAVELED SURFACE TO PREVENT SLIPPAGE AND ROCKING UNDER TRAFFIC.
3. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES ADJACENT TO THE WORK, THROUGHOUT THE CONSTRUCTION PERIOD.
4. ALL OPEN TRENCHES, WORK AREAS AND SHAFTS SHALL HAVE A SHORING SYSTEM IN ACCORDANCE WITH OSHA, STATE AND LOCAL REQUIREMENTS AND SPECIFICATIONS.
5. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, COUNTY, AND LOCAL LAWS AND ORDINANCES RELATING TO THE SAFETY AND CHARACTER OF WORK, EQUIPMENT AND PERSONNEL. THIS INCLUDES BUT IS NOT LIMITED TO SHEETING, SHORING, BRACING, VENTILATION, CONFORMANCE WITH TRAFFIC CONTROL AND MAINTENANCE OF BARRICADES AND WARNING DEVICES.
6. CONTRACTOR SHALL TAKE ALL PRACTICAL PRECAUTIONS TO MINIMIZE DISTURBANCES TO EXISTING VEGETATION AND TREES.
7. ALL PIPE SHALL BE AWWA C900 PVC AND ALL BENDS, TEE, FITTINGS, ETC. SHALL BE DUCTILE IRON AND RESTRAINED WITH MECHANICAL WEDGE ACTION JOINTS, UNLESS OTHERWISE SPECIFIED, AND CATHODICALLY PROTECTED PER THE SPECIFICATIONS.
8. THRUST BLOCKS NOT SHOWN, INSTALL ACCORDING TO CITY OF SANTA MARIA STANDARDS.

PUBLIC ACCESS/ ROW/ NIGHT WORK NOTES

1. THE CONTRACTOR SHALL MAKE ALL REASONABLE EFFORTS TO MAINTAIN ACCESS TO DRIVEWAYS AND BUSINESSES DURING THE WORK, AND ESPECIALLY DURING OVERNIGHT HOURS. CONTRACTOR SHALL MAINTAIN A READY SUPPLY OF STEEL TRAFFIC PLATES AND SHALL ACCOMMODATE PUBLIC ACCESS TO THE EXTENT FEASIBLE.
2. THE CONTRACTOR SHALL NOT BE CONTRACTUALLY ENTITLED TO STORE EQUIPMENT AND MATERIALS IN THE CITY RIGHT-OF-WAY OVERNIGHT, OR ON PRIVATE PROPERTY WITHOUT WRITTEN AGREEMENT FROM PROPERTY OWNERS. IT IS THE CITY'S INTENTION TO WORK WITH THE CONTRACTOR ON A CASE-BY CASE BASIS (I.E. LOCATION SPECIFIC) TO DETERMINE IF IT IS FEASIBLE TO STORE CONSTRUCTION EQUIPMENT AND MATERIALS IN THE CITY RIGHT-OF-WAY OR ADJACENT CITY PROPERTIES. THESE DETERMINATIONS WILL BE MADE ENTIRELY AT THE CITY DISCRETION. THE CONTRACTOR'S DEMONSTRATED ABILITY AND WILLINGNESS PROPERLY AND SAFELY SECURE EQUIPMENT IN THE RIGHT-OF-WAY, OVERNIGHT WILL BE A FACTOR IN THE CITY'S ONGOING CASE-BY-CASE DETERMINATIONS. MATERIALS MAY NOT BE STORED IN THE CITY RIGHT-OF-WAY OVERNIGHT.

EXCAVATION AND BACKFILLING NOTES

1. EXPOSE AND PREPARE SUBGRADE AS SHOWN ON THE DRAWINGS AND SPECIFIED. OBTAIN ENGINEER'S OBSERVATION OF SUBGRADE SURFACES, AS EXPOSED AND AS PREPARED, BEFORE PROCEEDING.
2. ALL EXCAVATED SOILS AND CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE ROADWAY (CITY RIGHT-OF-WAY) AT THE END OF EACH DAY / WORK SHIFT, AND LEGALLY DISPOSED OF IN A MANNER ACCEPTABLE TO THE CITY.

DESIGN CONSULTANT:  
BENGAL ENGINEERING  
360 S HOPE AVE STE C-110  
SANTA BARBARA, CA 93105  
(805) 563-0788

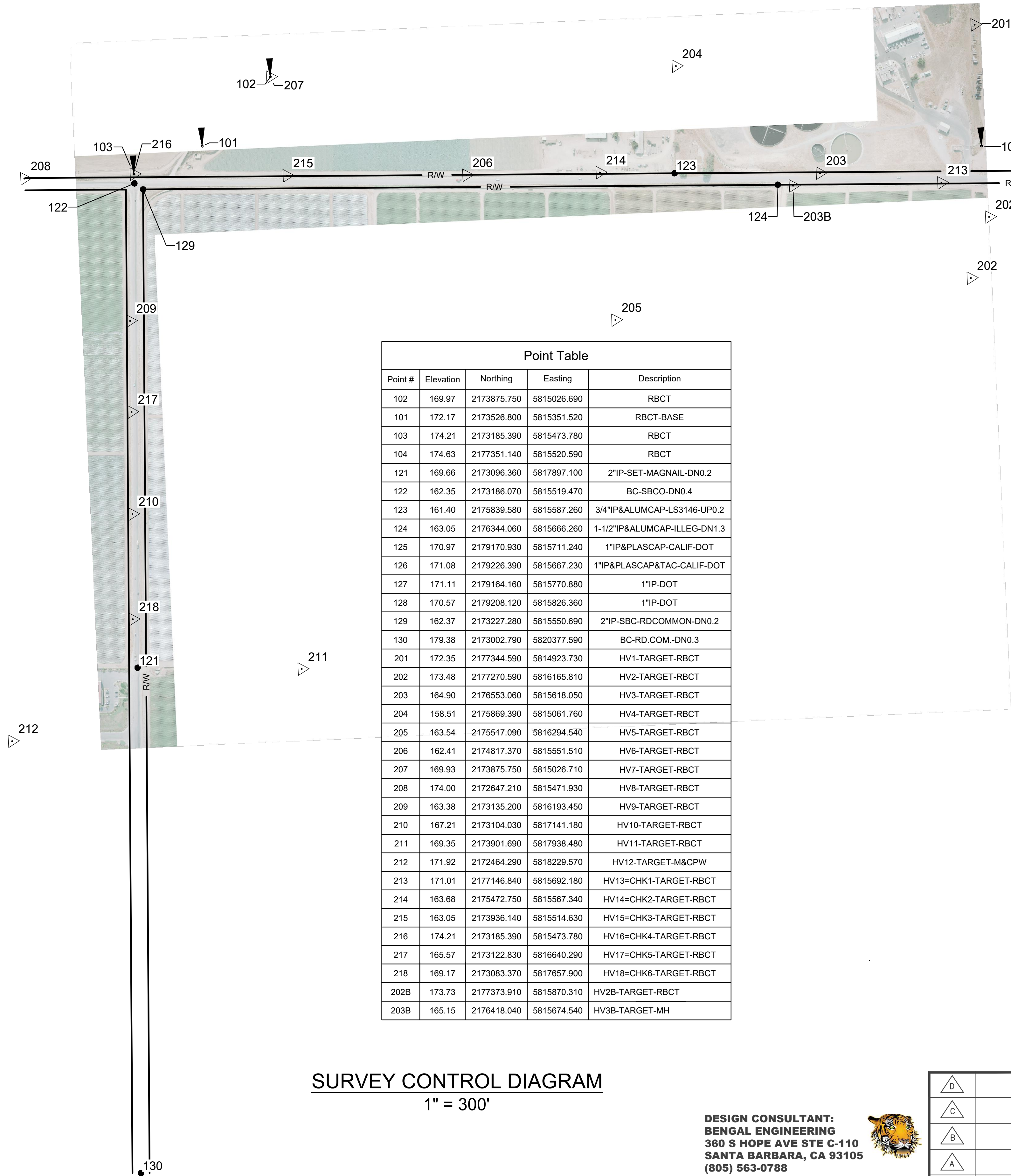


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LETTER	DATE	BY	APPROVED	REVISION

<div>CITY OF SANTA MARIA</div> <div>DEPARTMENT OF PUBLIC WORKS</div>	
GN-1	GENERAL NOTES
12" MAIN WATERLINE EXTENSION	

DRAWN BY	Daniel Hunt
CHECKED BY	SO
DATE	2/3/23
SHEET	2 OF 25 SHEETS
REFERENCES	
FILE NUMBER	I-2138.02 <div></div>





SURVEY CONTROL DIAGRAM  
1" = 300'

DESIGN CONSULTANT:  
BENGAL ENGINEERING  
360 S HOPE AVE STE C-110  
SANTA BARBARA, CA 93105  
(805) 563-0788



SURVEY NOTES

SURVEYING FOR THIS PROJECT WAS PROVIDED TO BENGAL ENGINEERING BY THE CITY. THE SURVEYING WAS PERFORMED BY REESE WATER AND LAND SURVEYING SERVICES, ROBERT REESE, PLS. CONTACT INFO FOR REESE IS (805) 543 - 5375.

GENERAL

BOUNDARY, RIGHT OF WAY, EASEMENT AND OTHER TITLE LINES, IF ANY, ARE RECORD (R) DATA, APPLIED TO FOUND AND MEASURED RECORD MONUMENTS. THESE DATA ARE PROVIDED FOR PRELIMINARY ENGINEERING DESIGN AND STUDY, AND TO DETERMINE AREAS FOR FURTHER LAND SURVEY WORK. THEY MUST NOT BE CONSTRUED OR USED AS FINAL LOCATION OF LINES OF TITLE, OCCUPATION AND/OR OWNERSHIP. ALTERNATE LOCATIONS MAY BE DETERMINED FROM ADDITIONAL LAND SURVEY WORK.

HORIZONTAL DATUM

THE HORIZONTAL DATUM FOR THIS MAP IS NAD83-2011 (EPOCH 2010.00). PRIMARY CONTROL POSITION FOR PT.101 WAS DERIVED FROM AN OPUS SUBMITTAL OF A MULTI-HOUR STATIC GNSS DATA. PRIMARY CONTROL POSITIONS FOR PTS.102-104 WERE DERIVED FROM A MINIMALLY CONSTRAINED ADJUSTMENT OF DIFFERENTIAL STATIC GNSS DATA AND HOLDING PT.101 POSITION FIXED. SECONDARY CONTROL POSITIONS FOR PTS.201-218 WERE DERIVED FROM AN RTK GNSS RADIAL SURVEY HOLDING THE POSITION OF PTS.101 OR 104 FIXED.

MAP PROJECTION & GRID COORDINATES

UNITS ARE US SURVEY FEET. GRID COORDINATES ARE CCS ZONE 5. THE MAPPING ANGLE AT PT.101 IS -1D 25' 10". THE GRID SCALE FACTOR IS 0.99992751, THE ELEVATION SCALE FACTOR IS 0.99999735, THE COMBINED SCALE FACTOR IS 0.99992486. TO OBTAIN GROUND DISTANCES, MULTIPLY ANY DISTANCES SHOWN BY 1.00007515.

VERTICAL DATUM & ELEVATIONS

THE VERTICAL DATUM FOR THIS MAP IS NAVD88. THE ELLIPSOID HEIGHT FOR PT.101 WAS DERIVED FROM AN OPUS PROCESS OF A MULTI-HOUR STATIC GNSS DATA. THE ORTHOMETRIC HEIGHTS FOR PTS.101-104 WERE OBTAINED BY APPLYING A HIGH PRECISION GEOID MODEL (GEOID18) TO THE ELLIPSOID HEIGHTS FROM THE MINIMALLY CONSTRAINED ADJUSTMENT HOLDING PT.101 ELEVATION FIXED. THE ORTHOMETRIC HEIGHTS FOR PTS.201-218 WERE DERIVED FROM AN RTK GNSS RADIAL SURVEY HOLING THE ELEVATION OF PTS.10&104 FIXED.

- EXISTING MONUMENTS
- △ SECONDARY CONTROL
- ▶ PRIMARY CONTROL

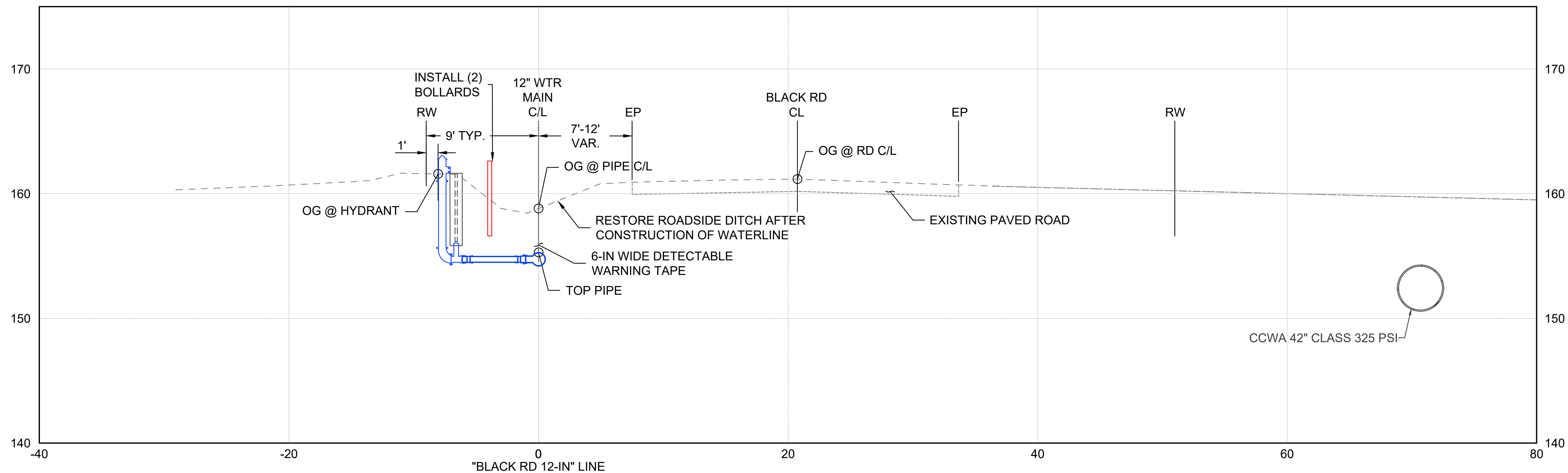
PROJECT CONTROL AND BENCHMARKS

POINT 101  
LAT N 34D 56'22.10356"  
LONG W 120D 29'25.66619  
ELLIPSH 55.42FT  
GRIDN(Y) 2173526.80FT  
GRIDE(X) 5815351.52FT  
ORTHOH 172.17FT  
DESCRIPTION:  
#5 REBAR AND PLASTIC CAP (WITH TAC) STAMPED "RWLSS CONTROL" ON A BLUFF OVERLOOKING A PUMP STATION, APPROXIMATELY 40 FEET WNW OF THE NORTHERLY CORNER OF THE PUMP STATION WHICH IS APPROXIMATELY 360 FEET NNW OF THE CENTERLINE INTERSECTION OF WEST STOWELL ROAD AND BLACK ROAD.

POINT 104  
LAT N 34D 56'59.96196"  
LONG W 120D 29'24.77406  
ELLIPSH 57.98FT  
GRIDN(Y) 2177351.14FT  
GRIDE(X) 5815520.58FT  
ORTHOH 174.61FT  
DESCRIPTION:  
MAGNAIL & ALUMINUM WASHER STAMPED "RWLSS CONTROL" SET ON THE NORTH SIDE OF A RAISED CONCRETE COLLAR OF A SEWER MANHOLE, IN AN AREA ENCLOSED BY BOLLARDS, APPROXIMATELY 55 FEET NORTH OF THE NORTH GATE POST TO THE ENTRY OF THE SANTA MARIA WASTEWATER TREATMENT FACILITY, 401 SOUTH BLACK ROAD. AREA IS PRIVATE AGRICULTURAL.

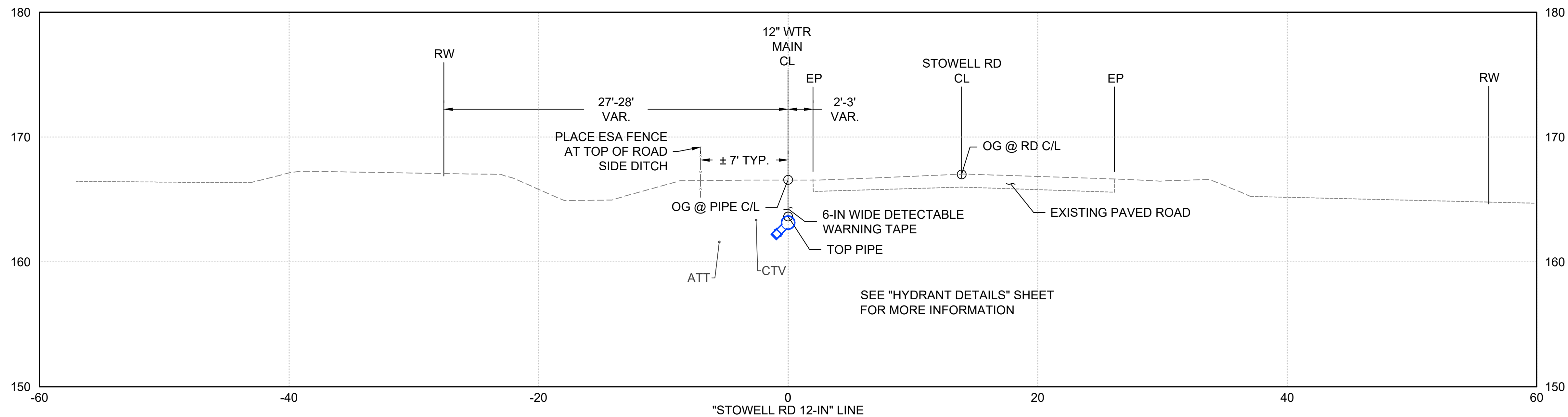
<div>D</div>					<div>CITY OF SANTA MARIA</div> <div>DEPARTMENT OF PUBLIC WORKS</div> <div>SC-1</div> <div>SURVEY CONTROL</div> <div>12" MAIN WATERLINE EXTENSION</div>	<div>DRAWN BY</div> <div>Daniel Hunt</div>
<div>C</div>						<div>CHECKED BY</div> <div>SO</div>
<div>B</div>						<div>DATE</div> <div>2/3/23</div>
<div>A</div>						<div>SHEET</div> <div>3</div> <div>OF</div> <div>25</div> <div>SHEETS</div>
<div>A</div>						<div>REFERENCES</div>
<div>LETTER</div>	<div>DATE</div>	<div>BY</div>	<div>APPROVED</div>	<div>REVISION</div>		<div>FILE NUMBER</div> <div>I-2138.03</div> <div><div></div></div>





TYPICAL SECTION OF PIPE LAYOUT ON BLACK RD

H: 1"=5'  
V: 1"=5'



TYPICAL SECTION OF PIPE LAYOUT ON STOWELL RD

H: 1"=5'  
V: 1"=5'



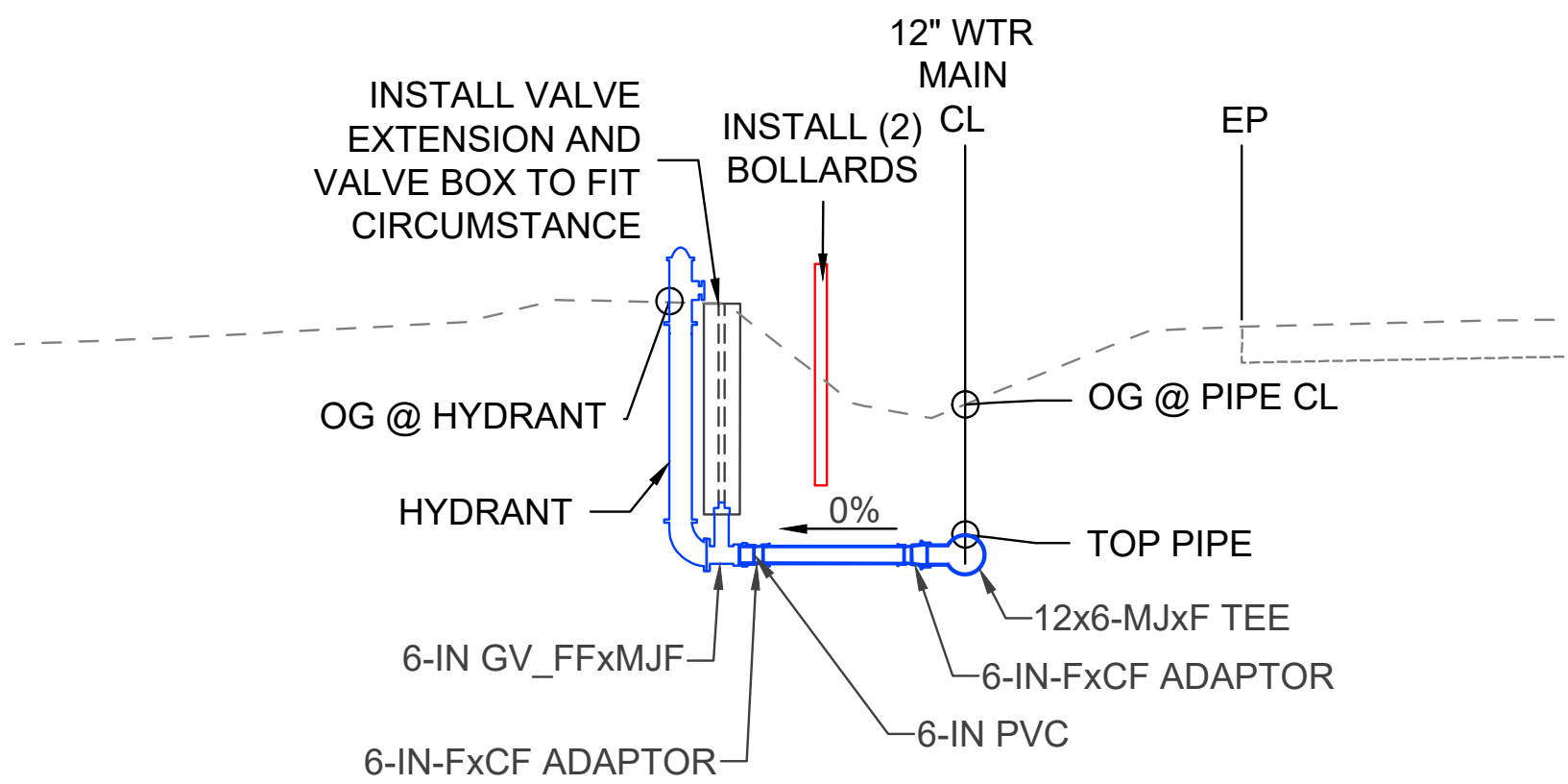
DESIGN CONSULTANT:  
BENGAL ENGINEERING  
360 S HOPE AVE STE C-110  
SANTA BARBARA, CA 93105  
(805) 563-0788



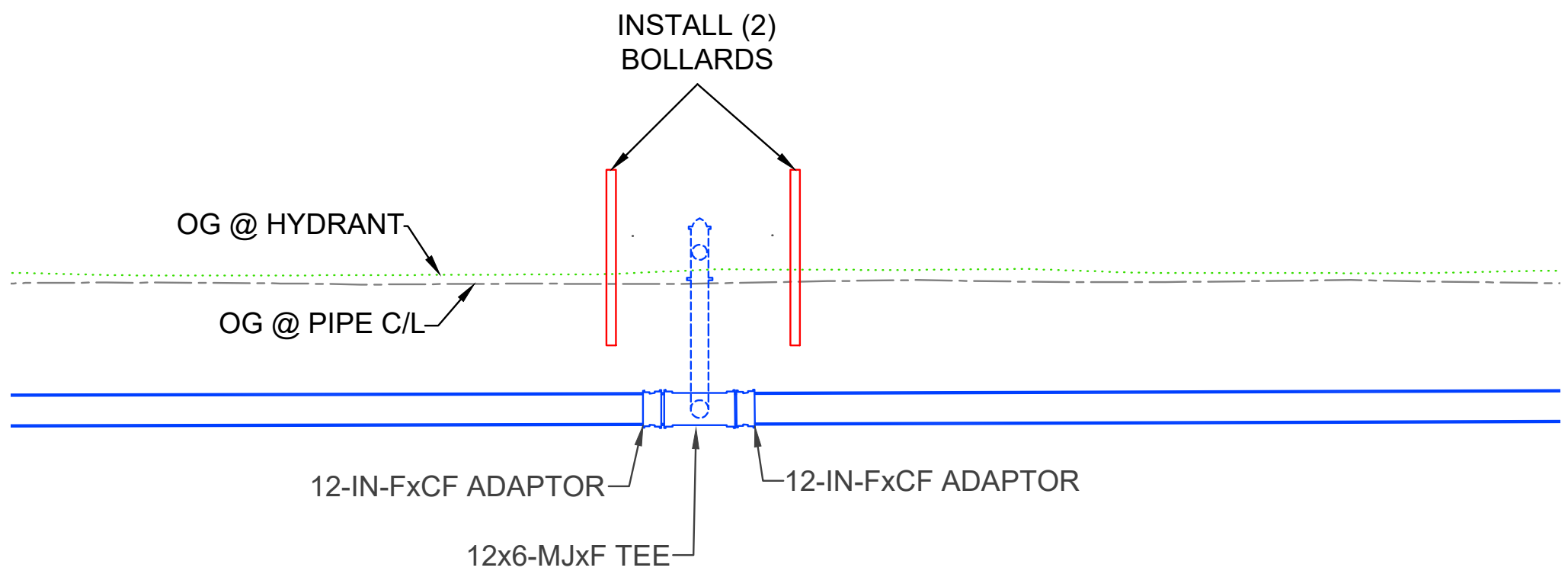
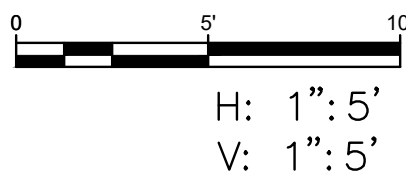
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LETTER	DATE	BY	APPROVED	REVISION

CITY OF SANTA MARIA DEPARTMENT OF PUBLIC WORKS	
TYP XS	TYPICAL CROSS SECTIONS
12" MAIN WATERLINE EXTENSION	

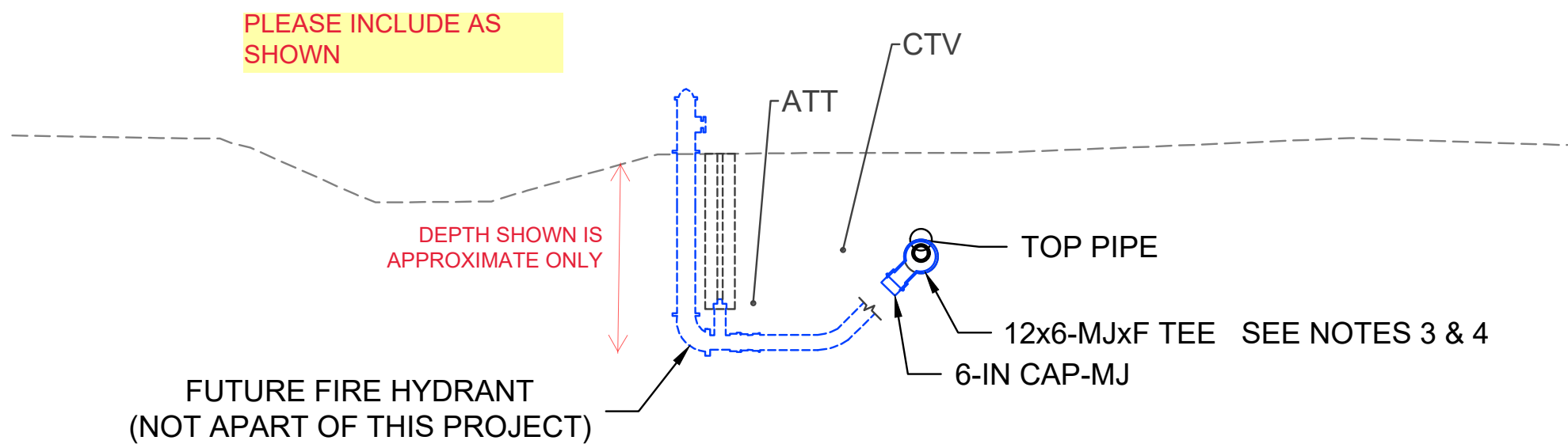
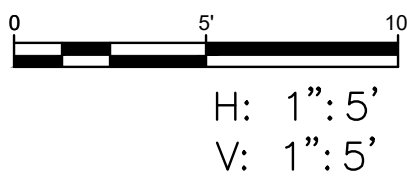
DRAWN BY	Daniel Hunt
CHECKED BY	SO
DATE	2/3/23
SHEET	4
OF	25
REFERENCES	
FILE NUMBER	I-2138.04



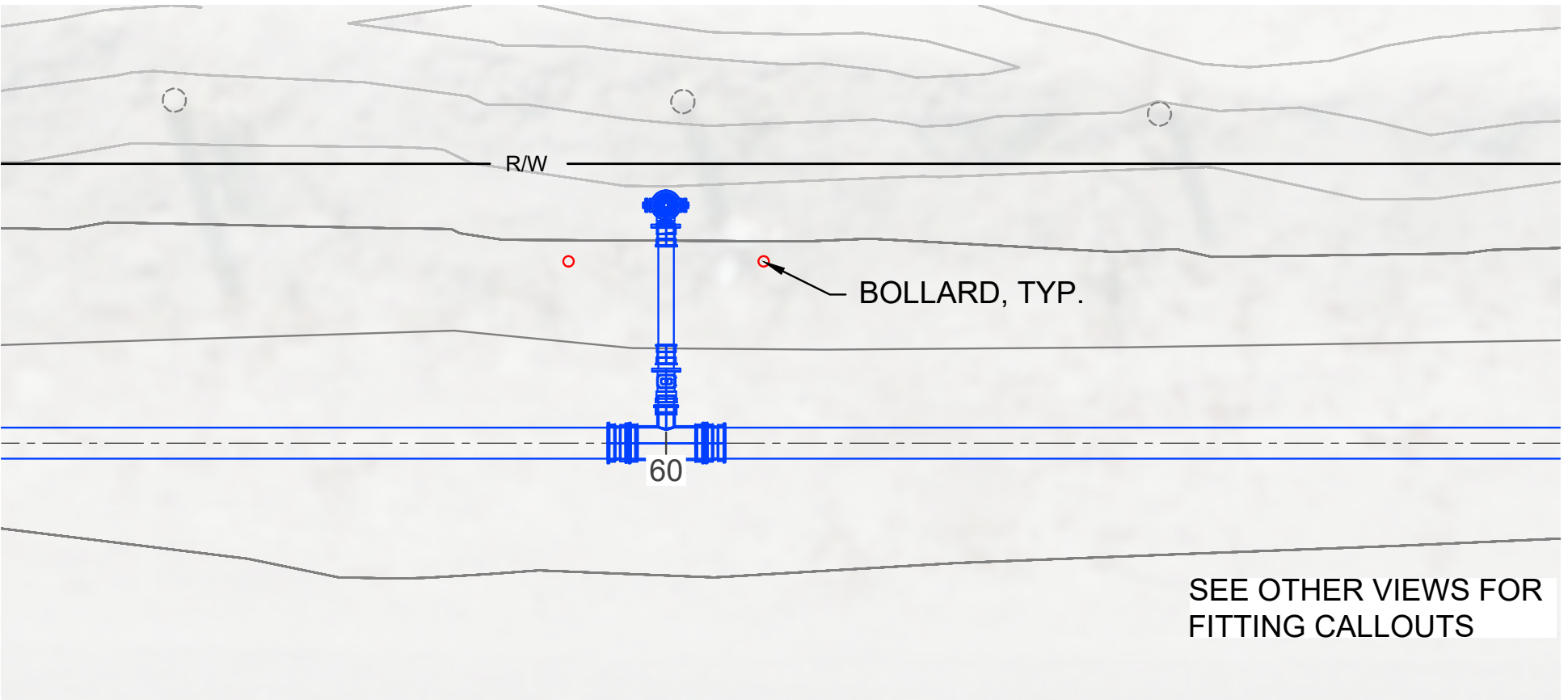
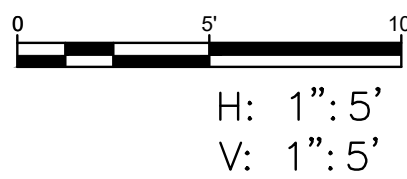
BLACK RD - HYDRANT INSTALLATION DETAIL  
SECTION VIEW



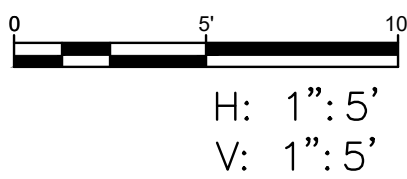
HYDRANT INSTALLATION DETAIL  
PROFILE VIEW



BLOCKOUT FOR FUTURE HYDRANT DETAIL  
SECTION VIEW



HYDRANT INSTALLATION DETAIL  
PLAN VIEW



HYDRANT NOTES:

1. EXACT LOCATIONS FOR FIRE HYDRANT INSTALLATIONS WILL BE DETERMINED BY THE ENGINEER
2. SOMEDAY HYDRANTS WILL BE INSTALLED AT THE STOWELL RD - HYDRANT BLOCKOUT LOCATIONS. THAT WORK IS NOT IN THIS CONTRACT.
3. FOR HYDRANT BLOCKOUTS - POTHOLE UTILITIES & SET ANGLE OF TEE TO ALLOW FUTURE HYDRANT TO CLEAR THEM WHEN INSTALLED.
4. FOR HYDRANT BLOCKOUTS - USE FLANGES ON EACH SIDE OF 12X6-MJXF TEE TO ALLOW EASY ADJUSTMENT IN THE FIELD

DESIGN CONSULTANT:  
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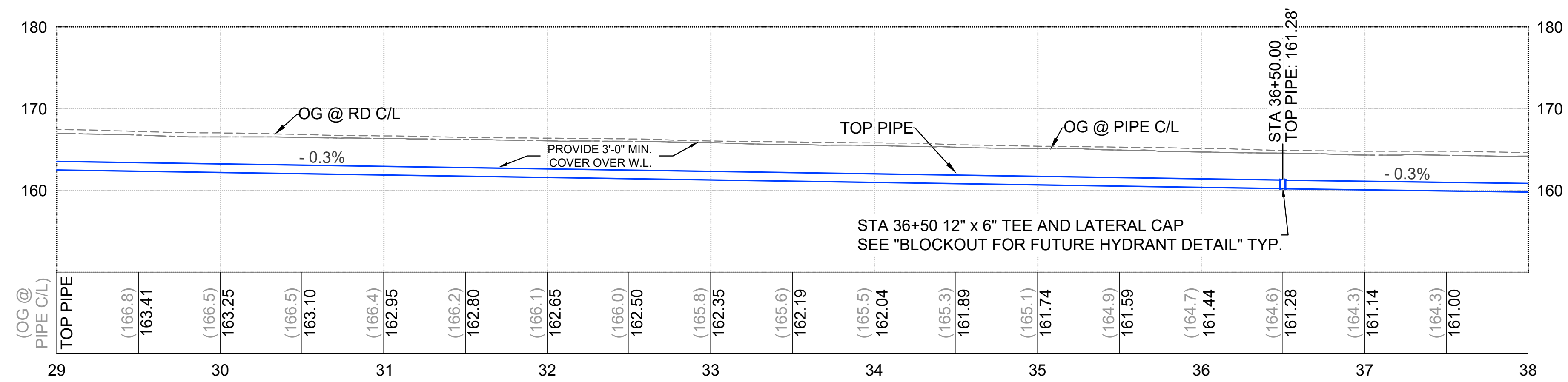


<div><div><div><div><div><span></span></div></div><div><div><span></span></div></div></div><div><div><span></span></div></div><div><div><span></span></div></div></div></div>						<div>CITY OF SANTA MARIA</div> <div>DEPARTMENT OF PUBLIC WORKS</div>		<div><div>DRAWN BY</div><div>Daniel Hunt</div></div> <div><div>CHECKED BY</div><div>SO</div></div> <div><div>DATE</div><div>2/3/23</div></div> <div><div>SHEET</div><div>5</div><div>OF</div><div>25</div><div>SHEETS</div></div> <div><div>REFERENCES</div><div></div></div> <div><div>FILE NUMBER</div><div>I-2138.05</div></div>	
<div><div><div><div><span></span></div></div><div><div><span></span></div></div></div><div><div><span></span></div></div><div><div><span></span></div></div></div>						HYD. D	HYDRANT DETAILS	12" MAIN WATERLINE EXTENSION	
<div>LETTER</div>	<div>DATE</div>	<div>BY</div>	<div>APPROVED</div>	<div>REVISION</div>					

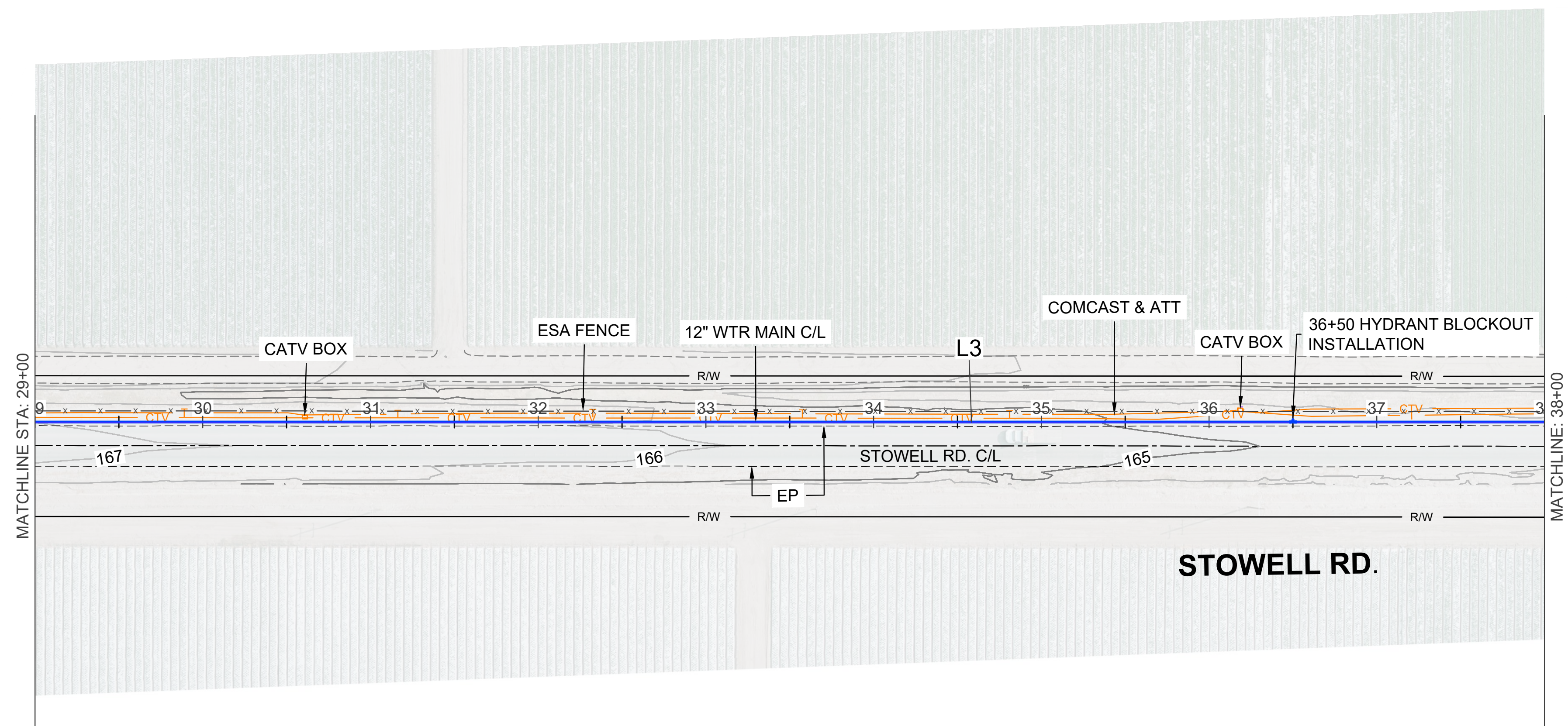




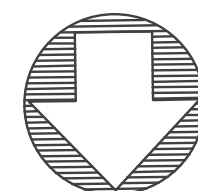
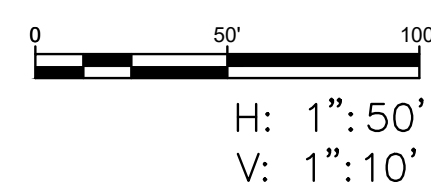




STOWELL RD 12-IN PROFILE VIEW  
STA: 29+00 to STA: 38+00



PLAN



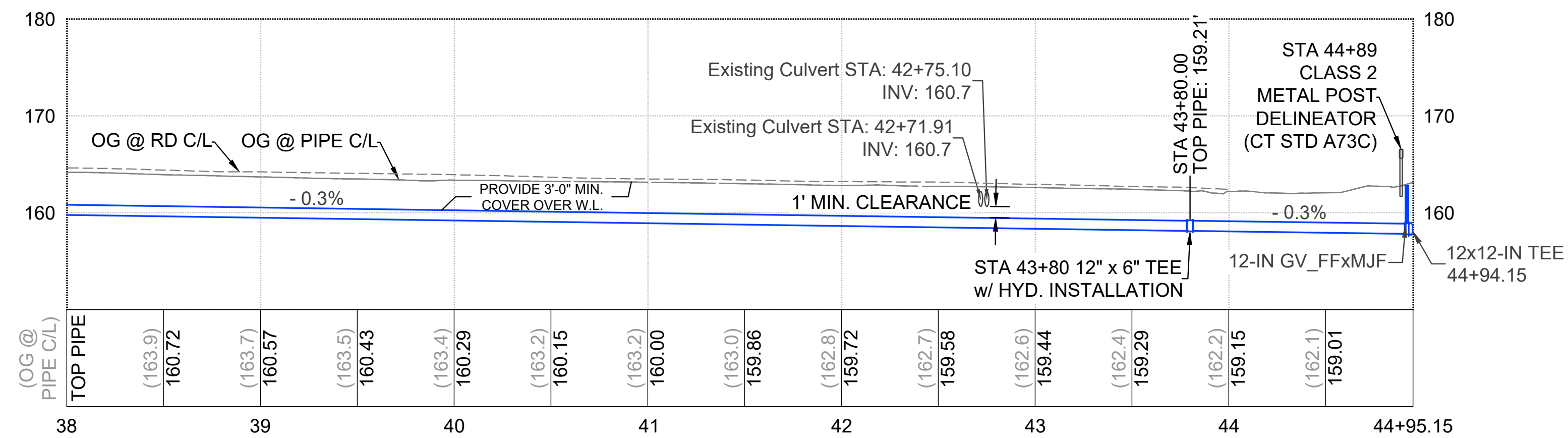
DESIGN CONSULTANT:  
BENGAL ENGINEERING  
360 S HOPE AVE STE C-110  
SANTA BARBARA, CA 93105  
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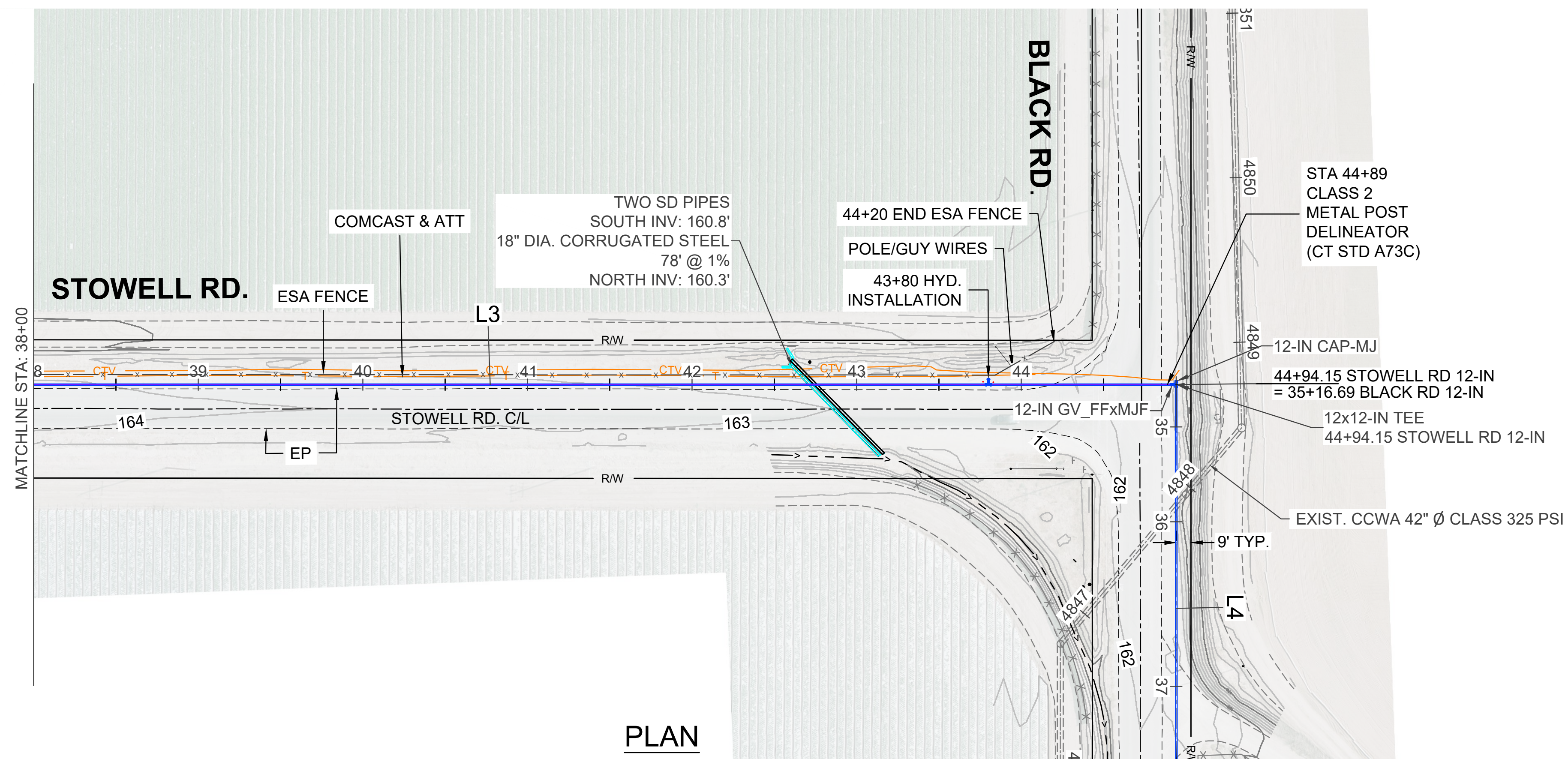
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LETTER	DATE	BY	APPROVED	REVISION

CITY OF SANTA MARIA DEPARTMENT OF PUBLIC WORKS		DRAWN BY Daniel Hunt
PP-2		CHECKED BY SO
PLAN AND PROFILE		DATE 2/3/23
12" MAIN WATERLINE EXTENSION		SHEET 7 OF 25 SHEETS
		REFERENCES
		FILE NUMBER I-2138.07



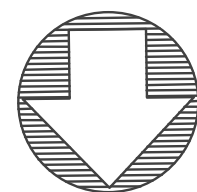


STOWELL RD 12-IN PROFILE VIEW  
STA: 38+00 to STA: 44+95



PLAN

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V: 1"=10'



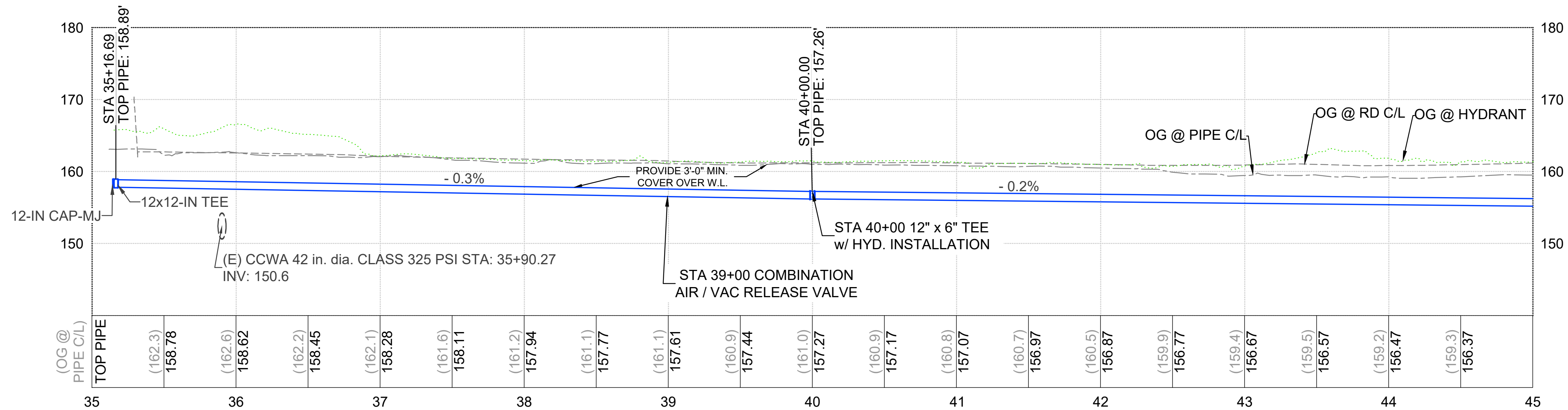
DESIGN CONSULTANT:  
BENGAL ENGINEERING  
360 S HOPE AVE STE C-110  
SANTA BARBARA, CA 93105  
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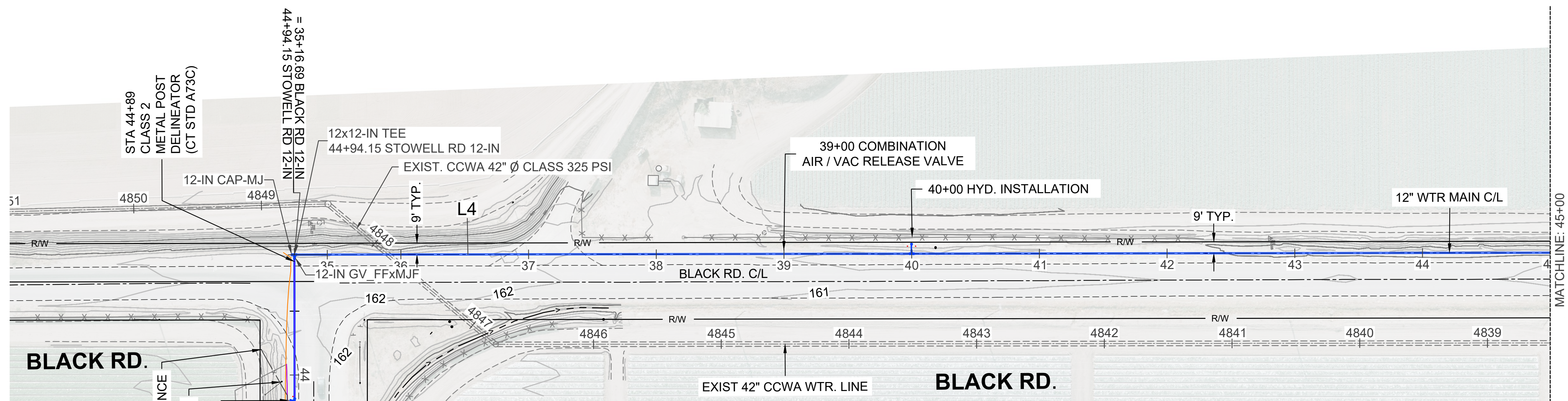
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LETTER	DATE	BY	APPROVED	REVISION	

CITY OF SANTA MARIA DEPARTMENT OF PUBLIC WORKS		DRAWN BY Daniel Hunt
PP-3		CHECKED BY SO
		DATE 2/3/23
		SHEET 8 OF 25 SHEETS
		REFERENCES
		FILE NUMBER I-2138.08
12" MAIN WATERLINE EXTENSION		

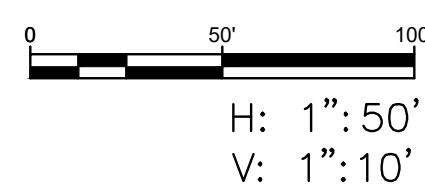
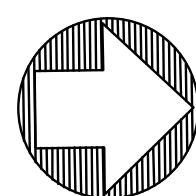




BLACK RD 12-IN PROFILE VIEW  
STA: 35+00 to STA: 45+00



PLAN



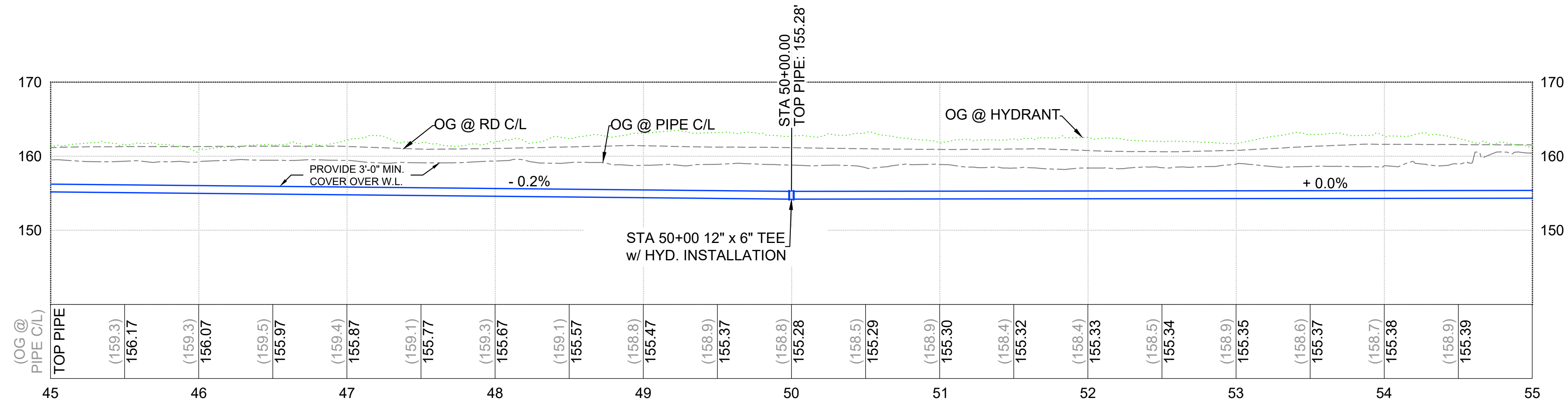
DESIGN CONSULTANT:  
BENGAL ENGINEERING  
360 S HOPE AVE STE C-110  
SANTA BARBARA, CA 93105  
(805) 563-0788



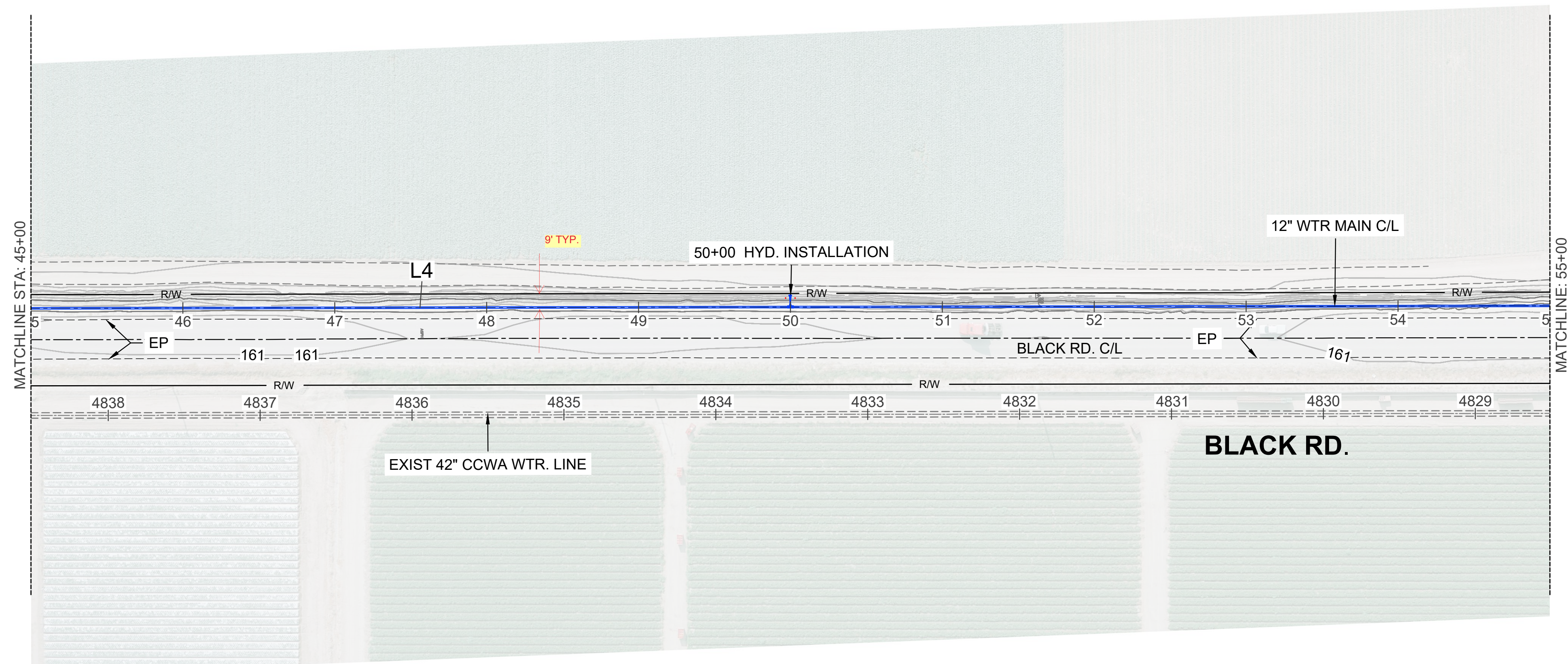
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LETTER	DATE	BY	APPROVED	REVISION

CITY OF SANTA MARIA DEPARTMENT OF PUBLIC WORKS		DRAWN BY Daniel Hunt
PP-4		CHECKED BY SO
PLAN AND PROFILE		DATE 2/3/23
12" MAIN WATERLINE EXTENSION		SHEET 9 OF 25 SHEETS
		REFERENCES
		FILE NUMBER I-2138.09

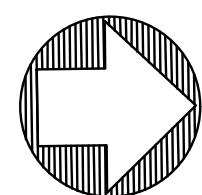




BLACK RD 12-IN PROFILE VIEW  
STA: 45+00 to STA: 55+00



PLAN



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V: 1":10'

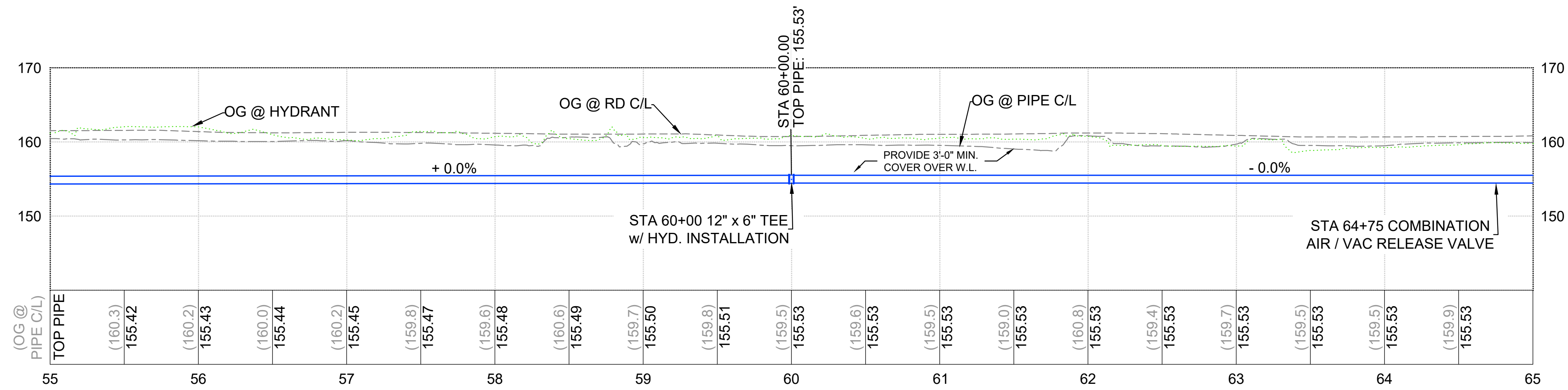
DESIGN CONSULTANT:  
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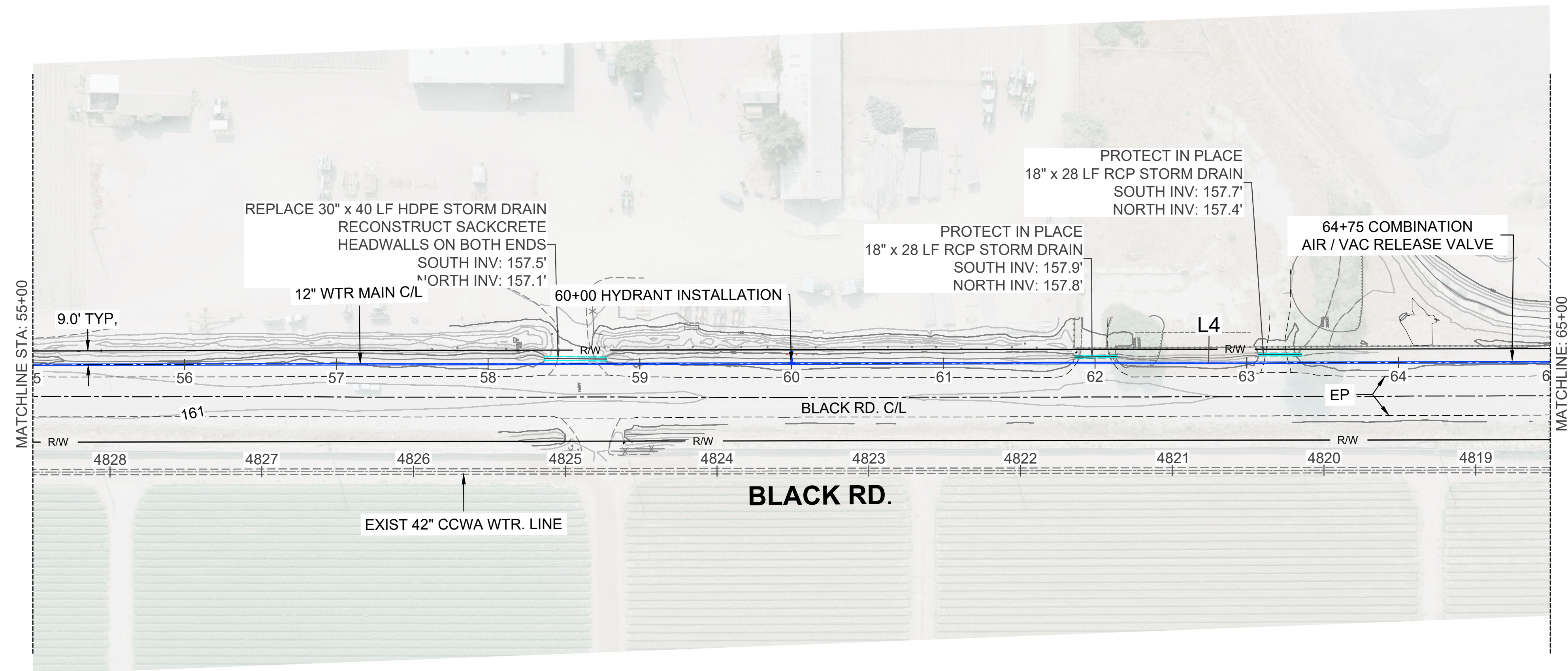
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LETTER	DATE	BY	APPROVED	REVISION

CITY OF SANTA MARIA DEPARTMENT OF PUBLIC WORKS		DRAWN BY Daniel Hunt
PP-5		CHECKED BY SO
PLAN AND PROFILE		DATE 2/3/23
12" MAIN WATERLINE EXTENSION		SHEET 10.25 REFERENCES
		FILE NUMBER I-2138.10

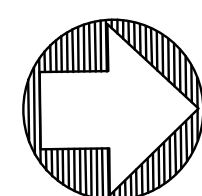




BLACK RD 12-IN PROFILE VIEW  
STA: 55+00 to STA: 65+00



PLAN



0 50' 100'  
H: 1"=50'  
V: 1"=10'

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<div>△ D</div>				
<div>△ C</div>				
<div>△ B</div>				
<div>△ A</div>				
LETTER	DATE	BY	APPROVED	REVISION

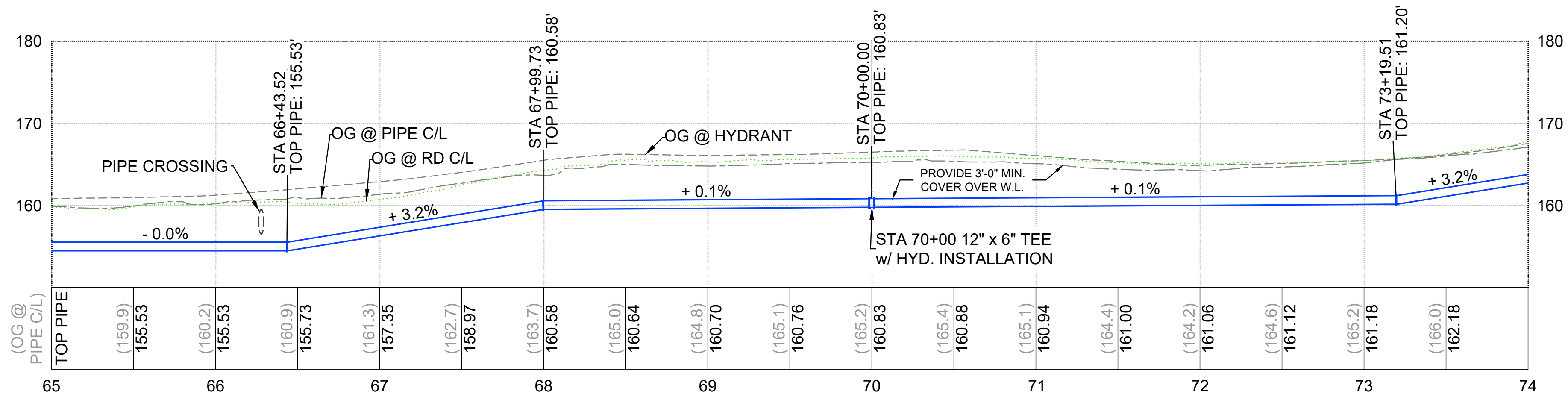
CITY OF SANTA MARIA  
DEPARTMENT OF PUBLIC WORKS

PP-6      PLAN AND PROFILE

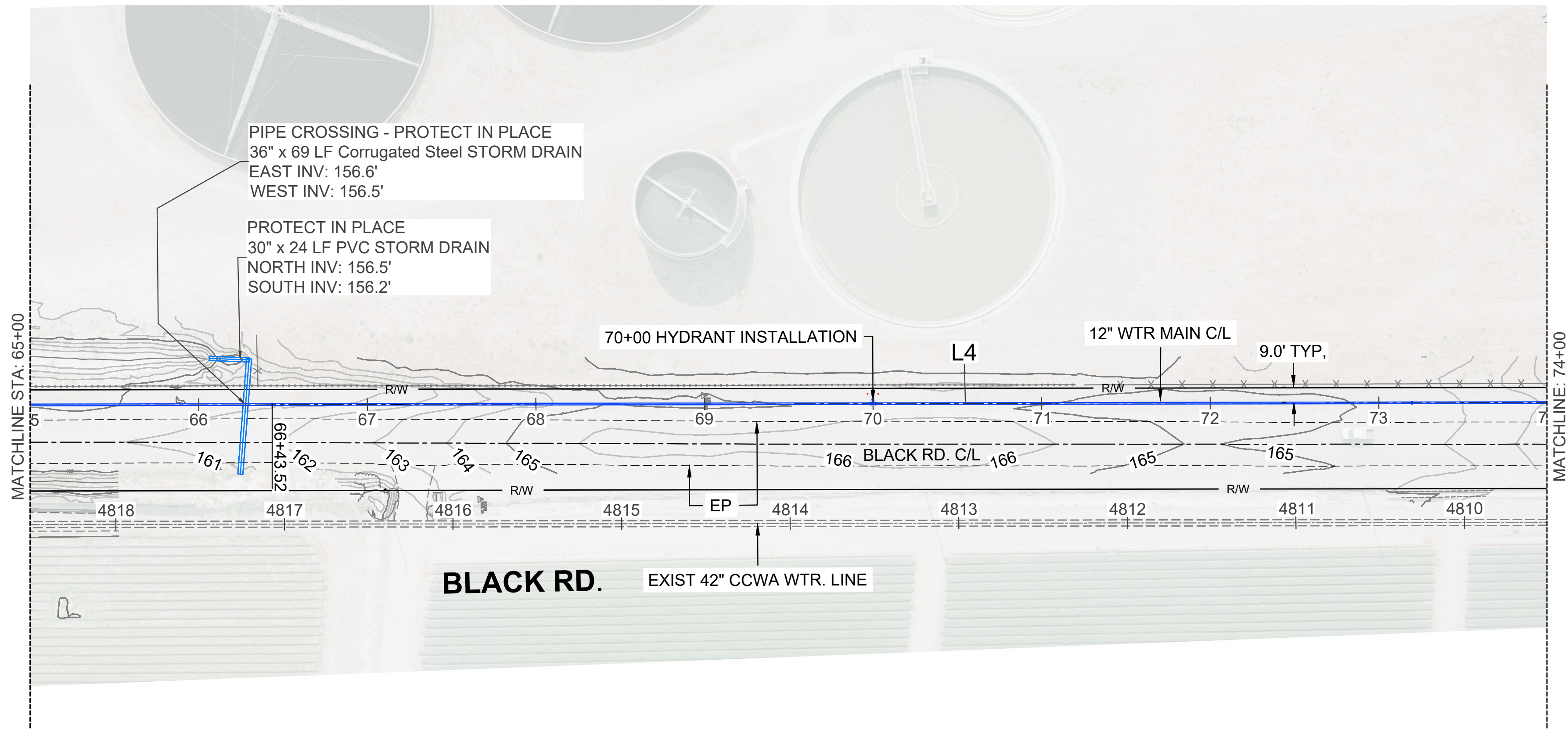
12" MAIN WATERLINE EXTENSION

DRAWN BY	Daniel Hunt
CHECKED BY	SO
DATE	2/3/23
SHEET	11 OF 25 SHEETS
REFERENCES	
FILE NUMBER	I-2138.11

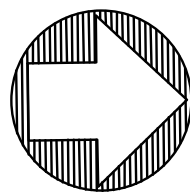




BLACK RD 12-IN PROFILE VIEW  
STA: 65+00 to STA: 74+00



PLAN



0 50' 100'  
H: 1"=50'  
V: 1"=10'

DESIGN CONSULTANT:  
BENGAL ENGINEERING  
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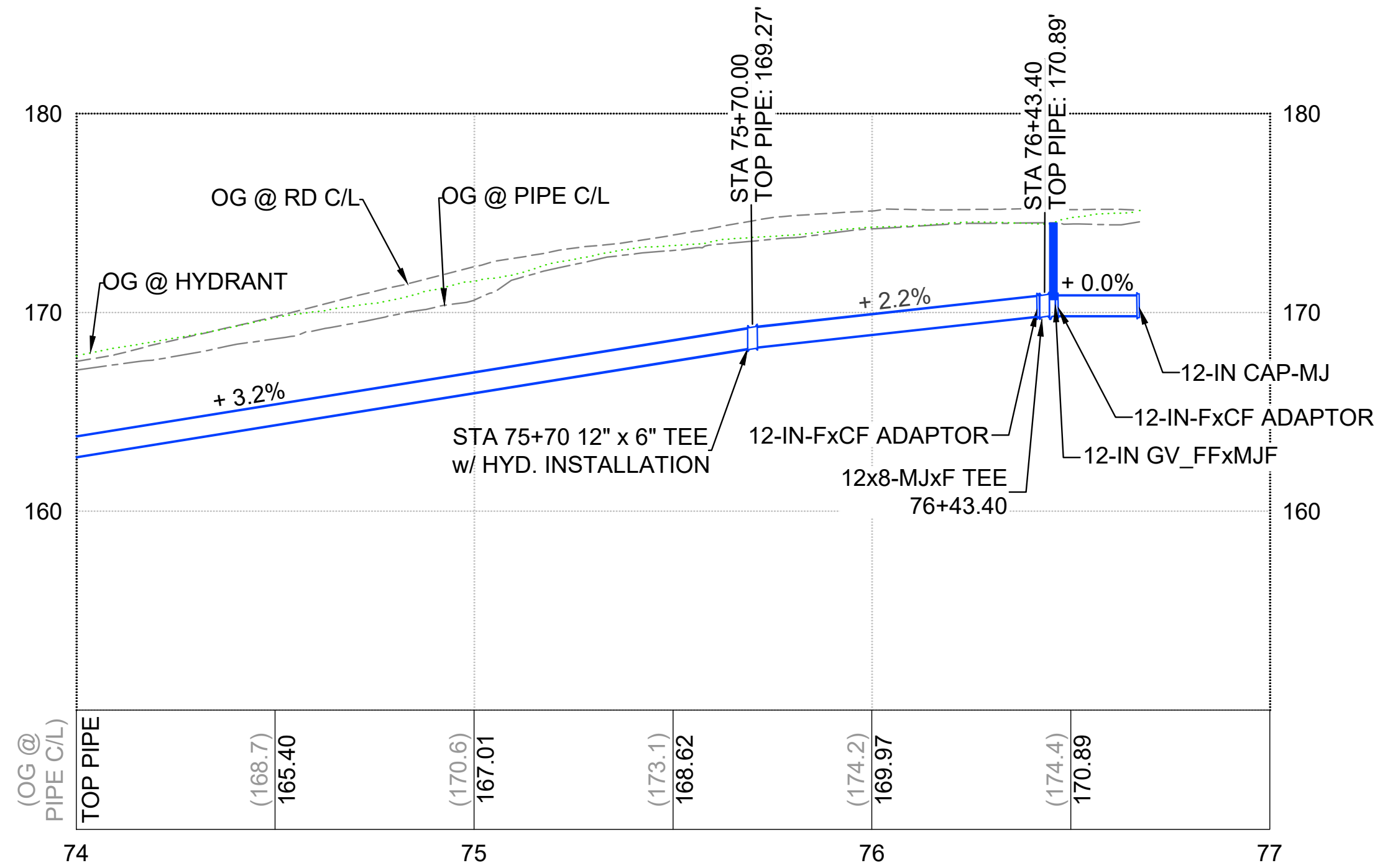


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LETTER	DATE	BY	APPROVED	REVISION	

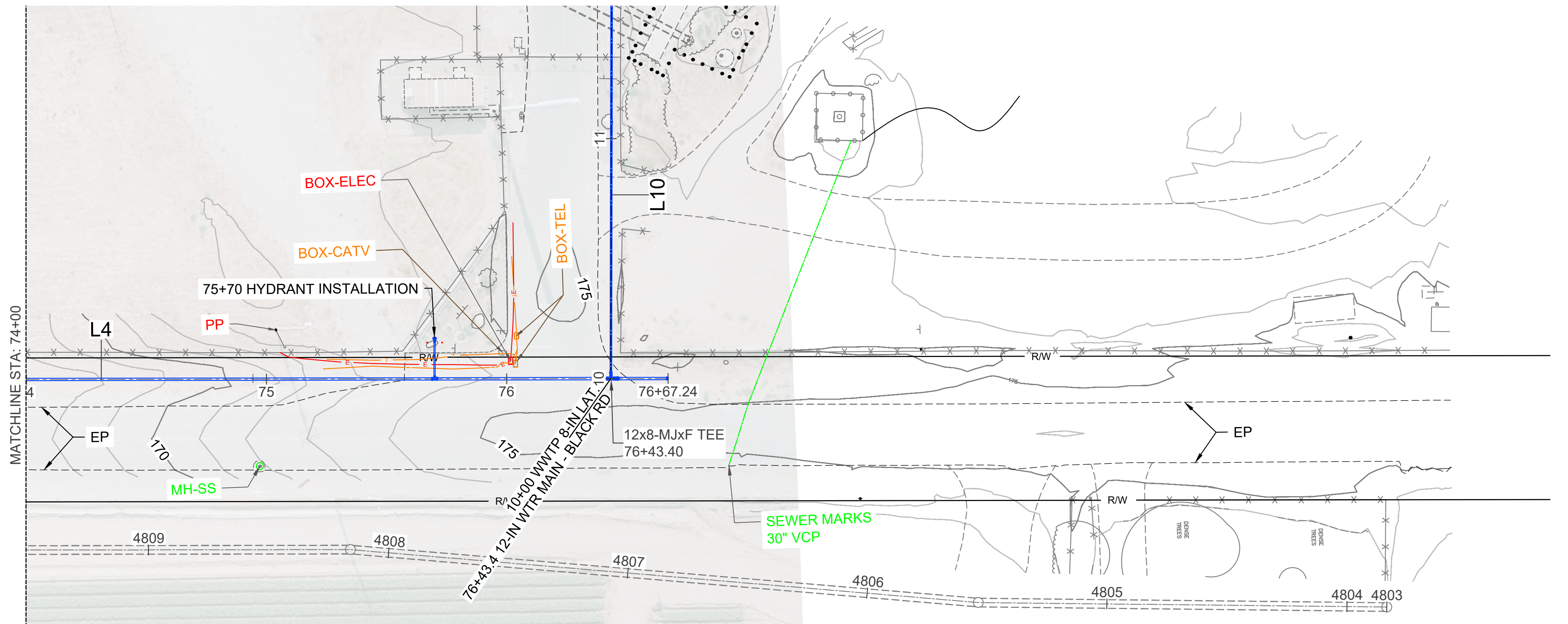
CITY OF SANTA MARIA DEPARTMENT OF PUBLIC WORKS	
PP-7	PLAN AND PROFILE
12" MAIN WATERLINE EXTENSION	

DRAWN BY	Daniel Hunt
CHECKED BY	SO
DATE	2/3/23
SHEET	12 OF 25 SHEETS
REFERENCES	
FILE NUMBER	I-2138.12

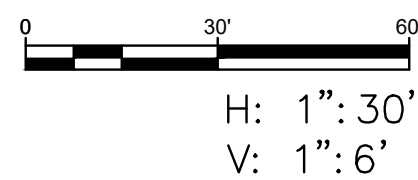
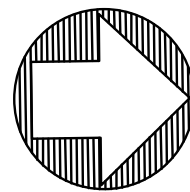




BLACK RD 12-IN PROFILE VIEW  
STA: 74+00 to STA: 77+00



PLAN



DESIGN CONSULTANT:  
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SANTA BARBARA, CA 93105  
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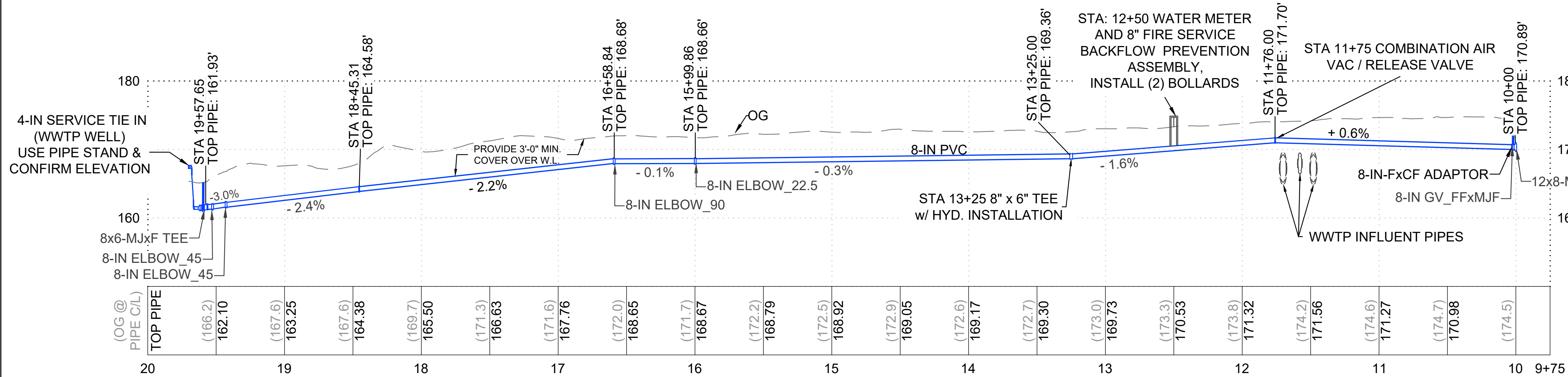


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LETTER	DATE	BY	APPROVED	REVISION	

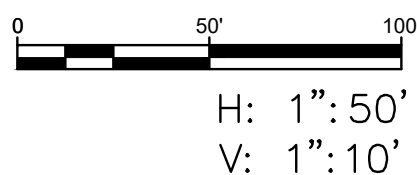
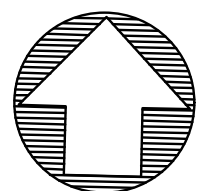
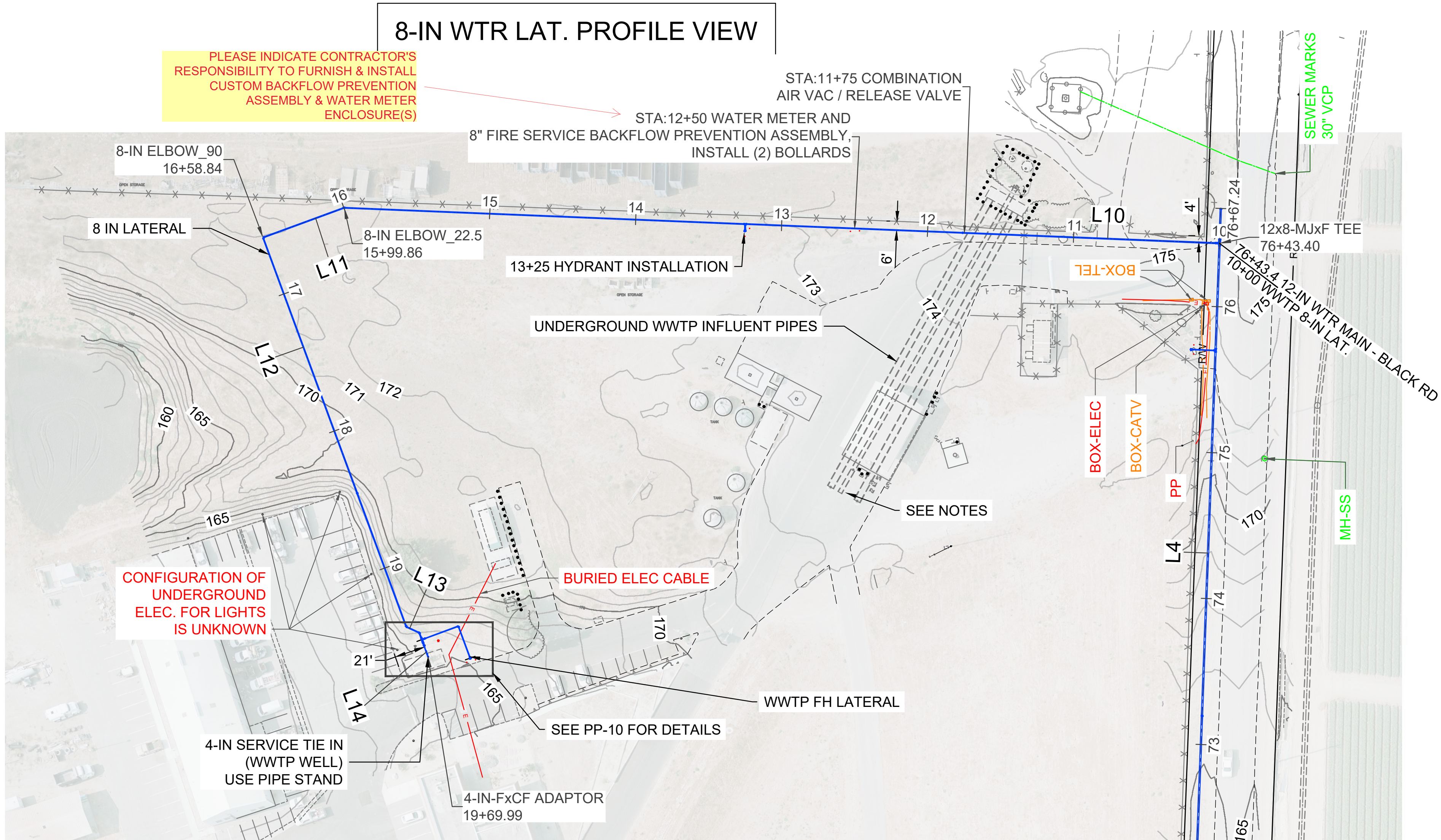
CITY OF SANTA MARIA DEPARTMENT OF PUBLIC WORKS	
PP-8	PLAN AND PROFILE
12" MAIN WATERLINE EXTENSION	

DRAWN BY	Daniel Hunt
CHECKED BY	SO
DATE	2/3/23
SHEET	13 OF 25 SHEETS
REFERENCES	
FILE NUMBER	I-2138.13





- CONSTRUCTION NOTES**
- A. THE CATV AND ELECTRIC UTILITIES IN THE SEWER PLANT DRIVEWAY WERE MARKED IN THE FIELD AND SURVEYED IN 2021.
- B. "DIG ALERT" WOULD NOT MARK INSIDE THE CITY'S SEWER PLANT.
- CONTRACTOR TO CAUTIOUSLY TRENCH INSIDE THE SEWER PLANT FOR CONSTRUCTION OF THE 8-INCH LARTERAL AND VERIFY LOCATION OF EXISTING UTILITIES, OR CONFIRM THAT NO UTILITY CONFLICT EXISTS BEFORE LAYING PIPE.
- CONTRACTOR TO POTHOLE AND VERIFY ANY UTILITY CONFLICTS INCLUDING THE WASTE WATER INFLUENT PIPES FROM THE BOLLARD SEWER DRAINS ALONG STA 11+00 TO STA 12+00




**PLAN**

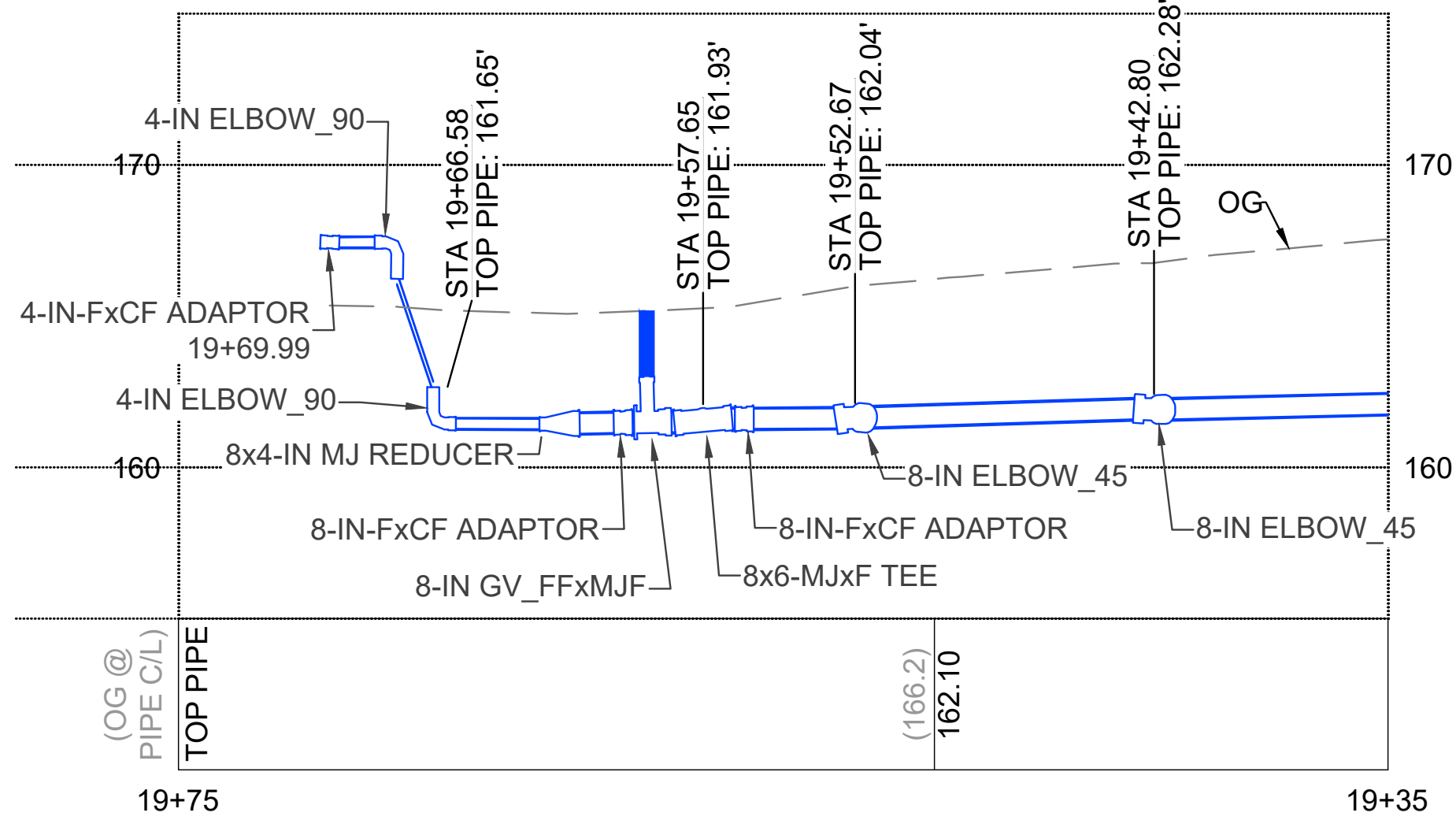
**DESIGN CONSULTANT:**  
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SANTA BARBARA, CA 93105  
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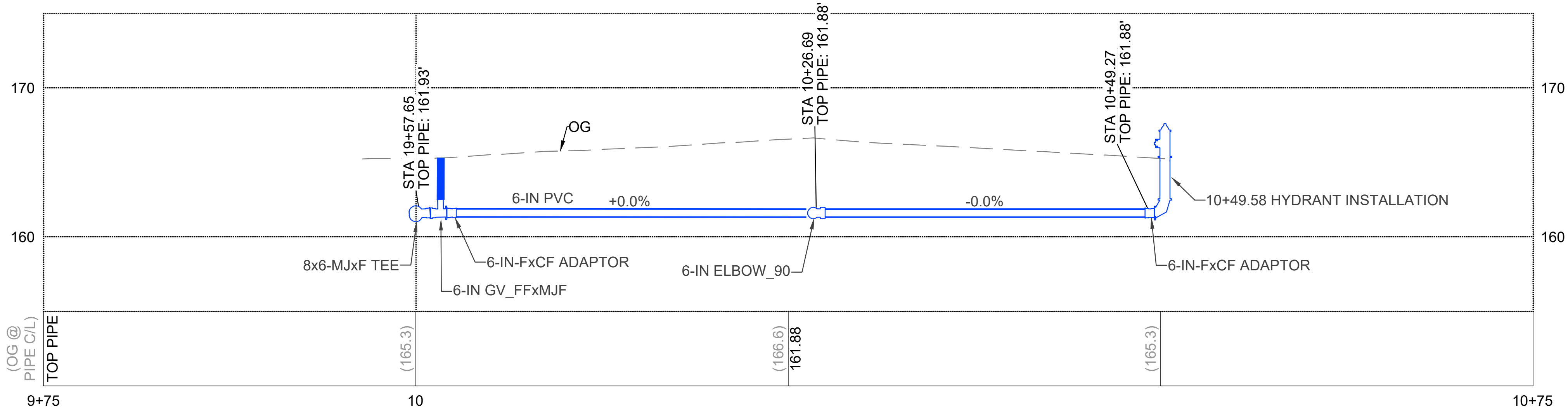
D					
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LETTER	DATE	BY	APPROVED	REVISION	

<i>CITY OF SANTA MARIA</i> DEPARTMENT OF PUBLIC WORKS		DRAWN BY Daniel Hunt
PP-9	PLAN AND PROFILE	CHECKED BY SO
		DATE 2/3/23
SHEET 14 OF 25 SHEETS		
REFERENCES		
12" MAIN WATERLINE EXTENSION		
		FILE NUMBER I-2138.14 

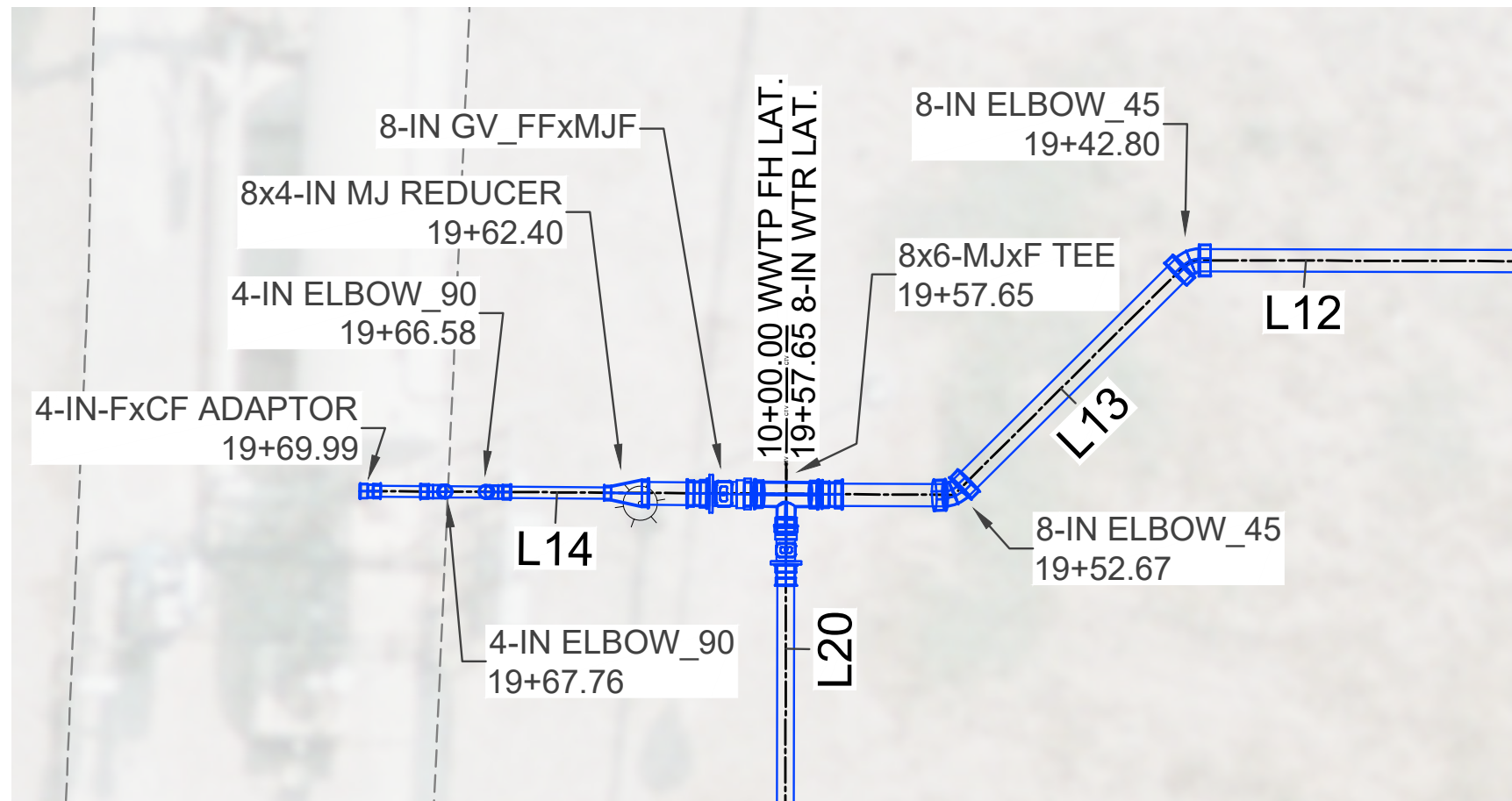




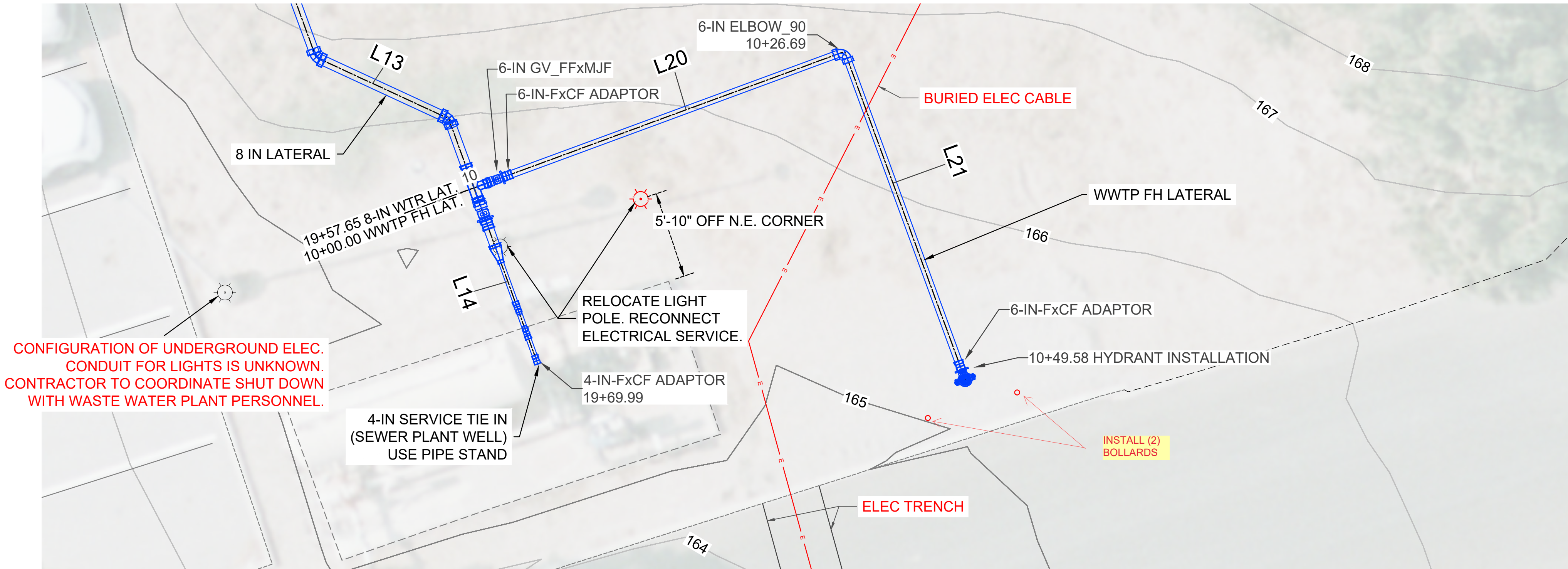
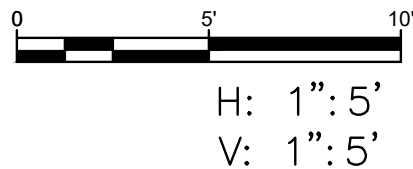
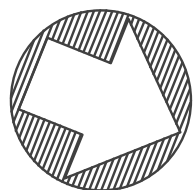
4-IN SERVICE TIE IN PROFILE



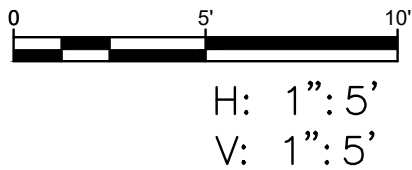
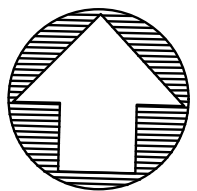
WWTP FH LATERAL Profile



PLAN



PLAN



**DESIGN CONSULTANT:**  
**BENGAL ENGINEERING**  
360 S HOPE AVE STE C-110  
SANTA BARBARA, CA 93105  
(805) 563-0788



D					
C					
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LETTER	DATE	BY	APPROVED	REVISION	

<b>CITY OF SANTA MARIA</b> DEPARTMENT OF PUBLIC WORKS		DRAWN BY Daniel Hunt
PP-10		CHECKED BY SO
PLAN AND PROFILE		DATE 2/3/23
12" MAIN WATERLINE EXTENSION		SHEET 15 OF 25 SHEETS
		REFERENCES
		FILE NUMBER I-2138.15

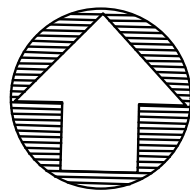


"STOWELL RD 12-IN" LINE							
SEGMENT ID	START STATION	START NORTHING	START EASTING	LENGTH	END STATION	DIRECTION/ DELTA	RADIUS
L1	20+00.00	2173059.99	5817985.85	59.56	20+59.56	N87°51'52"W	
L2	20+59.56	2173062.21	5817926.33	49.78	21+09.34	N65°21'52"W	
L3	21+09.34	2173082.96	5817881.09	2385.97	44+95.31	N87°51'52"W	

"BLACK RD 12-IN" LINE							
SEGMENT ID	START STATION	START NORTHING	START EASTING	LENGTH	END STATION	DIRECTION/ DELTA	RADIUS
L4	35+11.85	2173166.98	5815497.75	4155.39	76+67.24	N02°07'18"E	

"WWTP 8 IN LATERAL" LINE							
SEGMENT ID	START STATION	START NORTHING	START EASTING	LENGTH	END STATION	DIRECTION/ DELTA	RADIUS
L10	10+00.00	2177295.70	5815650.70	599.86	15+99.86	N87°40'35"W	
L11	15+99.86	2177320.02	5815051.34	58.98	16+58.84	S69°49'25"W	
L12	16+58.84	2177299.68	5814995.97	283.95	19+42.80	S20°10'56"E	
L13	19+42.80	2177033.16	5815093.94	9.88	19+52.67	S65°10'56"E	
L14	19+52.67	2177029.01	5815102.90	17.32	19+69.99	S19°58'27"E	

"WWTP FH LATERAL" LINE							
SEGMENT ID	START STATION	START NORTHING	START EASTING	LENGTH	END STATION	DIRECTION/ DELTA	RADIUS
L20	10+00.00	2177024.34	5815104.62	26.69	10+26.69	N69°48'34"E	
L21	10+26.69	2177033.55	5815129.67	23.61	10+50.29	S20°10'56"E	



0 300' 600'  
SCALE: 1" = 300'

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D				
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B				
A				
LETTER	DATE	BY	APPROVED	REVISION

CITY OF SANTA MARIA DEPARTMENT OF PUBLIC WORKS	
K-1	KEYLINE GEOMETRY
12" MAIN WATERLINE EXTENSION	

DRAWN BY	Daniel Hunt
CHECKED BY	SO
DATE	2/3/23
SHEET	16 OF 25 SHEETS
REFERENCES	
FILE NUMBER	I-2138.16

**APPENDIX B**  
**CalEEMod Results**



# Stowell/Black Road Waterline Extension Summary Report

## Table of Contents

- 1. Basic Project Information
  - 1.1. Basic Project Information
  - 1.2. Land Use Types
  - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
- 2. Emissions Summary
  - 2.1. Construction Emissions Compared Against Thresholds
- 6. Climate Risk Detailed Report
  - 6.2. Initial Climate Risk Scores
  - 6.3. Adjusted Climate Risk Scores
- 7. Health and Equity Details
  - 7.3. Overall Health & Equity Scores
  - 7.5. Evaluation Scorecard

# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	Stowell/Black Road Waterline Extension
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.90
Precipitation (days)	10.0
Location	34.93908407623515, -120.4905594849192
County	Santa Barbara
City	Unincorporated
Air District	Santa Barbara County APCD
Air Basin	South Central Coast
TAZ	3338
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas

## 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Linear	1.43	Mile	1.76	0.00	—	—	—	Water Line

## 1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-5	Use Advanced Engine Tiers
Construction	C-10-A	Water Exposed Surfaces
Construction	C-10-B	Water Active Demolition Sites
Construction	C-10-C	Water Unpaved Construction Roads
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Construction	C-12	Sweep Paved Roads

\* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

## 2. Emissions Summary

### 2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.09	3.42	25.9	25.2	0.09	0.96	0.07	1.03	0.88	0.02	0.90	—	9,475	9,475	0.39	0.12	0.49	9,521
Mit.	0.92	0.90	6.25	47.3	0.09	0.18	0.06	0.24	0.18	0.02	0.20	—	9,475	9,475	0.39	0.12	0.49	9,521
% Reduced	78%	74%	76%	-88%	—	81%	6%	76%	80%	—	78%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.52	0.44	3.30	3.19	0.01	0.12	0.01	0.13	0.11	< 0.005	0.11	—	1,212	1,212	0.05	0.02	0.04	1,218
Mit.	0.12	0.11	0.89	5.97	0.01	0.02	0.01	0.03	0.02	< 0.005	0.03	—	1,212	1,212	0.05	0.02	0.04	1,218
% Reduced	77%	74%	73%	-87%	—	81%	—	74%	79%	—	77%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.10	0.08	0.60	0.58	< 0.005	0.02	< 0.005	0.02	0.02	< 0.005	0.02	—	201	201	0.01	< 0.005	0.01	202
Mit.	0.02	0.02	0.16	1.09	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	201	201	0.01	< 0.005	0.01	202
% Reduced	77%	74%	73%	-87%	—	81%	6%	74%	79%	4%	77%	—	—	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	25.0	25.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	No	No	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mit.	—	No	No	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

## 6. Climate Risk Detailed Report

### 6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

### 6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 7. Health and Equity Details

### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	81.0
Healthy Places Index Score for Project Location (b)	30.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

# Stowell/Black Road Waterline Extension Detailed Report

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8. User Changes to Default Data

# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	Stowell/Black Road Waterline Extension
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.90
Precipitation (days)	10.0
Location	34.93908407623515, -120.4905594849192
County	Santa Barbara
City	Unincorporated
Air District	Santa Barbara County APCD
Air Basin	South Central Coast
TAZ	3338
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas

## 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Linear	1.43	Mile	1.76	0.00	—	—	—	Water Line

## 1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-5	Use Advanced Engine Tiers
Construction	C-10-A	Water Exposed Surfaces
Construction	C-10-B	Water Active Demolition Sites
Construction	C-10-C	Water Unpaved Construction Roads
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Construction	C-12	Sweep Paved Roads

\* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

## 2. Emissions Summary

### 2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.09	3.42	25.9	25.2	0.09	0.96	0.07	1.03	0.88	0.02	0.90	—	9,475	9,475	0.39	0.12	0.49	9,521
Mit.	0.92	0.90	6.25	47.3	0.09	0.18	0.06	0.24	0.18	0.02	0.20	—	9,475	9,475	0.39	0.12	0.49	9,521
% Reduced	78%	74%	76%	-88%	—	81%	6%	76%	80%	—	78%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.52	0.44	3.30	3.19	0.01	0.12	0.01	0.13	0.11	< 0.005	0.11	—	1,212	1,212	0.05	0.02	0.04	1,218
Mit.	0.12	0.11	0.89	5.97	0.01	0.02	0.01	0.03	0.02	< 0.005	0.03	—	1,212	1,212	0.05	0.02	0.04	1,218
% Reduced	77%	74%	73%	-87%	—	81%	—	74%	79%	—	77%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.10	0.08	0.60	0.58	< 0.005	0.02	< 0.005	0.02	0.02	< 0.005	0.02	—	201	201	0.01	< 0.005	0.01	202
Mit.	0.02	0.02	0.16	1.09	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	201	201	0.01	< 0.005	0.01	202
% Reduced	77%	74%	73%	-87%	—	81%	6%	74%	79%	4%	77%	—	—	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	25.0	25.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	No	No	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mit.	—	No	No	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

## 2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	4.09	3.42	25.9	25.2	0.09	0.96	0.07	1.03	0.88	0.02	0.90	—	9,475	9,475	0.39	0.12	0.49	9,521
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.52	0.44	3.30	3.19	0.01	0.12	0.01	0.13	0.11	< 0.005	0.11	—	1,212	1,212	0.05	0.02	0.04	1,218
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.10	0.08	0.60	0.58	< 0.005	0.02	< 0.005	0.02	0.02	< 0.005	0.02	—	201	201	0.01	< 0.005	0.01	202

## 2.3. Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.92	0.90	6.25	47.3	0.09	0.18	0.06	0.24	0.18	0.02	0.20	—	9,475	9,475	0.39	0.12	0.49	9,521
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.12	0.11	0.89	5.97	0.01	0.02	0.01	0.03	0.02	< 0.005	0.03	—	1,212	1,212	0.05	0.02	0.04	1,218
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.02	0.02	0.16	1.09	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	201	201	0.01	< 0.005	0.01	202

### 3. Construction Emissions Details

#### 3.1. Linear, Grubbing & Land Clearing (2023) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.26	1.06	7.51	6.87	0.03	0.27	—	0.27	0.25	—	0.25	—	2,997	2,997	0.12	0.02	—	3,007
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.19	1.38	1.26	0.01	0.05	—	0.05	0.05	—	0.05	—	550	550	0.02	< 0.005	—	552
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.25	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	91.1	91.1	< 0.005	< 0.005	—	91.4
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.2. Linear, Grubbing & Land Clearing (2023) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.28	1.47	14.7	0.03	0.06	—	0.06	0.06	—	0.06	—	2,997	2,997	0.12	0.02	—	3,007
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.27	2.71	0.01	0.01	—	0.01	0.01	—	0.01	—	550	550	0.02	< 0.005	—	552



Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.49	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	91.1	91.1	< 0.005	< 0.005	—	91.4
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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### 3.3. Linear, Grading & Excavation (2023) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.34	3.00	3.95	0.01	0.13	—	0.13	0.12	—	0.12	—	574	574	0.02	< 0.005	—	576
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.55	0.73	< 0.005	0.02	—	0.02	0.02	—	0.02	—	105	105	< 0.005	< 0.005	—	106
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.4	17.4	< 0.005	< 0.005	—	17.5

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.03	0.01	0.54	0.23	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	277	277	0.02	0.04	0.49	292
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.10	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	51.0	51.0	< 0.005	0.01	0.04	53.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.44	8.44	< 0.005	< 0.005	0.01	8.86

### 3.4. Linear, Grading & Excavation (2023) - Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	1.47	4.01	0.01	0.01	—	0.01	0.01	—	0.01	—	574	574	0.02	< 0.005	—	576
Dust From Material Movement:	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.27	0.74	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	105	105	< 0.005	< 0.005	—	106
Dust From Material Movement:	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.05	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.4	17.4	< 0.005	< 0.005	—	17.5
Dust From Material Movement:	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.03	0.01	0.54	0.23	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	277	277	0.02	0.04	0.49	292
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.10	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	51.0	51.0	< 0.005	0.01	0.04	53.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.44	8.44	< 0.005	< 0.005	0.01	8.86

### 3.5. Linear, Drainage, Utilities, & Sub-Grade (2023) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	0.94	6.68	6.10	0.02	0.24	—	0.24	0.22	—	0.22	—	2,664	2,664	0.11	0.02	—	2,673

Dust From Material Movement:	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.17	1.23	1.12	< 0.005	0.04	—	0.04	0.04	—	0.04	—	489	489	0.02	< 0.005	—	491
Dust From Material Movement:	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.22	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	81.0	81.0	< 0.005	< 0.005	—	81.2
Dust From Material Movement:	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.6. Linear, Drainage, Utilities, & Sub-Grade (2023) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.25	1.31	13.1	0.02	0.05	—	0.05	0.05	—	0.05	—	2,664	2,664	0.11	0.02	—	2,673
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.24	2.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	489	489	0.02	< 0.005	—	491
Dust From Material Movement:	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.44	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	81.0	81.0	< 0.005	< 0.005	—	81.2
Dust From Material Movement:	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00



Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.7. Linear, Paving (2023) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.08	8.14	8.05	0.03	0.31	—	0.31	0.29	—	0.29	—	2,963	2,963	0.12	0.02	—	2,973
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.2	16.2	< 0.005	< 0.005	—	16.3
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.69	2.69	< 0.005	< 0.005	—	2.70
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

## 3.8. Linear, Paving (2023) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.28	1.46	15.2	0.03	0.06	—	0.06	0.06	—	0.06	—	2,963	2,963	0.12	0.02	—	2,973
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.2	16.2	< 0.005	< 0.005	—	16.3
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.69	2.69	< 0.005	< 0.005	—	2.70

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

## 4. Operations Emissions Details

### 4.10. Soil Carbon Accumulation By Vegetation Type

#### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

## 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

#### 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

#### 4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

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

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

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

#### 4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

## 5. Activity Data

### 5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Traffic Control	Linear, Grubbing & Land Clearing	6/15/2023	9/15/2023	5.00	67.0	—
Trenching and installing	Linear, Grading & Excavation	6/15/2023	9/15/2023	5.00	67.0	—
Pipeline Installation	Linear, Drainage, Utilities, & Sub-Grade	6/15/2023	9/15/2023	5.00	67.0	—
Linear, Paving	Linear, Paving	7/27/2023	7/28/2023	5.00	2.00	—

### 5.2. Off-Road Equipment

#### 5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Traffic Control	Off-Highway Trucks	Diesel	Average	2.00	9.00	376	0.38
Trenching and installing	Excavators	Diesel	Average	2.00	8.00	36.0	0.38

Trenching and installing	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Pipeline Installation	Off-Highway Trucks	Diesel	Average	2.00	8.00	376	0.38
Linear, Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Linear, Paving	Off-Highway Trucks	Diesel	Average	2.00	8.00	376	0.38

### 5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Traffic Control	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	9.00	376	0.38
Trenching and installing	Excavators	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Trenching and installing	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Pipeline Installation	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	8.00	376	0.38
Linear, Paving	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36
Linear, Paving	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	8.00	376	0.38

## 5.3. Construction Vehicles

### 5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Traffic Control	—	—	—	—
Traffic Control	Worker	0.00	8.80	LDA,LDT1,LDT2
Traffic Control	Vendor	0.00	5.30	HHDT,MHDT
Traffic Control	Hauling	0.00	20.0	HHDT
Traffic Control	Onsite truck	—	—	HHDT
Trenching and installing	—	—	—	—
Trenching and installing	Worker	0.00	8.80	LDA,LDT1,LDT2
Trenching and installing	Vendor	0.00	5.30	HHDT,MHDT

Trenching and installing	Hauling	13.7	5.00	HHDT
Trenching and installing	Onsite truck	—	—	HHDT
Pipeline Installation	—	—	—	—
Pipeline Installation	Worker	0.00	8.80	LDA,LDT1,LDT2
Pipeline Installation	Vendor	0.00	5.30	HHDT,MHDT
Pipeline Installation	Hauling	0.00	20.0	HHDT
Pipeline Installation	Onsite truck	—	—	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	0.00	8.80	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	5.30	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	—	—	HHDT

### 5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Traffic Control	—	—	—	—
Traffic Control	Worker	0.00	8.80	LDA,LDT1,LDT2
Traffic Control	Vendor	0.00	5.30	HHDT,MHDT
Traffic Control	Hauling	0.00	20.0	HHDT
Traffic Control	Onsite truck	—	—	HHDT
Trenching and installing	—	—	—	—
Trenching and installing	Worker	0.00	8.80	LDA,LDT1,LDT2
Trenching and installing	Vendor	0.00	5.30	HHDT,MHDT
Trenching and installing	Hauling	13.7	5.00	HHDT
Trenching and installing	Onsite truck	—	—	HHDT
Pipeline Installation	—	—	—	—
Pipeline Installation	Worker	0.00	8.80	LDA,LDT1,LDT2

Pipeline Installation	Vendor	0.00	5.30	HHDT,MHDT
Pipeline Installation	Hauling	0.00	20.0	HHDT
Pipeline Installation	Onsite truck	—	—	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	0.00	8.80	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	5.30	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	—	—	HHDT

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

## 5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
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## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Traffic Control	—	—	1.76	0.00	—
Trenching and installing	3,400	3,960	1.76	0.00	—
Pipeline Installation	—	—	1.76	0.00	—
Linear, Paving	—	—	1.00	0.00	—

### 5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

## 5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Linear	0.01	< 0.5%

## 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2023	0.00	204	0.03	< 0.005

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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#### 5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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#### 5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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#### 5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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## 6. Climate Risk Detailed Report

### 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	5.33	annual days of extreme heat
Extreme Precipitation	4.25	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about  $\frac{3}{4}$  an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	N/A	N/A	N/A	N/A
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The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	14.9
AQ-PM	11.7
AQ-DPM	23.8
Drinking Water	58.3
Lead Risk Housing	63.6
Pesticides	97.5
Toxic Releases	8.03
Traffic	2.52
Effect Indicators	—
CleanUp Sites	44.2
Groundwater	96.6
Haz Waste Facilities/Generators	54.6
Impaired Water Bodies	99.9
Solid Waste	88.9



Sensitive Population	—
Asthma	81.8
Cardio-vascular	50.0
Low Birth Weights	80.7
Socioeconomic Factor Indicators	—
Education	92.9
Housing	67.7
Linguistic	84.2
Poverty	78.0
Unemployment	32.3

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	22.2764019
Employed	47.36301809
Median HI	25.52290517
Education	—
Bachelor's or higher	8.520467086
High school enrollment	11.8311305
Preschool enrollment	48.45374054
Transportation	—
Auto Access	43.30809701
Active commuting	69.76774028
Social	—
2-parent households	35.10843064

Voting	54.11266521
Neighborhood	—
Alcohol availability	45.73335044
Park access	56.05030155
Retail density	5.556268446
Supermarket access	2.399589375
Tree canopy	6.300526113
Housing	—
Homeownership	40.03592968
Housing habitability	25.79237777
Low-inc homeowner severe housing cost burden	40.5363788
Low-inc renter severe housing cost burden	67.15000642
Uncrowded housing	10.22712691
Health Outcomes	—
Insured adults	17.9006801
Arthritis	0.0
Asthma ER Admissions	12.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	57.3
Cognitively Disabled	29.3
Physically Disabled	49.3
Heart Attack ER Admissions	72.1

Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	1.2
Elderly	73.9
English Speaking	11.8
Foreign-born	61.7
Outdoor Workers	4.1
Climate Change Adaptive Capacity	—
Impervious Surface Cover	69.3
Traffic Density	2.9
Traffic Access	0.0
Other Indices	—
Hardship	84.3
Other Decision Support	—
2016 Voting	47.4

### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	81.0
Healthy Places Index Score for Project Location (b)	30.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

### 7.4. Health & Equity Measures

No Health & Equity Measures selected.

### 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

### 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

## 8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Based on Construction information Provided
Construction: Off-Road Equipment	Based on information provided.
Construction: Dust From Material Movement	Based on information provided
Construction: Trips and VMT	Information provided on the project assumes 1.5 miles of hauling for export and 5 miles of hauling for import. Conservatively assuming a haul length of 5 miles.
Construction: Paving	Project takes place outside of paved shoulder and only requires paving where the alignment crosses Black Road.

**APPENDIX C**  
**BIOLOGICAL SPECIES LISTS**






Search Results

23 matches found. Click on scientific name for details

Search Criteria: Quad is one of [3412084:3412085], 50 feet between Plant low elevation and high elevation, 250 feet between Plant low elevation and high elevation

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
<a href="#">Arctostaphylos purissima</a>	La Purisima manzanita	Ericaceae	perennial evergreen shrub	Nov-May	None	None	G2	S2	1B.1	Yes	1988-01-01	No Photo Available
<a href="#">Arctostaphylos rudis</a>	sand mesa manzanita	Ericaceae	perennial evergreen shrub	Nov-Feb	None	None	G2	S2	1B.2	Yes	1980-01-01	No Photo Available
<a href="#">Arenaria paludicola</a>	marsh sandwort	Caryophyllaceae	perennial stoloniferous herb	May-Aug	FE	CE	G1	S1	1B.1		1984-01-01	No Photo Available
<a href="#">Ceanothus cuneatus</a> var. <a href="#">fascicularis</a>	Lompoc ceanothus	Rhamnaceae	perennial evergreen shrub	Feb-Apr	None	None	G5T4	S4	4.2	Yes	2001-01-01	No Photo Available
<a href="#">Ceanothus impressus</a> var. <a href="#">impressus</a>	Santa Barbara ceanothus	Rhamnaceae	perennial shrub	Feb-Apr	None	None	G3T3	S3	1B.2		2006-01-10	No Photo Available
<a href="#">Chenopodium littoreum</a>	coastal goosefoot	Chenopodiaceae	annual herb	Apr-Aug	None	None	G1	S1	1B.2	Yes	2011-06-01	No Photo Available
<a href="#">Chorizanthe palmeri</a>	Palmer's spineflower	Polygonaceae	annual herb	Apr-Aug	None	None	G4	S4	4.2	Yes	1994-01-01	No Photo Available
<a href="#">Cirsium scariosum</a> var. <a href="#">loncholepis</a>	La Graciosa thistle	Asteraceae	perennial herb	May-Aug	FE	CT	G5T1	S1	1B.1	Yes	1974-01-01	No Photo Available
<a href="#">Convolvulus simulans</a>	small-flowered morning-glory	Convolvulaceae	annual herb	Mar-Jul	None	None	G4	S4	4.2		1994-01-01	No Photo Available
<a href="#">Deinandra increscens</a> ssp. <a href="#">villosa</a>	Gaviota tarplant	Asteraceae	annual herb	May-Oct	FE	CE	G4G5T2	S2	1B.1	Yes	1988-01-01	No Photo Available
<a href="#">Deinandra paniculata</a>	paniculate tarplant	Asteraceae	annual herb	(Mar)Apr-Nov	None	None	G4	S4	4.2		2001-01-01	No Photo Available
<a href="#">Delphinium parryi</a> ssp. <a href="#">blochmaniae</a>	dune larkspur	Ranunculaceae	perennial herb	Apr-Jun	None	None	G4T2	S2	1B.2	Yes	1988-01-01	No Photo Available

<u><i>Dichondra occidentalis</i></u>	western dichondra	Convolvulaceae	perennial rhizomatous herb	(Jan)Mar-Jul	None	None	G3G4	S3S4	4.2			1974-01-01	No Photo Available
<u><i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i></u>	Blochman's dudleya	Crassulaceae	perennial herb	Apr-Jun	None	None	G3T2	S2	1B.1			1974-01-01	 © 2011 Aaron E. Sims
<u><i>Erigeron blochmaniae</i></u>	Blochman's leafy daisy	Asteraceae	perennial rhizomatous herb	Jun-Aug	None	None	G2	S2	1B.2	Yes		1974-01-01	No Photo Available
<u><i>Erysimum suffrutescens</i></u>	suffrutescent wallflower	Brassicaceae	perennial herb	Jan-Jul(Aug)	None	None	G3	S3	4.2	Yes		1980-01-01	No Photo Available
<u><i>Horkelia cuneata</i> var. <i>puberula</i></u>	mesa horkelia	Rosaceae	perennial herb	Feb-Jul(Sep)	None	None	G4T1	S1	1B.1	Yes		2001-01-01	 © 2008 Tony Morosco
<u><i>Horkelia cuneata</i> var. <i>sericea</i></u>	Kellogg's horkelia	Rosaceae	perennial herb	Apr-Sep	None	None	G4T1?	S1?	1B.1	Yes		1988-01-01	 © 2018 Neal Kramer
<u><i>Leptosiphon grandiflorus</i></u>	large-flowered leptosiphon	Polemoniaceae	annual herb	Apr-Aug	None	None	G3G4	S3S4	4.2	Yes		1994-01-01	 © 2003 Doreen L. Smith
<u><i>Monardella undulata</i> ssp. <i>crispa</i></u>	crisp monardella	Lamiaceae	perennial rhizomatous herb	Apr-Aug(Dec)	None	None	G3T2	S2	1B.2	Yes		1974-01-01	No Photo Available
<u><i>Monardella undulata</i> ssp. <i>undulata</i></u>	San Luis Obispo monardella	Lamiaceae	perennial rhizomatous herb	May-Sep	None	None	G2	S2	1B.2	Yes		1974-01-01	No Photo Available
<u><i>Scrophularia atrata</i></u>	black-flowered figwort	Scrophulariaceae	perennial herb	Mar-Jul	None	None	G2?	S2?	1B.2	Yes		1974-01-01	No Photo Available
<u><i>Senecio blochmaniae</i></u>	Blochman's ragwort	Asteraceae	perennial herb	May-Oct	None	None	G3	S3	4.2	Yes		1974-01-01	No Photo Available

Showing 1 to 23 of 23 entries

**Suggested Citation:**  
 California Native Plant Society, Rare Plant Program. 2023. Rare Plant Inventory (online edition, v9.5). Website <https://www.rareplants.cnps.org> [accessed 8 February 2023].



# Selected Elements by Common Name

## California Department of Fish and Wildlife

### California Natural Diversity Database



Query Criteria: Quad</span>(Guadalupe (3412085)</span> OR </span>Santa Maria (3412084))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b>American badger</b> <i>Taxidea taxus</i>	AMAJF04010	None	None	G5	S3	SSC
<b>arroyo chub</b> <i>Gila orcuttii</i>	AFCJB13120	None	None	G2	S2	SSC
<b>black-flowered figwort</b> <i>Scrophularia atrata</i>	PDSCR1S010	None	None	G2?	S2?	1B.2
<b>Blochman's dudleya</b> <i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	PDCRA04051	None	None	G3T2	S2	1B.1
<b>Blochman's leafy daisy</b> <i>Erigeron blochmaniae</i>	PDAST3M5J0	None	None	G2	S2	1B.2
<b>burrowing owl</b> <i>Athene cunicularia</i>	ABNSB10010	None	None	G4	S3	SSC
<b>California red-legged frog</b> <i>Rana draytonii</i>	AAABH01022	Threatened	None	G2G3	S2S3	SSC
<b>California tiger salamander - Santa Barbara County DPS</b> <i>Ambystoma californiense</i> pop. 2	AAAAA01182	Endangered	Threatened	G2G3T2	S2	WL
<b>Central Dune Scrub</b> <i>Central Dune Scrub</i>	CTT21320CA	None	None	G2	S2.2	
<b>coast horned lizard</b> <i>Phrynosoma blainvillii</i>	ARACF12100	None	None	G3G4	S4	SSC
<b>coastal goosefoot</b> <i>Chenopodium littoreum</i>	PDCHE091Z0	None	None	G1	S1	1B.2
<b>crisp monardella</b> <i>Monardella undulata</i> ssp. <i>crispa</i>	PDLAM18070	None	None	G3T2	S2	1B.2
<b>dune larkspur</b> <i>Delphinium parryi</i> ssp. <i>blochmaniae</i>	PDRAN0B1B1	None	None	G4T2	S2	1B.2
<b>Gaviota tarplant</b> <i>Deinandra increscens</i> ssp. <i>villosa</i>	PDAST4R0U3	Endangered	Endangered	G4G5T2	S2	1B.1
<b>Kellogg's horkelia</b> <i>Horkelia cuneata</i> var. <i>sericea</i>	PDROS0W043	None	None	G4T1?	S1?	1B.1
<b>La Graciosa thistle</b> <i>Cirsium scariosum</i> var. <i>loncholepis</i>	PDAST2E1N0	Endangered	Threatened	G5T1	S1	1B.1
<b>La Purisima manzanita</b> <i>Arctostaphylos purissima</i>	PDERI041A0	None	None	G2	S2	1B.1
<b>marsh sandwort</b> <i>Arenaria paludicola</i>	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
<b>monarch - California overwintering population</b> <i>Danaus plexippus plexippus</i> pop. 1	IILEPP2012	Candidate	None	G4T1T2	S2	





Selected Elements by Common Name  
California Department of Fish and Wildlife  
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b>Northern California legless lizard</b> <i>Anniella pulchra</i>	ARACC01020	None	None	G3	S2S3	SSC
<b>sand mesa manzanita</b> <i>Arctostaphylos rudis</i>	PDERI041E0	None	None	G2	S2	1B.2
<b>Santa Barbara ceanothus</b> <i>Ceanothus impressus</i> var. <i>impressus</i>	PDRHA040L1	None	None	G3T3	S3	1B.2
<b>Southern Vernal Pool</b> <i>Southern Vernal Pool</i>	CTT44300CA	None	None	GNR	SNR	
<b>Swainson's hawk</b> <i>Buteo swainsoni</i>	ABNKC19070	None	Threatened	G5	S3	
<b>vernal pool fairy shrimp</b> <i>Branchinecta lynchi</i>	ICBRA03030	Threatened	None	G3	S3	
<b>western pond turtle</b> <i>Emys marmorata</i>	ARAAD02030	None	None	G3G4	S3	SSC
<b>western spadefoot</b> <i>Spea hammondi</i>	AAABF02020	None	None	G2G3	S3S4	SSC

Record Count: 27

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Santa Barbara County, California



## Local office

Ventura Fish And Wildlife Office

☎ (805) 644-1766

📅 (805) 644-3958

✉ [FW8VenturaSection7@FWS.Gov](mailto:FW8VenturaSection7@FWS.Gov)

2493 Portola Road, Suite B  
Ventura, CA 93003-7726

NOT FOR CONSULTATION

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

- 
1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Birds

NAME	STATUS
California Condor <i>Gymnogyps californianus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/8193">https://ecos.fws.gov/ecp/species/8193</a>	Endangered
Least Bell's Vireo <i>Vireo bellii pusillus</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/5945">https://ecos.fws.gov/ecp/species/5945</a>	Endangered
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/6749">https://ecos.fws.gov/ecp/species/6749</a>	Endangered
Yellow-billed Cuckoo <i>Coccyzus americanus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/3911">https://ecos.fws.gov/ecp/species/3911</a>	Threatened

## Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a>	Threatened

## Insects

NAME	STATUS
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Monarch Butterfly *Danaus plexippus*

Candidate

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/9743>

## Crustaceans

NAME

STATUS

Vernal Pool Fairy Shrimp *Branchinecta lynchi*

Threatened

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

<https://ecos.fws.gov/ecp/species/498>

## Flowering Plants

NAME

STATUS

Gambel's Watercress *Rorippa gambellii*

Endangered

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/4201>

La Graciosa Thistle *Cirsium loncholepis*

Endangered

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

<https://ecos.fws.gov/ecp/species/6547>

Marsh Sandwort *Arenaria paludicola*

Endangered

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/2229>

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

# Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds  
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds  
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

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NAME

BREEDING SEASON

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<p><b>Allen's Hummingbird</b> <i>Selasphorus sasin</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/9637">https://ecos.fws.gov/ecp/species/9637</a></p>	Breeds Feb 1 to Jul 15
<p><b>Belding's Savannah Sparrow</b> <i>Passerculus sandwichensis beldingi</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p> <p><a href="https://ecos.fws.gov/ecp/species/8">https://ecos.fws.gov/ecp/species/8</a></p>	Breeds Apr 1 to Aug 15
<p><b>Black Skimmer</b> <i>Rynchops niger</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/5234">https://ecos.fws.gov/ecp/species/5234</a></p>	Breeds May 20 to Sep 15
<p><b>Bullock's Oriole</b> <i>Icterus bullockii</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds Mar 21 to Jul 25
<p><b>California Gull</b> <i>Larus californicus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Mar 1 to Jul 31
<p><b>California Thrasher</b> <i>Toxostoma redivivum</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Jan 1 to Jul 31
<p><b>Clark's Grebe</b> <i>Aechmophorus clarkii</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Jun 1 to Aug 31
<p><b>Common Yellowthroat</b> <i>Geothlypis trichas sinuosa</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p> <p><a href="https://ecos.fws.gov/ecp/species/2084">https://ecos.fws.gov/ecp/species/2084</a></p>	Breeds May 20 to Jul 31



**Golden Eagle** *Aquila chrysaetos*

Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1680>

**Lawrence's Goldfinch** *Carduelis lawrencei*

Breeds Mar 20 to Sep 20

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9464>

**Marbled Godwit** *Limosa fedoa*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9481>

**Nuttall's Woodpecker** *Picoides nuttallii*

Breeds Apr 1 to Jul 20

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9410>

**Oak Titmouse** *Baeolophus inornatus*

Breeds Mar 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9656>

**Olive-sided Flycatcher** *Contopus cooperi*

Breeds May 20 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3914>

**Short-billed Dowitcher** *Limnodromus griseus*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9480>

**Tricolored Blackbird** *Agelaius tricolor*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3910>

Breeds Jun 1 to Aug 31

Western Grebe *aechmophorus occidentalis*  
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  
<https://ecos.fws.gov/ecp/species/6743>

Breeds elsewhere

Willet *Tringa semipalmata*  
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Mar 15 to Aug 10

Wrentit *Chamaea fasciata*  
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Apr 1 to Jul 31

Yellow-billed Magpie *Pica nuttalli*  
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  
<https://ecos.fws.gov/ecp/species/9726>

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 1 2 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum

probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .

3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (I)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

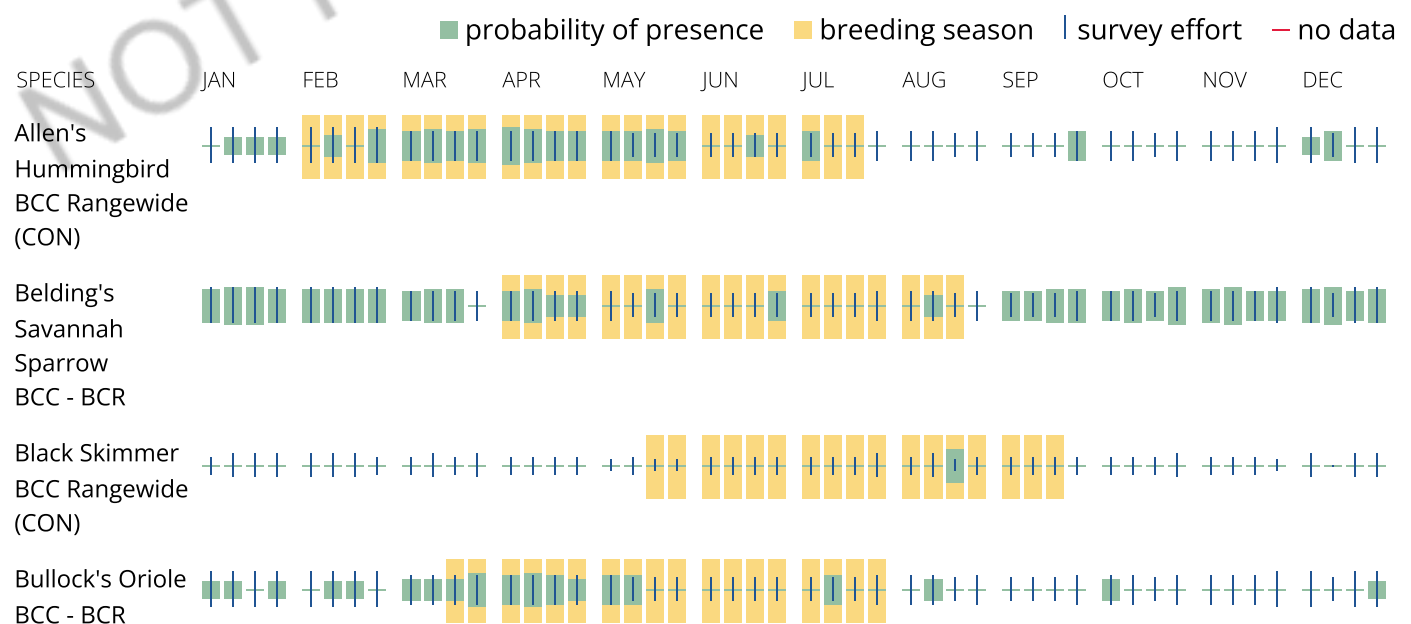
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

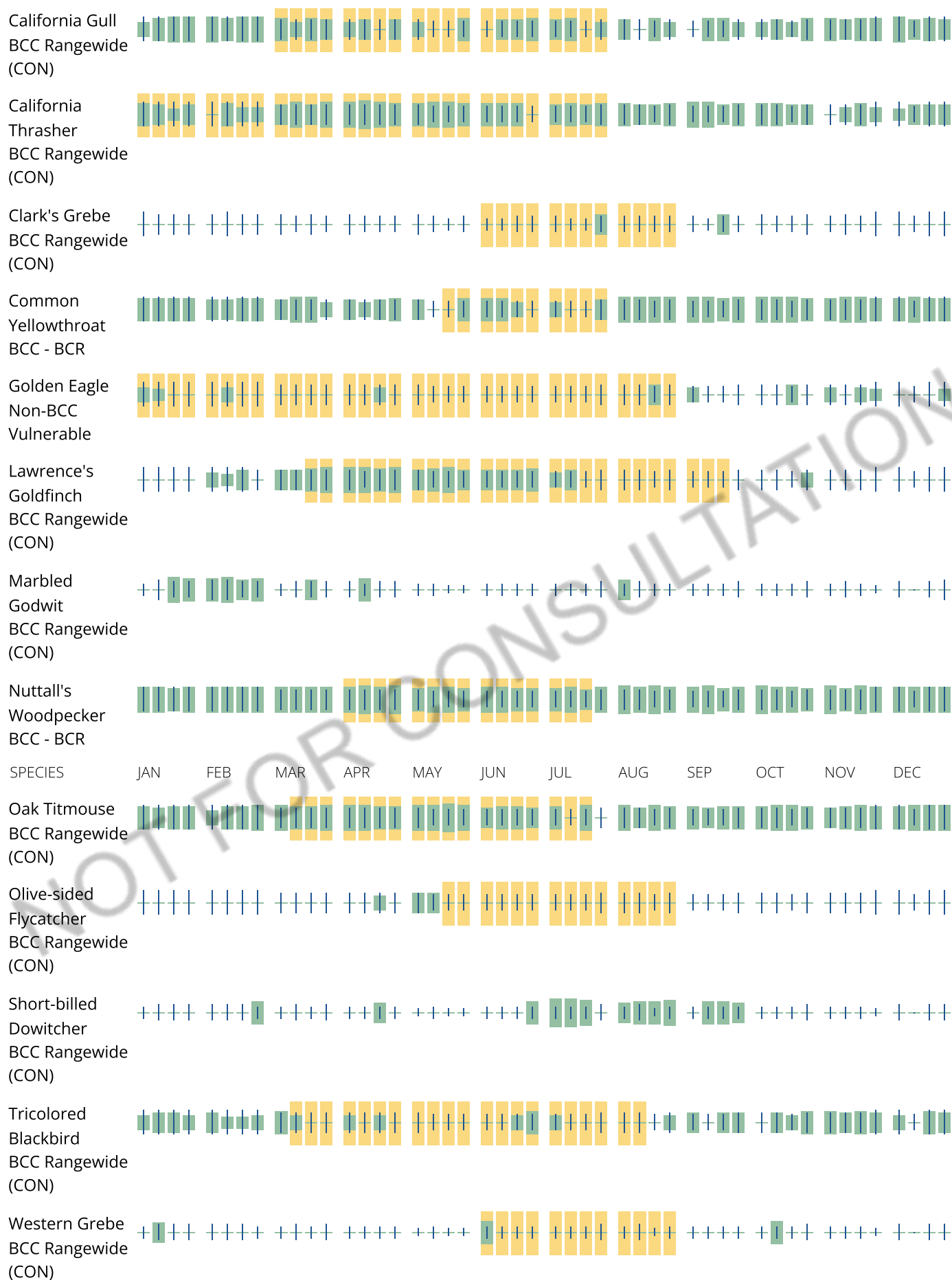
No Data (—)

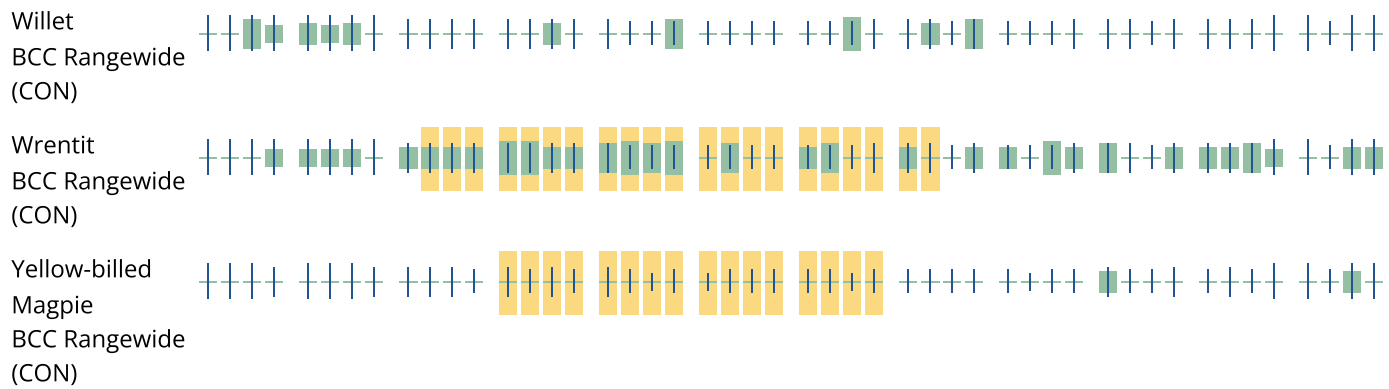
A week is marked as having no data if there were no survey events for that week.

## Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.







**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

**What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

## How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

## What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

## Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

## What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

## Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

### Fish hatcheries

There are no fish hatcheries at this location.

### Wetlands in the National Wetlands Inventory (NWI)



Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

## Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.



## **APPENDIX D**

### **MITIGATION MONITORING AND REPORTING PLAN (MMRP)**

## MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
<i>Air Quality</i>				
AQ-1	<p><b>Fugitive Dust Control Measures.</b> The City of Santa Maria shall implement the Santa Barbara County Air Pollution Control District's Standard Fugitive Dust Control Measures, where applicable:</p> <ol style="list-style-type: none"> <li>During construction, use water trucks or sprinkler systems to keep areas of vehicle movement damp to prevent dust from leaving the site and from exceeding the Santa Barbara County Air Pollution Control District's limit of 20% opacity for greater than 3 minutes in any 60-minute period. At a minimum, this shall include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency shall be required when sustained wind speed exceeds 15 miles per hour. Reclaimed water shall be used whenever possible; however, reclaimed water shall not be used in or around crops for human consumption.</li> <li>On-site vehicle speeds shall be no greater than 15 miles per hour when traveling on unpaved surfaces.</li> <li>Install and operate a track-out prevention device where vehicles enter and exit unpaved roads onto paved streets. The track-out prevention device can include any device or combination of devices that are effective at preventing track out of dirt such as gravel pads, pipe-grid track-out control devices, rumble strips, or wheel-washing systems.</li> <li>If importation, exportation, and stockpiling of fill material is involved, soil stockpiled for more than 1 day shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.</li> <li>Minimize the amount of disturbed area. After clearing, grading, earthmoving, or excavation is completed, treat the disturbed area by watering, using roll-compaction, revegetating, or spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur. All roadways, driveways, sidewalks etc. to be paved shall be completed as soon as possible.</li> <li>Schedule clearing, grading, earthmoving, and excavation activities during periods of low wind speed to the extent feasible. During periods of high winds (&gt;25 miles per hour), clearing, grading, earthmoving, and excavation operations shall be minimized to prevent fugitive dust created by on-site operations from becoming a nuisance or hazard.</li> </ol>	Measures shall be shown on grading and building plans	During construction activities	City of Santa Maria

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
	<p>g. The contractor or builder shall designate a person or persons to monitor and document the dust control program requirements to ensure any fugitive dust emissions do not result in a nuisance and to enhance the implementation of the mitigation measures as necessary to prevent transport of dust off-site. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Santa Barbara County Air Pollution Control District prior to grading/building permit issuance and/or map clearance.</p> <p>h. For fill material, cover, keep moist, or treat soil stockpiled for more than two days, and tarp trucks transporting fill material to and from the site.</p> <p>i. Install gravel pads at access points to prevent tracking of mud onto public roads.</p> <p>j. After clearing, grading, earthmoving, or excavation is completed, treat the disturbed area by watering, revegetating, or spreading soil binders until the area is paved or otherwise developed.</p> <p>k. Designate a person or persons to monitor the dust control program and to order increased watering, as necessary.</p> <p>All requirements shall be shown on grading and building plans and/or as a separate information sheet listing the conditions of approval to be recorded with the map. Timing requirements shall be shown on plans prior to grading/building permit issuance and/or recorded with the map during map recordation. Conditions shall be adhered to throughout all grading and construction periods. The Lead Agency shall ensure measures are on project plans and/or recorded with maps. City of Santa Maria staff shall ensure compliance on-site. Santa Barbara County Air Pollution Control District inspectors will respond to nuisance complaints.</p>			
AQ-2	<p><b>Diesel Particulate and Nitrogen Oxides Emission Reduction Measures.</b> The City of Santa Maria shall comply with the requirements of Section 2485 of Title 13 of the California Code of Regulations (CCR), which limits idling from diesel-fueled commercial motor vehicles with gross vehicular weight ratings of more than 10,000 pounds and licensed for operation on highways. Additionally, the following is a list of regulatory requirements and control strategies that shall be implemented to the maximum extent feasible:</p> <p>a. All portable diesel-powered construction equipment greater than 50 brake horsepower shall be registered with the state's portable equipment registration program or shall obtain a Santa Barbara County Air Pollution Control District (SBCAPCD) permit.</p> <p>b. Fleet owners of diesel-powered mobile construction equipment greater than 25 horsepower are subject to the California Air Resource Board (CARB) In-Use Off-Road Diesel-Fueled Fleets</p>	All requirements to be shown on grading and building plans	During construction activities	City of Santa Maria

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
	Regulation (13 CCR Section 2449), the purpose of which is to reduce nitrogen oxides (NOx), diesel particulate matter (DPM), and other criteria pollutant emissions from in-use off-road diesel-fueled vehicles. Off-road heavy-duty trucks shall comply with the State Off-Road Regulation. For more information, see <a href="http://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm">www.arb.ca.gov/msprog/ordiesel/ordiesel.htm</a> .			
	c. Fleet owners of diesel-fueled heavy-duty trucks and buses are subject to the CARB's On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation (13 CCR Section 2025), the purpose of which is to reduce Nox, DPM, and other criteria pollutants from in-use (on-road) diesel-fueled vehicles. For more information, see <a href="http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm">www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm</a> .			
	d. All commercial off-road and on-road diesel vehicles are subject, respectively, to 13 CCR Sections 2449(d)(3) and 2485, limiting engine idling time. Off-road vehicles subject to the State Off-Road Regulation are limited to idling no more than 5 minutes. Idling of heavy-duty diesel trucks during loading and unloading shall be limited to 5 minutes, unless the truck engine meets the optional low-NOx idling emission standard, the truck is labeled with a clean-idle sticker, and it is not operating within 100 feet of a restricted area.			
	e. Diesel equipment meeting the CARB Tier 3 or higher emission standards for off-road heavy-duty diesel engines shall be used to the maximum extent feasible.			
	f. On-road heavy-duty equipment with model year 2010 engines or newer shall be used to the maximum extent feasible.			
	g. Diesel-powered equipment shall be replaced by electric equipment whenever feasible. Electric auxiliary power units shall be used to the maximum extent feasible.			
	h. Equipment/vehicles using alternative fuels, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane, or biodiesel, shall be used on-site where feasible.			
	i. Catalytic converters shall be installed on gasoline-powered equipment, if feasible.			
	j. All construction equipment shall be maintained in tune per the manufacturer's specifications.			
	k. The engine size of construction equipment shall be the minimum practical size.			
	l. The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.			
	m. Construction worker trips shall be minimized by requiring carpooling and providing for lunch on-site.			

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
	<ul style="list-style-type: none"> <li>n. Construction truck trips shall be scheduled during non-peak hours to reduce peak hour emissions whenever feasible.</li> <li>o. Proposed truck routes shall minimize to the extent feasible impacts to residential communities and sensitive receptors.</li> <li>p. Construction staging areas shall be located away from sensitive receptors such that exhaust and other construction emissions do not enter the fresh air intakes to buildings, air conditioners, and windows.</li> <li>q. Prior to grading/building permit issuance and/or map recordation, all requirements shall be shown as conditions of approval on grading/building plans and/or on a separate sheet to be recorded with the map. Conditions shall be adhered to throughout all grading and construction periods. The contractor shall retain the Certificate of Compliance for CARB's In-Use Regulation for Off-Road Diesel Vehicles on-site and have it available for inspection. The Lead Agency shall ensure measures are on project plans and/or recorded with maps. The Lead Agency staff shall ensure compliance on-site. SBCAPCD inspectors will respond to nuisance complaints.</li> </ul>			
AQ-3	<b>Portable Diesel-Fired Construction Engines.</b> All portable diesel-fired construction engines rated at 50 brake horsepower or greater must have either statewide Portable Equipment Registration Program (PERP) certificates or Santa Barbara County Air Pollution Control District (SBCAPCD) permits prior to grading/building permit issuance. Construction engines with PERP certificates are exempt from SBCAPCD permits, provided they will be on-site for less than 12 months.	Obtain either statewide Portable Equipment Registration Program (PERP) certificates or Santa Barbara County Air Pollution Control District (SBCAPCD) permits, as applicable	Prior to grading/building permit issuance	City of Santa Maria
AQ-4	<p><b>Diesel Idling.</b> At all times, idling of heavy-duty diesel trucks shall be minimized and auxiliary power units shall be used whenever possible. State law requires that:</p> <ul style="list-style-type: none"> <li>a. Drivers of diesel-fueled commercial vehicles shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location.</li> <li>b. Drivers of diesel-fueled commercial vehicles shall not idle a diesel-fueled auxiliary power system (APS) for more than 5 minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle. Trucks with 2007 or newer model year engines must meet additional requirements (verified clean APS label required).</li> <li>c. These requirements shall be shown on grading/building plans and/or on a separate sheet to be required with the map and shall be adhered to throughout all grading and construction periods.</li> </ul>	All requirements to be shown on grading/building plans	During construction activities	City of Santa Maria

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
<b>Biological Resources</b>				
BR-1	<p><b>Worker Environmental Awareness Training.</b> Prior to the commencement of work, a qualified biologist shall conduct environmental awareness training for all construction personnel. The environmental awareness training shall include discussions of the special-status species that occur or have potential to occur in the project site. At a minimum, topics of discussion shall include:</p> <ul style="list-style-type: none"> <li>a. A description of the sensitive aquatic resources, special-status species potentially present, and the boundaries within which the project may be accomplished;</li> <li>b. Measures implemented to protect special-status species and potentially jurisdictional waters;</li> <li>c. Review of the project boundaries and special conditions;</li> <li>d. The monitor's role in project activities;</li> <li>e. Lines of communication; and</li> <li>f. Procedures to be implemented in the event a special-status species is observed in the work area.</li> </ul>	A qualified biologist shall conduct environmental awareness training for all construction personnel.	Prior to the commencement of work	City of Santa Maria
BR-2	<p><b>California Red-legged Frog and Western Spadefoot Toad.</b> To avoid potential impacts to dispersing California red-legged frog and western spadefoot, all work activities shall be restricted to dry periods or periods of low rainfall (less than 1/4-inch precipitation per 24-hour period).</p> <ul style="list-style-type: none"> <li>a. The City of Santa Maria shall monitor the National Weather Service (NWS) 72-hour forecast for the project site. If a 70% or greater chance of rainfall is predicted within 24 hours of project activity, the project will be delayed until dry conditions resume.</li> <li>b. If rain exceeds 1/2 inch during a 24-hour period, all work activities adjacent to the ditch shall cease until it is no longer raining, and no further rain is forecast.</li> <li>c. If work activity is stopped for a significant rain event, a qualified biologist shall conduct a preconstruction survey of the work areas prior to construction resuming.</li> <li>d. If a California red-legged frog is found in the work area all construction activities shall stop and the U.S. Fish and Wildlife Service shall be contacted immediately for consultation.</li> </ul> <p>If a western spadefoot is found in the project site, the qualified biologist shall capture and relocate the species, and any other amphibians or reptiles found within the work areas, to suitable habitat outside of the area of impact.</p>	Restrict all work to dry periods or periods of low rainfall. If amphibians or reptiles are found in the project site, the qualified biologist shall capture and relocate the species.	During construction activities	City of Santa Maria

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
BR-3	<b>Tricolored Blackbird Survey.</b> Project activities shall be timed to avoid the normal bird breeding season for tricolored blackbirds (February 1–September 15). However, if project activities must take place during that time, a qualified wildlife biologist shall conduct surveys for nesting tricolored blackbirds no more than 10 days prior to the start of implementation to evaluate presence/absence of tricolored blackbird nesting colonies within 300 feet of project activities and to evaluate potential project-related impacts.	Limit project activities to avoid the normal bird breeding season for tricolored blackbirds (February 1–September 15). If project activities must take place during that time, a qualified wildlife biologist shall conduct nesting preconstruction surveys.	During construction activities; no more than 10 days prior to project activities.	City of Santa Maria
BR-4	<b>Tricolored Blackbird Avoidance.</b> If an active tricolored blackbird nesting colony is found during preconstruction surveys, a minimum 300-foot no-disturbance buffer in accordance with the California Department of Fish and Wildlife <i>Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agriculture Fields in 2015</i> (California Department of Fish and Wildlife 2015). This buffer shall remain in place until the breeding season has ended or until a qualified biologist has determined that nesting has ceased, the birds have fledged, and the birds are no longer reliant upon the colony or parental care for survival. It is important to note that tricolored blackbird colonies can expand over time and for this reason, the colony shall be reassessed to determine the extent of the breeding colony within 10 days of project initiation.	Implement a minimum 300-foot no-disturbance buffer.	During construction activities	City of Santa Maria
BR-5	<b>Tricolored Blackbird Take Authorization.</b> In the event that a tricolored blackbird nesting colony is detected during surveys, the City of Santa Maria shall consult with the California Department of Fish and Wildlife to discuss how to implement the project and avoid take, or if avoidance is not feasible, to acquire an Incidental Take Permit, pursuant to California Fish and Game Code Section 2081(b), prior to any ground-disturbing activities.	Consult with the California Department of Fish and Wildlife to avoid take, or if avoidance is not feasible, to acquire an Incidental Take Permit.	Prior to any ground-disturbing activities	City of Santa Maria
BR-6	<b>Nesting Bird Surveys.</b> If construction activities involving ground disturbance or vegetation removal are proposed during the typical nesting bird season (February 1–September 15), a nesting bird survey shall be conducted by a qualified biologist no more than 10 days prior to the start of ground disturbance to determine presence/absence of nesting birds. Surveys shall cover all areas potentially affected by the project via direct impacts (e.g., nest destruction) or indirect impacts (e.g., noise, vibration, odors, movement of workers or equipment, etc.). If absence of nesting birds is verified, construction can proceed. If nesting activity is detected, the following measures shall be implemented: a. <b>Buffer Establishment.</b> If an active bird nest is observed during preconstruction surveys or during construction, the qualified biologist shall determine an appropriate no-disturbance setback based on existing conditions and bird behavior. If an active tricolored blackbird nesting colony is found during preconstruction surveys, a 300-foot	If construction activities involving ground disturbance or vegetation removal are proposed during the typical nesting bird season, a nesting bird survey shall be conducted by a qualified biologist.	No more than 10 days prior to the start of ground disturbance	City of Santa Maria

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
	<p>no-disturbance buffer shall be implemented. These buffers shall remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.</p> <p>b. <b>Variance of Buffer Distances.</b> Variance from the no-disturbance buffers established above may be allowable when there is a compelling biological or ecological reason to do so, such as when the construction area would be concealed from a nest site by topography. Any variance from the no-disturbance buffers shall be advised and supported by a qualified biologist. CDFW may be contacted for technical assistance if recommended by the qualified biologist.</p> <p>c. <b>Nesting Monitoring.</b> If nest buffers are reduced, the biologist shall monitor any construction activities within the pre-determined setback distance. If nesting birds show any signs of disturbance, including changes in behavior, significantly reducing frequency of nests visits, or refusal to visit the nest, the biologist will stop work and increase the nest buffer. If appropriate on a case-by-case basis, as determined by the qualified biologist, nest monitoring may be reduced to weekly spot-check monitoring, at a minimum, if the biologist determines that the nesting birds have shown no signs of disturbance from construction activities and a continuation of the same types of construction activities are unlikely to disturb the nesting birds.</p> <p>d. <b>Nest Removal.</b> Nests, eggs, or young of birds covered by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGF) shall not be moved or disturbed until a qualified biologist has determined that the nest has become inactive or young have fledged and become independent of the nest.</p> <p>e. <b>Reporting.</b> A qualified biologist shall document all active nests and submit a letter report to the City of Santa Maria documenting project compliance with the MBTA, CFGF, and applicable project mitigation measures.</p>			
<b>Cultural Resources</b>				
CR-1	In the event that cultural resources are encountered during project activities, all ground-disturbing activities within a 25-foot radius of the find shall cease and the City of Santa Maria shall be notified immediately. Work shall not continue until a qualified archaeologist assesses the find and determines the need for further study. If the find includes Native American-affiliated materials, a local Native American tribal representative will be contacted to work in conjunction with the approved archaeologist to determine the need for further study. A standard inadvertent discovery	In the event that cultural resources are encountered during project activities, all ground-disturbing activities within a 25-foot radius of the find shall cease and the City of Santa Maria project manager shall be notified immediately.	During construction activities	City of Santa Maria



Stowell/Black Road Waterline Extension Project  
Mitigation Monitoring and Reporting Program

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
	clause shall be included in every grading and construction contract to inform contractors of this requirement.			
<b>Hydrology and Water Quality</b>				
WQ-1	<b>Silt Fencing.</b> Prior to the start of construction adjacent to the drainage ditches, a qualified biologist shall delineate the boundary of the ditch located along the southern side of West Stowell Road and monitor the installation of a silt fence to avoid impacts or accidental discharge into the ditch. A monitor shall conduct weekly inspections of the silt fence to make sure it remains in place along the segment of active work area and functions properly throughout the duration of construction. For each segment of the pipeline installation that is completed, the silt fence may be removed.	A qualified biologist shall delineate the boundary of the ditch located along the southern side of West Stowell Road and monitor the installation of a silt fence.	Prior to the start of construction	City of Santa Maria
<b>Transportation</b>				
TR-1	Prior to the implementation of any lane/road closures or detour routes, the City of Santa Maria and/or its project contractors shall provide notice to all emergency response providers likely to be affected by the closure and detours, including, but not limited to, the Santa Maria Fire Department and Santa Maria Police Department. The notice shall include the following information: dates of construction, location and anticipated duration of temporary lane/road closures and detours, and contact information, including the phone number and email address of the City of Santa Maria staff person responsible for responding to and addressing public complaints regarding access. The notice shall be provided at least 2 weeks prior to any planned road closure.	Provide notice to all emergency response providers likely to be affected by the closure and detours.	Prior to the implementation of any lane/road closures or detour routes	City of Santa Maria; project contractors