Taaffe/Elena/Moody Roads
Water Main Replacement Project

Initial Study / Mitigated Negative Declaration

Purissima Hills Water District

26375 Fremont Road

Los Altos Hills, CA 94022

August 2019

Prepared by MIG, Inc.
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San Jose, CA 95134

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Draft Mitigated Negative Declaration

Project: Taaffe/Elena/Moody Roads Water Main Replacement Project

Lead Agency/ Project Proponent: Purissima Hills Water District

Availability of Documents: The Initial Study for this Mitigated Negative Declaration is available for review at:

Purissima Hills Water District
26375 Fremont Road
Los Altos Hills, CA 94022

Contact: Patrick Walter, General Manager
Purissima Hills Water District
26375 Fremont Road, Los Altos Hills, CA 94022
Phone: 650-948-1217

PROJECT DESCRIPTION

The District is implementing water main replacements outlined in their Capital Improvement Program. These replacements, collectively called the "project," includes the replacement of approximately 9,000 linear feet (LF) of existing water mains along Elena Road, Taaffe Road, Vista Del Valle Court, Old Snakey Road, and Moody Road, in the town of Los Altos Hills. The majority of the proposed mains to be replaced are located within existing road right-of-way. A short segment is proposed as a "cross-country" route across open land owned by the District to connect to the Elena Pump Station.

The purpose of the project is to allow improved water flow from the Elena Pump Station to the Altamont tanks and will allow for overall system reliability in the event of an earthquake. Portions of the water main segments to be replaced are made of asbestos concrete, which is brittle and subject to severe damage during seismic events. Other segments consisting of cast iron pipe (CIP) will also be updated to ductile iron pipe (DIP) for increased reliability.

The District is the Lead Agency for the project.

PROPOSED FINDINGS

The District has reviewed the attached Initial Study and determined that the Initial Study identifies potentially significant project effects, but:

1. Revisions to the project plans incorporated herein as mitigation would avoid or mitigate the effects to a point where no significant effects would occur; and
2. There is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment. Pursuant to California Environmental Quality Act (CEQA) Guidelines Sections 15064(f)(3) and 15070(b), a Mitigated Negative Declaration has been prepared for consideration as the appropriate CEQA document for the project.

BASIS OF FINDINGS

Based on the environmental evaluation presented in the attached Initial Study, the project would not cause significant adverse effects related to aesthetics, agricultural and forestry resources, air quality, energy, geology/soils, greenhouse gas emissions, hazards/hazardous materials, land use/planning, mineral resources, noise, population/housing, public services, recreation, transportation, utilities/service systems, and wildfire. The project does not have impacts that are individually limited, but cumulatively considerable.

The environmental evaluation has determined that the project would have potentially significant impacts on biological, cultural and tribal cultural resources as described below.

Mitigation Measures

The project could result in significant adverse effects to biological resources, cultural resources, and tribal cultural resources. However, the project has been revised to include the mitigation measures listed below, which reduce these impacts to a less-than-significant level. With implementation of these mitigation measures, the project would not substantially degrade the quality of the environment, reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or substantially reduce the number or restrict the range of a rare or endangered plant or animal. Nor would the project cause substantial adverse effects on humans, either directly or indirectly.

Mitigation Measures Incorporated into the Project:

Mitigation Measure BIO-1: A qualified biologist will conduct a pre-construction survey within the project footprint between the water tank and Elena Road for the presence of CRLF. The survey will be conducted immediately prior to the start of project activities, including vegetation removal, grubbing, grading, installation of fencing, and construction. If any CRLF are found, work will not commence until the appropriate state and/or federal resource agencies are contacted and avoidance measures are in place.

If an animal is found at the work site after the survey has been completed and is believed to be a protected species, work must be stopped, and the project biologist be contacted for guidance. Care must be taken not to harm or harass the species. No wildlife species will be handled and/or removed from the project footprint by anyone except a qualified biologist.

The contractor shall avoid the use of monofilament netting, including its use in temporary and permanent erosion control materials to avoid entanglement and entrapment of wildlife. All holes greater than one-foot deep must be sealed overnight to prevent the entrapment of wildlife. Where holes or trenches cannot be sealed, escape ramps that are no greater than 30% slope will be positioned such that entrapped wildlife will be able to escape. The escape ramps should be at least one-foot wide and covered/fitted with a material that provides traction.

Open trenches or holes for CRLF and other special-status species will be inspected every day (by a biologist or a trained inspector/job foreman) before construction activities commence. If any special-status species are found, construction activities will not be allowed to start and the biologist shall consult USFWS and CDFW on an appropriate course of action.

Food items may attract wildlife onto the construction site, which will expose them to construction-related hazards. The construction site shall be maintained in a clean condition. All trash (e.g., food scraps, cans, bottles, containers, wrappers, and other discarded items) will be placed in closed containers and properly disposed of.

Mitigation Measure BIO-2: A biologist will provide environmental training for each of the workers trenching and installing the waterline between the water tank on Vista del Valle Court and Elena Road. The training will include a brief presentation to explain biological resources concerns to contractors, their employees, and any other personnel involved in construction of the alignment. The program will include the following: a description of relevant special-status species, nesting birds, and bats along with their habitat needs as they pertain to the project; a report of the occurrence of these species in the project vicinity, as applicable; an explanation of the status of these species and their protection under the federal and state regulations; a list of measures being taken to reduce potential impacts to natural resources during project

construction and implementation; and instructions if a special-status species is found onsite. A fact sheet conveying this information will be prepared for distribution to the above-mentioned people and anyone else who may enter the project footprint. Upon completion of training, employees will sign a form stating that they attended the training and agree to all the conservation and protection measures

Mitigation Measure BIO-3: To avoid impacts to nesting birds and violation of state and federal laws pertaining to birds, all construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) should occur outside the avian nesting season (that is, prior to February 1 or after September 15). If construction and construction noise occurs within the avian nesting season (from February 1 to September 15), all suitable habitats located within the project's area of disturbance including staging and storage areas plus a 250-foot (passerines) and 1,000-foot (raptor nests) buffer around these areas shall be thoroughly surveyed, as feasible, for the presence of active nests by a qualified biologist no more than five days before commencement of any site disturbance activities and equipment mobilization. If project activities are delayed by more than five days, an additional nesting bird survey shall be performed. Active nesting is present if a bird is building a nest, sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of the surveys shall be documented.

If pre-construction nesting bird surveys result in the location of active nests, no site disturbance and mobilization of heavy equipment (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, fence installation, demolition, and grading), shall take place within 250 feet of non-raptor nests and 1,000 feet of raptor nests, or as determined by a qualified biologist in consultation with the California Department of Fish and Wildlife, until the chicks have fledged. Monitoring shall be required to insure compliance with MBTA and relevant California Fish and Game Code requirements. Monitoring dates and findings shall be documented.

Mitigation Measure BIO-4: Fourteen (14) days prior to the start of construction activities in the portion of the alignment that crosses oak woodland (between Elena Road and the water tank), a qualified biologist will map all San Francisco dusky-footed woodrat houses within a 50-foot buffer around the project footprint. All mapped woodrat houses will be clearly marked with flagging to avoid physical disturbance of the woodrat house from construction activities. A 10-foot radius buffer will be marked around each woodrat house found within fifty feet of project activities. The buffers shall be left undisturbed and no construction activities or staging of equipment shall take place within the buffer areas.

Mitigation Measure BIO-5: At least five days before the start of construction-related activities in the alignment that crosses oak woodland between the water tank at Vista del Valle Court and Elena Road a biologist shall conduct a pre-construction survey for bat roosts. Construction activities include mobilization and staging, clearing, grubbing, tree removal, vegetation removal, fence installation, demolition, and grading. If an occupied maternity or colony roost is detected, CDFW shall be consulted to determine appropriate measures if disturbance of the roost cannot be avoided. The results of the surveys shall be documented.

Mitigation Measure BIO-6: The District shall obtain and the contractor shall implement a tree protection plan from an arborist that includes measures and construction monitoring to protect mature trees during trenching in oak woodland.

Mitigation Measure CULT-1a: Prior to any ground disturbing activity, all supervisors and workers engaging in ground disturbing activity will receive cultural resource training from an archaeologist who meets the Secretary of the Interior's Standards for Archaeology. The training will describe the kinds of resources that the project could encounter and will help workers identify resources during excavation.

Mitigation Measure CULT-1b: All project plans shall clearly state that ground disturbing activities have the potential for the discovery of human remains.

Mitigation Measure CULT-1c: Archaeological monitoring shall be instigated for all ground disturbing activities along the Moody Road and Old Snakey Road segments of the alignment. An archaeologist who meets the Secretary of the Interior's Standards for Archaeology shall be present at the project site during ground disturbing activities, including machine or hand excavation. No ground disturbing activities, with the exception of road surface removal, shall be allowed to take place if the archaeologist is not present. An archaeological report meeting the Secretary of the Interior's Standards detailing the findings of the monitoring will be submitted to the Northwest Information Center after monitoring has ceased.

Mitigation Measure CULT-1d: All excavator machinery on Moody Road and Old Snakey Road shall use toothless buckets during ground disturbing activity to allow the monitoring archaeologist to more clearly identify archaeological features, if present.

Mitigation Measure CULT-1e: If archaeological remains from either a historic or prehistoric period are discovered (or have been suspected to have been discovered) during project construction, all ground disturbing work on the water main segment shall cease. An archaeologist shall assess the discovery before any additional ground disturbing work within the site shall be allowed to continue. If archaeological remains are found on the northern segment of water main, archaeological monitoring will be instigated for that segment. No further ground disturbing work shall be allowed to continue until the archaeologist has fully evaluated the find and permits work to continue. Dependent on the evaluation by the archaeologist, archaeological excavation and recordation may be required before construction can continue. An Archaeological Resource Treatment Plan (ARTP) will be written in consultation with the District.

If a newly discovered resource is, or is suspected to be, Native American in origin, a Native American cultural monitor will be retained, as directed by the NAHC. Additionally, the resource shall be treated as a significant Tribal Cultural Resource, pursuant to Public Resources Code 21074, until the County has determined otherwise with the consultation of a qualified archaeologist and local tribal representative.

Mitigation Measure CULT-1f: If human remains are unearthed during construction, the County Coroner will be notified immediately, and no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC shall then identify the person(s) thought to be the Most Likely Descendent (MLD). All applicable laws pertaining to the discovery of human remains will be followed.

Mitigation Measure TRIB-1: It is possible for a lead agency to determine that an artifact is considered significant to a local tribe, and thus considered a significant resource under CEQA, even if it would not otherwise be considered significant under CEQA. As such, all Native American tribal finds are to be considered significant until the lead agency has enough evidence to make a determination of significance.

WATER MAIN REPLACEMENT PROJECT INITIAL STUDY

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Chapter 1. Introduction

This Initial Study (IS) evaluates the potential environmental effects of replacing existing water mains within the Purissima Hills Water District's (District) service area in the Town of Los Altos Hills. These proposed activities constitute a project under the California Environmental Quality Act (CEQA).

The District is the CEQA Lead Agency for the project. No responsible agencies have been identified.

1.1 PROJECT BACKGROUND AND OVERVIEW

The District is implementing water main replacements outlined in their Capital Improvement Program. The project includes the replacement of approximately 9,000 linear feet (LF) of existing water mains along Elena Road, Taaffe Road, Vista Del Valle Court, Old Snakey Road, and Moody Road in the Town of Los Altos Hills. The majority of the mains to be replaced are located within existing road right-of-way. A short segment is proposed as a "cross-country" route across open land owned by the District to connect to the Elena Pump Station.

The project allows improved water flow from the Elena Pump Station to the Altamont tanks and improves system reliability in the event of an earthquake. Many of the mains being replaced were originally constructed in the 1960s when the area was first developed. Portions of the main segments are made of asbestos concrete (AC), which is brittle and subject to severe damage during seismic events. Other segments consisting of cast iron pipe (CIP) would also be updated to ductile iron pipe (DIP) for increased reliability.

1.2 REGULATORY GUIDANCE

The California Environmental Quality Act (CEQA; Public Resources Code § 21000 et seq.) and the CEQA Guidelines (14 CCR §15000 et seq.) establish the Purissima Hills Water District (District) as the lead agency for the project. The lead agency is defined in CEQA Guidelines Section 15367 as, "the public agency which has the principal responsibility for carrying out or approving a project." The lead agency is responsible for preparing the appropriate environmental review document under CEQA. The District's Board serves as the decision-making body for the District and is responsible for adopting the CEQA document and approving the project.

CEQA Guidelines Section 15070 states a public agency shall prepare a proposed Negative Declaration or a Mitigated Negative Declaration when:

1. The Initial Study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or
2. The Initial Study identifies potentially significant effects, but:
    - Revisions in the project plans made before a proposed Mitigated Negative Declaration and Initial Study are released for public review would avoid the effects or mitigate the effects to a point where no significant effects would occur, and
    - There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

Pursuant to Section 15070, the District has determined a Mitigated Negative Declaration is the appropriate environmental review document for the Water Main Replacement Project.

To ensure that the mitigation measures and project revisions identified in a Mitigated Negative Declaration are implemented, CEQA Guidelines Section 15097(a) requires the District to adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. The District shall

prepare a Mitigation, Monitoring and Reporting Plan based on the mitigation measures contained in this IS/MND.

1.3 LEAD AGENCY CONTACT INFORMATION

The lead agency for the project is the Purissima Hills Water District. The contact person for the lead agency is:

Patrick Walter, General Manager
Purissima Hills Water District
26375 Fremont Road, Los Altos Hills, CA 94022
Phone: 650-948-1217

1.4 DOCUMENT PURPOSE AND ORGANIZATION

The purpose of this document is to evaluate the potential environmental effects of the Water Main Replacement Project. This document is organized as follows:

- Chapter 1 – Introduction. This chapter introduces the project and describes the purpose and organization of this document.
- Chapter 2 – Project Description. This chapter describes the project location, area, site, objectives, and characteristics.
- Chapter 3 – Environmental Checklist and Responses. This chapter contains the Environmental Checklist that identifies the significance of potential environmental impacts (by environmental issue) and a brief discussion of each impact resulting from implementation of the proposed project. This chapter also contains the Mandatory Findings of Significance.
- Chapter 4 – Report Preparation. This chapter provides a list of those involved in the preparation of this document.

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Chapter 2. Project Description

2.1 PROJECT PURPOSE

The proposed project is to replace existing water mains to improve efficiency and reliability of potable water service in Los Altos Hills, California. The proposed improvements are planned improvements included in the District's 2018 Capital Improvement Program. Many of the mains to be replaced were installed in the 1960s and are susceptible to breaks.

2.2 PROJECT LOCATION

The project site is located in the Town of Los Altos Hills (Figure 2-1 Project Location) along portions of Elena Road, Taaffe Road, Vista Del Valle Court, and Moody Road (Figure 2-2 Project Vicinity). The site is generally located south of I-280 and west of Foothill College in a rural residential neighborhood consisting of single-family homes on large lots. Most of the improvements are located on or near Taaffe Road which is a narrow and curvy, two-lane road in the project area.

The Moody Road location is approximately 0.75 miles south from the Elena Road, Taaffe Road, and Vista del Valle Court alignments.

2.3 PROJECT FEATURES

Water Main Installation/Replacement

Approximately 9,000 linear feet (LF) of existing mains would be replaced using ductile iron pipe (DIP) and would occur at several locations in the same general vicinity. The new water mains would replace existing Cast Iron Pipe (CIP) or Asbestos Cement (AC) pipe. Water main replacements would occur in existing roadways along the following alignments. See also Figures 1 and 2. The length of total water main to be replaced/installed is approximately 9,000 LF (36,000 SF area of disturbance)

These project improvements are listed in the District's 2018 Capital Improvement Program (CIP) and are briefly described below.

Elena /Taaffe Road Intertie

This portion of the water main replacement connects the District's infrastructure with Cal Water infrastructure, located on Robleda Road southeast of the intersection of Taaffe Road and Elena Road. The purpose of the replacement provides system reliability and redundancy by providing access to an additional source of water (Cal Water) in the event of an emergency.

- Elena Road – Install 400 LF of new 8" DIP (Taaffe to 400 LF southeast of Taaffe/Elena intersection)
- Vista Del Valle Court – Replace 800 LF of 8"/10" CIP w/ 12" DIP (includes piping on Elena Tank Site)
- Vista Del Valle Court – Replace 250 LF of 6" AC w/ 8" DIP – abandon 200 LF 6" AC cross country

Taaffe Road Water Main Replacement

Hydraulic modeling performed by the District's engineers, Pakpour Engineering Group, revealed that maintaining a direct feed into the District's Altamont Tank is essential to maintaining water service throughout Zone 3 in the event of an earthquake or water main break. The modeling simulated water main breaks along certain alignments and the effects the breaks would have on tank cycle times (i.e. the number of hours needed to refill the storage tanks). In the summer months, a break in the water main on Taaffe Road between the Elena Tank site and Dezahara Way would result in nearly doubling the cycling time, indicating longer pump times. Under

catastrophic conditions with multiple main breaks, the District's Zone 3 would run out of water within 34 hours in the summer months.

Taaffe Road is the primary transmission main between the Elena Pump Station and the Altamont Tanks. Should this stretch of main become unusable following a seismic event, it would have a drastic effect on system operations and efficiency, even if other mains remain in service. Replacing the water mains and increasing their size (diameter) will improve system operations following a seismic event and reinforce the Zone 3 backbone.

- Taaffe Road – Replace 3,200 LF existing 8" AC w/ 12" DIP (Upper Dezahara to Vista Del Valle)
- Taaffe Road – Install 830 LF of new 8" DIP (Vista Del Valle to 26270 Taaffe driveway)
- Taaffe Road – Replace 350 LF of existing 6" CIP with 8' DIP (26270 Taaffe driveway to Elena Road)

Elena Tank Cross-Country Alignments

This project abandons an existing 200 foot 8" CIP and an existing 100 foot 12" CIP that connects the existing Elena Tank site with Elena Road on the northwest side of the existing tank. The existing 200 foot 8" CIP will be abandoned in-place while the 100 foot 12" CIP will either be removed to permit installation of the new water mains or also abandoned in place if feasible. Two new 12" DIP water mains will be installed along the existing alignment of the 100 foot 12" CIP. Several trees are located in the vicinity of the proposed water mains, however, it is anticipated that tree removal to accommodate the proposed water mains would not be required.

- Elena Tank Cross-Country – Abandon 200 LF 8" CIP and 100 LF 12" CIP and replace w/ 2-100 LF 12" DIPs (two pipes)

Elena Road North Water Main Replacement

The Elena Road North Water Main Replacement segment will connect the new cross-country Elena tank site water main segment with the existing water line in Elena Road, and would follow the road as it continues north until the intersection with La Barranca Road. Approximately 200 feet from the Elena Tank site, the road makes a hairpin turn. At this hairpin turn location, the water main would cross above a storm drain culvert located approximately 12 feet below ground elevation. The water main trench will be dug to a depth of approximately 4 feet, therefore 8 feet of clearance would remain between the top of the culvert and the bottom of the proposed water main trench. Typical cross sections and this specific storm drain crossing cross section are shown in Figure 3.

- Elena Road – Replace 1,700 LF of 8" CIP w/ 12" DIP (La Barranca to Elena Tank Cross Country)

Remaining Water Main Replacements

The remaining segments of water mains listed above would support normal replacement functions and essentially replace older water mains with new water main materials to maintain reliability or eliminate short segments of cross-country alignment.

- Old Snakey Road – Install 300 LF of 8" DIP to allow abandonment of 120 LF of 8" CIP cross-country between Old Snakey Road and Moody Road
- Moody Road – Replace 600 LF of 8" CIP w/ 8" DIP (between Old Snakey Road and Francemont Road)

- Moody Road – Replace 400 LF of 8" CIP w/ 8" DIP (between Rhus Ridge and Moody Springs Ct)

Abandoned Segments

Several short segments of existing water main will be abandoned in favor of replacement water mains within existing road right-of-way. The segments to be abandoned currently cross open space (i.e. are "cross-country alignments"), therefore, the replacement of these water mains within the right-of-way would provide easier access for maintenance. The water mains would be abandoned (left) in place and grout sealed.

Construction

The water main replacements are proposed to be installed with open trench installation. The water mains are typically installed with three (3) feet of cover (top of the pipe is 3 feet below the ground surface). Therefore, a trench would be dug, approximately two (2) feet wide and four (4) feet deep along the length of the alignment. Upon water main installation, a four (4) foot wide section of asphalt centered over the trench will be replaced. The cross-country area will be dug approximately five (5) feet wide to permit dual 12" water main installation. The area of disturbance is calculated at approximately 36,000 square feet.

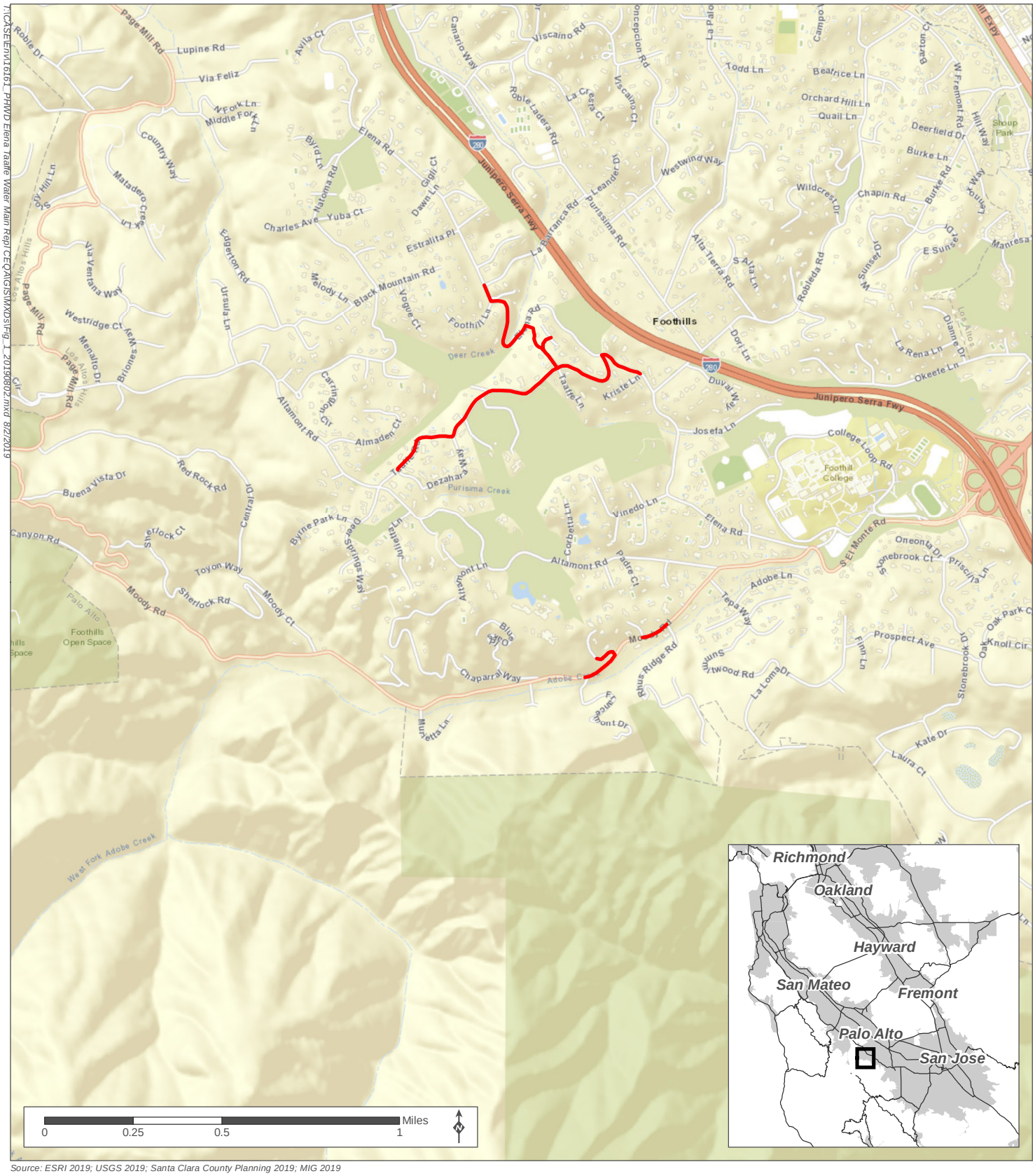
Construction is planned to begin in the Winter of 2019. The water main installation can be accomplished at a rate of approximately 100 to 200 feet per day and is therefore expected to last approximately eight (8) months. The expected construction equipment type and numbers of days in use on the project are as follows:

Project Construction Equipment Estimates		
Equipment Type	**No. on Site**	**No. of Working Days In Use**
Loader (duals as an excavator)	2	~150
Paver	1	~15
Roller	2	~15
F-250 Trucks	4	~150
End Dump Trucks	2-3	~150

Total off-haul is estimated at approximately 3,000 cubic yards (length of trench (approximately 9,000 linear feet) by cross sectional area (9 square feet) on average). Assuming 9 cubic yard capacities, this would result in approximately 350 trips for the off-haul of spoils and material deliveries over the eight-month construction period.

Partial and full road closures during construction hours are anticipated to accommodate the water main installation due to narrow road widths in the area. Resident and emergency vehicle traffic would be allowed access during full road closures. Construction hours would be limited to 8:00 A.M. to 5:00 P.M. Monday through Friday, within with the Towns Municipal Code construction hours limitation. No work is planned on Saturdays or Sundays. The District will require the contractor to stop active construction activities at 3:00 P.M. in order to allow for site clean up time to reopen the roadway to traffic by 5:00 P.M.

The project specifications will require the contractor to prepare a traffic control plan which will be reviewed by the Town of Los Altos Hills. The plan generally includes provisions for notification of neighbors, flaggers, signing, barricades, detours, access to private property, maintaining emergency vehicle access, etc.



Source: ESRI 2019; USGS 2019; Santa Clara County Planning 2019; MIG 2019

Project Site Alignment

Figure 1 Project Location

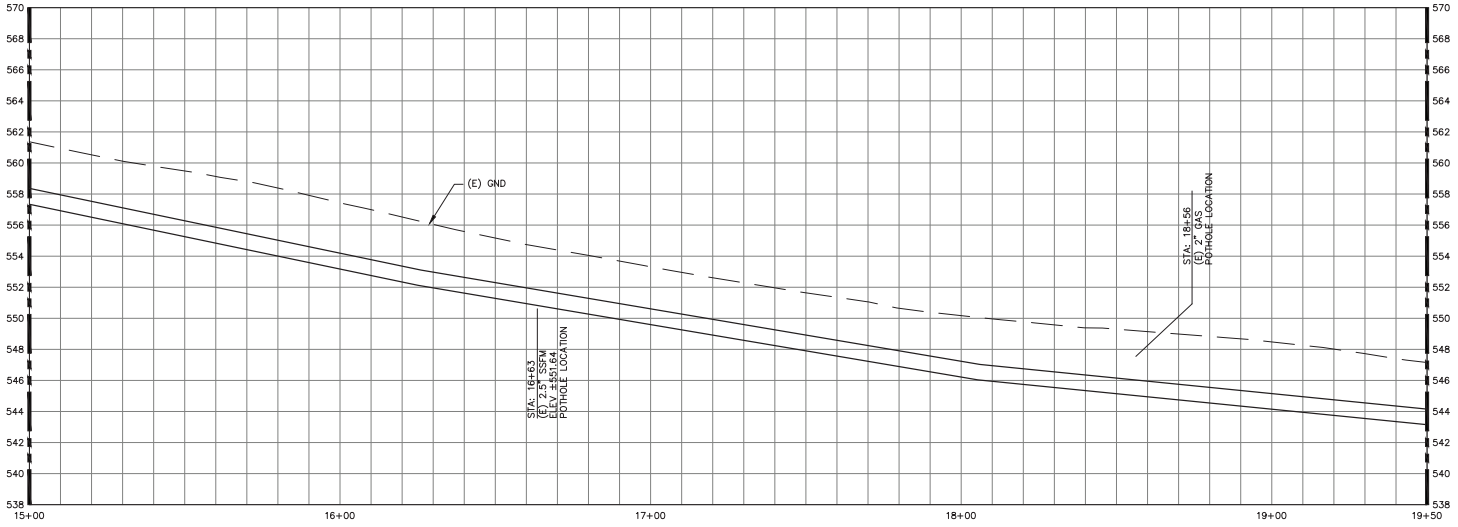
Water Main Replacement Project

Source: ESRI 2019; USGS 2019; Santa Clara County Planning 2019; MIG 2019

Project Site Alignment

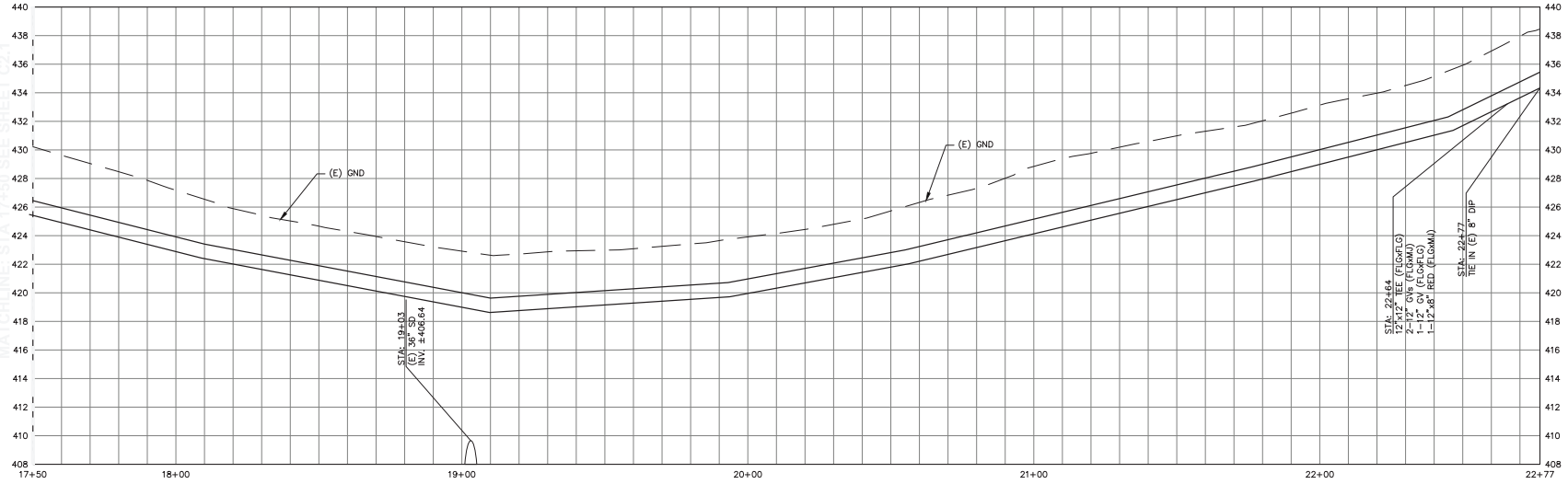
Figure 2 Project Vicinity

Water Main Replacement Project



Source: Pakpour Consulting Group Inc. 2019

Typical profile view of excavation depths/slopes.



Source: Pakpour Consulting Group Inc. 2019

North water main replacement showing approximately 8' of clearance above underground culvert.

Figure 3 Excavation Profile View

Water Main Replacement Project

Figure 4 Site Photographs

1. View Elena Tank looking south.

2. View from Elena Tank site looking south along entrance road toward Vista Del Valle Court.

3. View from Elena Tank site looking north along proposed cross-country water main route to Elena Road.

4. View looking south down Vista del Valle Court to Taaffe Road.

5. View of Taaffe Road looking west (uphill) from lower Dezahara Way intersection

6. View of Taaffe Road looking east (downhill) from lower Dezahara Way intersection

7. View of Taaffe Road looking west (uphill) just west of Elmberg Ridge Road

8. View of Taaffe Road looking east (downhill) just west of Elmberg Ridge Road

9. View of Elena Road looking northwest from Taaffe Road intersection

10. View of Elena Road looking southeast from Taaffe Road intersection

11. View of Moody Road looking west from Rhus Ridge Road intersection

12. View looking south on Old Snakey Road towards Moody Road.

2.4 BEST MANAGEMENT PRACICES / CONDITIONS OF APPROVAL

The District has incorporated the following Best Management Practices (BMPs) into the planning, design, construction, operation, and maintenance of the proposed project to minimize the potential adverse effects of the project on the surrounding community and the environment. These BMPs are considered a part of the project and are not considered mitigation measures.

Table 2-1: Best Management Practices

Impact Section	Best Management Practice
Air Quality	To reduce potential fugitive dust that may be generated by project construction activities, the District or its contractor shall implement the following BAAQMD basic construction measures when they are appropriate: • Water all exposed surfaces (e.g., staging areas, soil piles, graded areas, and unpaved access roads) during construction as necessary and adequately wet demolition surfaces to limit visible dust emissions. • Cover all haul trucks transporting soil, sand, or other loose materials off the project site. • Use a wet power vacuum street sweeper as necessary to remove all visible mud or dirt track-out onto adjacent public roads (dry power sweeping is prohibited) during construction of the proposed project. • Vehicle speeds on unpaved roads/areas shall not exceed 15 miles per hour. • Complete all areas to be paved as soon as possible. • Minimize idling time of diesel-powered construction equipment to five minutes and post signs reminding workers of this idling restriction at access points and equipment staging areas during construction of the proposed project. • Maintain and properly tune all construction equipment in accordance with manufacturer's specifications and have a CARB-certified visible emissions evaluator check equipment prior to use at the site. • Post a publicly visible sign with the name and telephone number of the construction contractor and District-staff person to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. The publicly visible sign shall also include the contact phone number for the Bay Area Air Quality Management District to ensure compliance with applicable regulations.
Hydrology/Water Quality	The District will require preparation and implementation of an erosion control plan or SWPPP during construction. The plan would include the following provisions, as applicable: • All construction equipment will be well-maintained and kept in good working order so no vehicle fluids are leaked or dripped on-site. • Construction equipment will be re-fueled and maintained away from creeks, roadside drainages and unpaved areas (Neary tank site).

	• The contractor will have on hand at all times sufficient quantities of absorbent materials to clean up the largest possible spill of construction fuels or fluids. • The contractor would use of fiber rolls, sand bags/filter covers for drains, plastic over stock piles, and track out control for the construction yard to prevent erosion and sedimentation. • Should a rain event occur during construction storm water runoff will be directed away from open trenches and around stockpiles of soil materials. Stockpiles of soil materials shall be covered to prevent erosion during a storm event.
Noise	Construction and Hours Limitations – Standard District procedure limits the contractor construction operations to Monday through Friday, 8:00 AM to 5:00 PM, with no construction allowed on Saturday or Sunday. Standard District procedures require contractors to stop laying additional pipe at 3 pm to ensure all construction activities can finish by 5:00 PM.
Traffic Control Plan	The plan generally includes provisions for notification of neighbors, flaggers, signing, barricades, detours, access to private property, maintaining emergency vehicle access, etc. The plan shall be reviewed by the Town of Los Altos Hills.

2.5 REQUIRED APPROVALS

The District is both the proponent and the Lead Agency for the proposed project. No other agency permitting is required for the project.

Chapter 3. Environmental Checklist and Responses

1. **Project Title:** Taaffe/Elena/Moody Roads Water Main Replacement Project
2. **Lead Agency Name and Address:** Purissima Hills Water District, 26375 Fremont Road, Los Altos Hills, CA 94022
3. **Contact Person and Phone Number:** Patrick Walter - General Manager, (650) 948-1217
4. **Project Location:** Elena Road, Taaffe Road, Vista Del Valle Court, Moody Road, Old Snakey Road, Los Altos Hills, California.
5. **Project Sponsor's Name and Address:** Same as Lead Agency
6. **General Plan Designation:** Road right-of-way and Elena tank site - Residential
7. **Zoning:** N/A, and R-A (Residential Agricultural)
8. **Description of the Project:** The proposed project consists of the installation and replacement of existing water main facilities.
9. **Surrounding Land Uses and Setting:** The proposed water main improvements will be installed in the Town of Los Altos Hills within road right-of-way surrounded by single family estate residential development.
10. **Other public agencies whose approval is required:** None.
11. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?** The District has not received any request from a Native American tribe traditionally and culturally affiliated with the project area. Thus, no consultation has been conducted.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

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

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

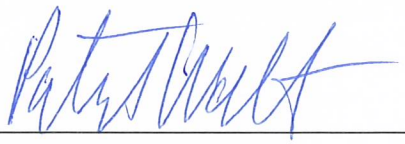
☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

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

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

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

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



Signature

August 19, 2019

Date

Patrick Walter

Printed Name

General Manager

Title

Purissima Hills Water District

Agency

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in 5. below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:
    a. Earlier Analysis Used. Identify and state where they are available for review.
    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation Measures. For effects that are "Less Than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources. A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
    a. the significance criteria or threshold, if any, used to evaluate each question; and
    b. the mitigation measure identified, if any, to reduce the impact to less than significance.

3.1 AESTHETICS

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

3.1.1 Environmental Setting

The project located in the Town of Los Altos Hills. Typical development in the areas near the proposed improvements include single family residences on large lots. Views are scenic in the area owing to the sparse development and abundant vegetation (landscaping and natural). All proposed improvements would be installed underground and not visible once installed.

3.1.2 Discussion

Would the project:

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

Less than Significant Impact. For purposes of determining significance under CEQA, a scenic vista is defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the public. Many of the roadway alignments contain scenic vistas of rolling grassy hillsides and oak woodlands. However, the proposed water mains would be installed underground in the existing roadways and would not be visible after project completion. Construction activities would have a short-term impact on scenic vistas along the project alignment; however, such activities would not be visible over a large area because of curves in the roadway, vegetation, and varying topography along the project roads restrict views to small portions of the alignment at a time. It is anticipated that some minor tree trimming may be necessary in the vicinity of the Elena Tank cross-country alignment water main installation. All disturbed areas would be returned to pre-project conditions following installation. Due to the short-term and small-scale nature of construction impacts to scenic vistas, this impact is considered less than significant.

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

No Impact. The project alignment is not visible from a state scenic highway. The closest state scenic highway to the alignment is Highway 280 (Caltrans 2011), located approximately 0.3 miles east of the closest part of the alignment (Moody Road). The alignment is not visible from Highway 280 due to intervening topography, vegetation and land uses (Foothill College, etc.). Therefore, the project would not damage scenic resources within a state scenic highway.

The Los Altos Hills General Plan considers all of the Town's roads as scenic roadways. All project elements within roadway alignments would be installed underground and thus would not damage scenic resources along the Town's roadways. As stated above, all disturbed areas would be returned to pre-project conditions following water main installation. Minor tree trimming would be performed under the supervision of an arborist. Because the project does not affect scenic resources within a state scenic highway, there would be no impact.

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

Less than Significant Impact. The proposed project would consist of installing or replacing existing infrastructure that is located underground and is not visible from public views. Construction equipment would be visible for the duration of construction, however the equipment is expected to move along the alignments as construction progresses. No tree removal is anticipated. The minor vegetation removal and tree trimming is anticipated in the cross-country alignment at the Elena tank site. This impact is temporary. No permanent significant change or degradation of the existing visual character or quality of the site is anticipated. There are temporary impacts to scenic resources in the area, therefore, the impact is considered less than significant.

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

No Impact. The proposed project would not include the installation of lights or involve any night time construction.

3.1.3 References

California Department of Transportation. 2019. Scenic Highways, Santa Clara County. Accessed on February 20, 2019 at http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/

Los Altos Hills, Town of. 2007. Town of Los Altos Hills General Plan Update. Adopted April 26. http://www.losaltoshills.ca.gov/documents-forms/browse/cat_view/61-general-plan, accessed June 26, 2019.

3.2 AGRICULTURAL AND FOREST RESOURCES

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

3.2.1 Environmental Setting

The project site is located in the Town of Los Altos Hills and the majority of project improvements would occur within existing road right-of-way. The one proposed cross-country alignment is on District owned land and is adjacent to Elena Road. The California Department of Conservation Farmland Mapping and Monitoring Program identifies the area as Urban and Built-up Land.

3.2.2 Discussion

Would the project:

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

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

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

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

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

No Impact (Responses a – e). There are no forest lands or agricultural lands that would be impacted by construction activities. All construction activities are confined to roadway right-of-way and cross-country segments that are not in agricultural or forestry use. The project would not convert or cause the conversion of any farmland or forest land to a non-agricultural/non-forest use. The proposed project would not impact Prime Farmland, Unique Farmland, Farmland of Statewide Importance, forest land, or land under a Williamson Act contract. Thus, the project would not result in impacts to any agricultural or forestry resources.

3.2.3 References

Town of Los Altos Hills, 2007. Los Altos Hills General Plan. Land Use Element.

3.3 AIR QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:*				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐
*Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.				

3.3.1 Environmental Setting

Air quality is a function of pollutant emissions, and topographic and meteorological influences. The physical features and atmospheric conditions of a landscape interact to affect the movement and dispersion of pollutants and determine its air quality.

Federal, state, and local governments control air quality through the implementation of laws, ordinances, regulations, and standards. The federal and state governments have established ambient air quality standards for "criteria" pollutants considered harmful to the environment and public health. National Ambient Air Quality Standards (NAAQS) have been established for carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO2), ozone (O3), fine particulate matter (particles 2.5 microns in diameter and smaller, or PM2.5), inhalable coarse particulate matter (particles 10 microns in diameter and smaller, or PM10), and sulfur dioxide (SO2). California Ambient Air Quality Standards (CAAQS) are more stringent than the national standards for the pollutants listed above and include the following additional pollutants: hydrogen sulfide (H2S), sulfates (SOX), and vinyl chloride. In addition to these criteria pollutants, the federal and state governments have classified certain pollutants as hazardous air pollutants (HAPs) or toxic air contaminants (TACs), such as asbestos and diesel particulate matter (DPM).

The proposed project is located in the San Francisco Bay Area Air Basin (SFBAAB), an area of non-attainment for national and state ozone, state particulate matter (PM10), and national and state fine particulate matter (PM2.5) air quality standards (BAAQMD 2017a). The Bay Area Air Quality Management District (BAAQMD) has jurisdiction over air quality in the SFBAAB.

Existing Emissions Sources

Motor vehicles are the primary source of air pollution in the project area; although the project alignment is in a rural residential area and the project roads do not experience high traffic volumes. Other sources of emissions in the project area include road dust, construction, and grading activities, wood-burning stoves, and fireplaces (Town of Los Altos Hills 2009).

Sensitive Receptors

Sensitive receptors along the project alignment include adjacent residences and users of open space areas near the alignment. Single-family residences are present at low density adjacent to all the project roads including Taaffe Road, Elena Road, Vista Del Valle Court, Moody Road, and Old Snakey Road. Open space areas near to the alignment include the Byrne Preserve located northwest of Taaffe Road, the Rhus Ridge Preserve located south of the Moody Road alignment, and the Rancho San Antonio Open Space Preserve bordering the Town to the South.

3.3.2 Regulatory Setting

In-Use Off-Road Diesel Vehicle Regulation

On July 26, 2007, CARB adopted a regulation to reduce DPM and NO_x emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. Such vehicles are used in construction, mining, and industrial operations. This regulation applies to all off-road diesel vehicles over 25 horsepower (hp) used in California and most two-engine vehicles (except on-road two-engine sweepers), which are subject to the *Regulation for In-Use Off-Road Diesel Fueled Fleets (Off-Road regulation).* Additionally, vehicles that are rented or leased (rental or leased fleets) are included in this regulation.

The Off-Road regulation:

- Imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles;
- Requires all off-road diesel vehicles over 25-horsepower be reported to CARB (using the Diesel Off-Road Online Report System DOORs) and labeled;
- Restricts the adding of older vehicles into fleets; and,
- Requires fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies, VDECS (i.e., exhaust retrofits).

Bay Area Air Quality Management District

The BAAQMD is the agency primarily responsible for maintaining air quality and regulating emissions of criteria and toxic air pollutants within the SFBAAB. The BAAQMD carries out this responsibility by preparing, adopting, and implementing plans, regulations, and rules that are designed to achieve attainment of state and national air quality standards.

On April 19, 2017, the BAAQMD adopted the *2017 Clean Air Plan: Spare the Air, Cool the Climate* (*Clean Air Plan*), which updates the District's *2010 Clean Air Plan*, and continues to provide the framework for assuring that the NAAQS and CAAQS would be attained and maintained in the Bay Area in compliance with state and federal requirements (BAAQMD 2017c). The BAAQMD's 2017 *Clean Air Plan* is a multi-pollutant plan focused on protecting public health and the climate. Specifically, the primary goals of the 2017 Clean Air Plan are to:

- Attain all state and national quality standards;
- Eliminate disparities among Bay Area communities in cancer health risk from toxic air contaminants; and
- Reduce Bay Area GHG Emissions to 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050.

The *Clean Air Plan* includes 85 distinct control measures to help the region reduce air pollutants and has a long-term strategic vision which forecasts what a clean air Bay Area will look like in the year 2050. The control measures aggressively target the largest source of GHG, ozone pollutants,

and particulate matter emissions – transportation. The 2017 Clean Air Plan includes more incentives for electric vehicle infrastructure, off-road electrification projects such as Caltrain and shore power at ports, and reducing emissions from trucks, school buses, marine vessels, locomotives, and off-road equipment.

3.3.3 Discussion

Would the proposed project:

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

No Impact. The proposed project would not conflict with nor obstruct implementation of the BAAQMD *2017 Clean Air Plan*. The *2017 Clean Air Plan* includes increases in regional construction, area, mobile, and stationary source activities, and operations in its emission inventories and plans for achieving attainment of air quality standards. Chapter 5 of the 2017 Clean Air Plan contains the BAAQMD's strategy for achieving the plan's climate and air quality goals. This control strategy is the backbone of the *2017 Clean Air Plan*.

The proposed project consists of construction activities and would not emit operational criteria air pollutant upon its completion. The control measures in the *2017 Clean Air Plan* do not apply to the proposed project and, therefore, the proposed project would not conflict with the *2017 Clean Air Plan*. No impact would occur.

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

Less Than Significant Impact. Emissions from the proposed project are those incurred during construction only. The project is the installation of water mains which do not result in operational emissions or additional long term operational trips. The project would not require demolition activities, extensive site preparation, material transport (i.e., greater than 10,000 cubic yards of soil import/export), or the simultaneous occurrence of more than two construction phases (e.g., grading and trenching and building construction, grading and paving and trenching). The proposed project anticipates 3,000 cubic yards of off-haul for trenched water main excavation spoils.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Sensitive residential receptors are located all around the project site. Project-related construction activities would emit PM2.5 from equipment exhaust. Nearly all the project's PM2.5 emissions from equipment exhaust would be diesel particulate matter (diesel PM), a TAC.

Water main installation is expected to progress at approximately 100 to 200 feet of installed water main per day. Sensitive receptors such as the neighboring residences along the water main alignment would not be exposed to substantial pollutant concentrations during construction (such as equipment and vehicle exhaust). This finding is based on the anticipated amount of equipment required for water main trenching, installation, and repaving, and taking into account that construction vehicles and equipment would remain near any one location for a relatively short time; typically from one (1) to three (3) days as construction progresses.

As described above, the project is below all BAAQMD construction emission thresholds and heavy-duty construction equipment would operate intermittently during the daytime along the water main alignment during weekday hours (typically 8 AM to 3 PM), installing approximately 100-200 linear feet of water main per day. The District would implement construction air quality BMPs (See Section 2.6), which requires the District's contractors to incorporate measures into the project that would reduce potential emissions of fugitive dust and limit diesel construction

equipment idling to no more than five minutes. The proposed project would not result in long-term increases in operational emissions. This impact would be less than significant.

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

Less Than Significant Impact. Construction of the project would generate typical odors associated with construction activities, such as fuel and oil odors. The odors generated by the project would be intermittent and localized in nature and would disperse quickly. There are no other anticipated emissions. Therefore, the project would not create emissions or odors that adversely affect a substantial number of people. This impact would be less than significant.

3.3.4 References

Bay Area Air Quality Management District (BAAQMD) 2017a. "Air Quality Standards and Attainment Status". BAAQMD, Research & Data, Air Quality Standards & Attainment Status. January 5, 2017. Accessed on October 3, 2017 at http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status.

_____2017b. Current Rules. BAAQMD. Accessed on December 12, 2017 at http://www.baaqmd.gov/rules-and-compliance/current-rules.

_____2017c. 2017 Clean Air Plan: Spare the Air, Cool the Climate. BAAQMD, Planning, Rules, and Research Division. April 19, 2017.

_____2017d. California Environmental Quality Act Air Quality Guidelines. San Francisco, CA. June 2010, updated May 2017.

3.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

3.4.1 Environmental Setting

The project alignments are in a rural residential area dominated by coast live oak woodland, in which coast live oak (Quercus agrifolia) is the dominant tree, but valley oak (Q. lobata), and blue oak (Q. douglasii) are also present. Understory species mainly include poison oak (Toxicodendron diversilobum), toyon (Heteromeles arbutifolia), and coyote brush (Baccharis pilularis). One alignment, from the water tank on Vista del Valle Court to Elena Road crosses through oak woodland and involves abandoning 100 feet of water main in place and trenching to install two 100-foot water mains in the same alignment. The alignment is sited between two valley oak trees and the remaining vegetation in the alignment is dominated by poison oak and coyote brush. The other alignments are in the roadbed of Elena Road, Taaffe Road, Vista Del Valle Court, Old Snakey Road and Moody Road and do not affect biological resources.

The water tank-to-Elena alignment is located south of Elena Road. Deer Creek is located north of Elena Road. Deer Creek flows from west of Elena Road, under I-280, then north along portions of Purissima Road to eventually cross Stanford lands and meet Matadero Creek at

Foothill Expressway. The Moody Road alignment is near Adobe Creek. Special-status species are known to occur in the Deer-Matadero Creek watershed (see below), but are not expected in the Adobe Creek watershed (CNDDB 2019; NOAA Fisheries, pers. comm.).

Common reptile and amphibian species likely to occur in the project alignment between the water tank and Elena Road include western fence lizard (Sceloporus occidentalis), Northern alligator lizard (Elgaria coerulea) and gopher snake (Pituophis catenifer).

Bird species observed along the project alignment include Anna's hummingbird (Calypte anna), western scrub jay (Aphelocoma californica), American crow (Corvus brachyrhynchos), oak titmouse (Baeolophus inornatus), Bewick's wren (Thryomanes bewickii), wrentit (Chamaea fasciata), American robin (Turdus migratorious), spotted towhee (Pipilo maculatus), and song sparrow (Melospiza melodia). Other common bird species in the region include mourning dove (Zenaida macroura), Nuttall's woodpecker (Picoides nuttallii), black phoebe (Sayornis nigricans), chestnut-backed chickadee (Poecile rufescens), bushtit (Psaltriparus minimus), Northern mockingbird (Mimus polyglottos), yellow-rumped warbler (Dendroica coronata), California towhee (Pipilo crissalis), dark-eyed junco (Junco hyemalis) and house finch (Carpodacus purpureus), among others. Diurnal raptors common to the area include turkey vulture (Cathartes aura), sharp-shinned hawk (Accipiter striatus), Cooper's hawk (Accipiter cooperi), red-shouldered hawk (Buteo lineatus), red-tailed hawk (Buteo jamaicensis) and American kestrel (Falco sparverius); common nocturnal raptors include barn owl (Tyto alba) and great-horned owl (Bubo virginianus).

Common mammal species in the project area include Eastern fox squirrel (Sciurus niger), northern raccoon (Procyon lotor), Virginia opossum (Didelphis virginiana), striped skunk (Mephitis mephitis), and mule deer (Odocoileus hemionus). One special status mammal species, the San Francisco dusky-footed woodrat (Neotoma fuscipes annectens), also commonly occurs in this area.

Special-Status Species

Amphibians and Reptiles

California red-legged frog

California red-legged frog (CRLF) is federally listed as threatened and is designated by the state as a Species of Special Concern. CRLF occurs in different habitats depending on life stage, season, and weather conditions. CRLF typically uses a variety of aquatic habitats (e.g., ephemeral ponds, intermittent streams, seasonal wetlands, springs, seeps, perennial creeks, artificial ponds, marshes, dune ponds, and lagoons), as well as riparian and upland habitats. The common factor among habitats where CRLF occurs is the association with a permanent water source. California red-legged frog is thought to disperse widely during autumn, winter, and spring rains. Juveniles use the wet periods to expand outward from their pond of origin and adults may move between aquatic areas. These frogs disperse through many types of upland vegetation and use a broader range of habitats outside of breeding season. CRLF is recorded to occur in Deer Creek and Matadero Creek on Stanford lands, downstream of the project site. The alignment between the water tank and Elena Road is 200-300 feet uphill of Deer Creek. The alignment along Elena Road crosses a culverted portion of Deer Creek but will be in the roadbed several feet above the depth of the culvert. The project will not impact Deer Creek, which may provide breeding habitat or CRLF.

Based on the presence of suitable dispersal habitat near a creek that has been documented to support CRLF, it is assumed that CRLF could be found in the alignment in oak woodland between the water tank and Elena Road. No CRLF were observed during the field survey.

Western pond turtle

Western pond turtle (WPT; *Emys marmorata*) is designated as a California Species of Special Concern. WPT is often seen basking above the water and will quickly slide into the water when it feels threatened. The species is active from around February to November and may be active during warm periods in winter. Western pond turtle hibernates underwater, often in the muddy bottom of a pool and may estivate during summer droughts by burying itself in soft bottom mud. When creeks and ponds dry up in summer, some turtles that inhabit creeks will travel along the creek until they find an isolated deep pool, others stay within moist mats of algae in shallow pools while many turtles move to woodlands above the creek or pond and bury themselves in loose soil where they will overwinter.

Pond turtles are normally found in and along riparian areas, although gravid (egg bearing) females have been reported up to a mile away from water in search of appropriate nest sites. The preferred habitat for these turtles includes ponds or slow-moving water with numerous basking sites (logs, rocks, etc.), food sources (plants, aquatic invertebrates, and carrion), and few predators (raccoons, introduced fishes, and bullfrogs). Typically, the female excavates a nest in hard-packed clay soil in open habitats (usually on south-facing slopes) within a few hundred yards of a watercourse.

WPT has been reported to occur in Matadero Creek (Stanford University, 2013), and it is assumed that it could occur in Deer Creek, which crosses under the Elena Road alignment. Due to a lack of suitable habitat WPT is not expected to occur in the project alignments.

Birds

Migratory birds and raptors

Nesting birds likely inhabit the dense shrub and tree cover surrounding the project alignments, particularly in the section between the water tank and Elena Road, wher. ample nesting materials and nesting sites are available. The majority of bird species are protected under the Migratory Bird Treaty Act (MBTA) and all bird species are protected under California Fish and Game code.

White-tailed kite

The white-tailed kite (*Elanus leucurus*; WTKI) is a medium-sized raptor that is found throughout the United States and is a year-round breeding resident in California. It is a fully protected species under §5050 of the California Fish and Game Code. WTKI is common to uncommon and a yearlong resident in coastal and valley lowlands. It is found year-round in San Mateo and Santa Clara counties. This species nests in tree tops in a dense canopy, generally in riparian woodland, and forages in undisturbed, open grasslands, meadows, farmlands and emergent wetlands. WTKI could occur in the project area.

Long-eared owl

The long-eared owl (*Asio otus*) is a strictly nocturnal owl that is widely distributed throughout the Northern Hemisphere. It is a California Species of Special Concern. In California, it is known to breed along the western foothills of the Sierra Nevada and in the Coast Ranges from Sonoma County south to Santa Barbara County. It is a rare breeding resident in Santa Clara County. It is known to breed in Foothills Preserve and Monte Bello Open Space Preserve.

Within Santa Clara County, long-eared owls generally nest along streams and creeks with dense canopies. This species also requires open uncultivated lands near their riparian nest sites for forage. Long-eared owl could occur in the project area.

Mammals

San Francisco dusky-footed woodrat

San Francisco dusky-footed woodrat is designated by the state as a Species of Special Concern. Wood rats occupy forest habitats of moderate canopy and moderate to dense understory. Dusky-footed woodrats are known for their large terrestrial stick houses, some of which are maintained by successive generations for twenty or more years. Houses typically are placed on the ground against or straddling a log or exposed roots of a standing tree, and are often located in dense brush. Nests are also placed in the crotches and cavities of trees and in hollow logs. Sometimes arboreal nests are constructed but this behavior seems to be more common in habitat with evergreen trees such as live oak.

San Francisco dusky-footed woodrat houses are present about 150 feet from the proposed trench between the water tank at Vista del Valle Court and Elena Road, but no houses were found in the alignment.

Townsend's big-eared bat

Townsend's big-eared bat (*Corynorhinus townsendii*) is a California Species of Special Concern. It is a medium-sized bat with extremely long, flexible ears, and small yet noticeable lumps on each side of the snout. It is found in a variety of habitats from forests to desert scrub. It prefers to roost in open caves; however, it will use a variety of other roost types, particularly abandoned buildings, mines, and tunnels. When roosting it does not tuck into cracks and crevices like many bat species but prefers large open areas. This species is sensitive to disturbance and it has been documented to abandon roost sites after human disturbance.

Townsend's big-eared bat hibernates throughout its range during winter months when temperatures are between 0°C and 11.5 degrees Celsius (32-53 degrees Fahrenheit). While hibernating, it hangs alone or in small groups in the open, with fur erect to provide maximum insulation and with ears coiled back. These bats emerge late in the evening to forage and are swift, highly maneuverable fliers. Prey items include small moths, flies, lacewings, dung beetles, and sawflies.

Townsend's big-eared bat has been documented to occur in Santa Clara County. This species may roost within large tree cavities in both riparian and upland habitats. This species may occur in the project area.

Western red bat

Western red bat (*Lasiurus blossevillii*) is a California Species of Special Concern. It roosts primarily in tree foliage, especially in cottonwood, sycamore, and other riparian trees, or in orchards. The bat prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging, including grasslands, shrublands, and open woodlands. They are solitary by nature but will gather in larger nursery roosts during the summer.

Western red bat has been documented to occur in Santa Clara County, and could occur in the project area.

Other bat species

Bats tend to forage and roost near water sources. Therefore, bat species have the potential to roost and forage within the riparian corridors of Deer Creek and Adobe Creek, near the project alignments. Bat species that could occur in the area include hoary bat (*Lasiurus cinereus*), California myotis (*Myotis californicus*), Yuma myotis (*Myotis yumanensis*), long-eared myotis (*Myotis evotis),* fringed myotis (*Myotis thysanodes),* long-legged myotis (*Myotis volans*), big brown bat (*Eptesicus fuscus*), and western pipistrelle (*Pipistrellus hesperus*).

Bats are protected under California Fish and Game Code as non-game mammals. Disturbance of maternity colonies (April to August) of any species of bat could be considered significant under CEQA guidelines. No maternal roosts were observed during the site survey.

Special-Status Plants

Western leatherwood

Western leatherwood (*Dirca occidentalis*) is a perennial deciduous shrub/tree and is listed by the CNPS as a 1B.2 (rare, threatened or endangered in California and elsewhere; fairly endangered in California). It is found in mesic habitats in a variety of woodland types, including riparian forest and woodland. It blooms from January to April. There is suitable habitat for this species in the vicinity of the project, but not within any of the proposed alignments.

Sensitive Natural Communities

Some oak woodland alliances are listed by the California Department of Fish and Wildlife as sensitive communities at risk of being lost to urban development. A portion of the alignment crosses coast live oak woodland that is dominated by coast live oak, with occasional valley oaks, and with an understory dominated by poison oak and coyote brush. This oak woodland is not one of the oak woodland alliances that is listed as a sensitive habitat.

3.4.2 Regulatory Setting

Federal Regulations

Clean Water Act

The USACE and the United States Environmental Protection Agency (EPA) regulate the discharge of dredged or fill material into waters of the United States, including wetlands, under Section 404 of the Clean Water Act (33 USC 1344). Waters of the United States are defined in Title 33 Code of Federal Regulations (CFR) Part 328.3(a) and include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds. The lateral limits of jurisdiction in those waters may be divided into three categories – territorial seas, tidal waters, and non-tidal waters – and is determined depending on which type of waters is present (Title 33 CFR Part 328.4(a), (b), (c)).

Activities in waters of the United States regulated under Section 404 include fill for development, water resource projects (e.g., dams and levees), infrastructure developments (e.g., highways, rail lines, and airports) and mining projects. Section 404 of the CWA requires a federal permit before dredged or fill material may be discharged into waters of the United States, unless the activity is exempt from Section 404 regulation (e.g., certain farming and forestry activities).

Section 401 of the CWA (33 U.S.C. 1341) requires an applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a water quality certification from the state in which the discharge originates. The discharge is required to comply with the applicable water quality standards. A certification obtained for the construction of any facility must also pertain to the subsequent operation of the facility. The EPA has delegated responsibility for the protection of water quality in California to State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards.

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973, as amended, provides the regulatory framework for the protection of plant and animal species (and their associated critical habitats), which are formally listed, proposed for listing, or candidates for listing as endangered or threatened under the FESA. The FESA has the following four major components: (1) provisions for listing species, (2) requirements for consultation with the USFWS and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries), (3) prohibitions against "taking" (meaning harassing, harming, hunting, shooting, wounding, killing, trapping, capturing, or collecting, or attempting to engage in any such conduct) of listed species, and (4) provisions for permits that allow incidental "take". The FESA also discusses recovery plans and the designation of critical habitat for listed species. Section 7 requires Federal agencies, in consultation with, and with the assistance of the USFWS or NOAA Fisheries, as appropriate, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species. Both the USFWS and NOAA Fisheries share the responsibility for administration of the FESA.

Migratory Bird Treaty Act

The Federal Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.), Title 50 CFR Part 10, prohibits taking, killing, possessing, transporting, and importing of migratory birds, parts of migratory birds, and their eggs and nests, except when specifically authorized by the Department of the Interior. As used in the act, the term "take" is defined as meaning, "to pursue, hunt, capture, collect, kill or attempt to pursue, hunt, shoot, capture, collect or kill, unless the context otherwise requires." With a few exceptions, most birds are considered migratory under the MBTA. Previously, under MBTA it was illegal to disturb a nest that is in active use, since this could result in killing a bird, destroying a nest, or destroying an egg. In 2017, the USFWS issued a memorandum stating that the MBTA does not prohibit incidental take; therefore, the MBTA is currently limited to purposeful actions, such as hunting and poaching.

State Regulations

California Endangered Species Act

The State of California enacted the California Native Plant Protection Act (NPPA) in 1977, and the California Endangered Species Act (CESA) in 1984. The CESA expanded upon the original NPPA and enhanced legal protection for plants, but the NPPA remains part of California Fish and Game Code. To align with the federal ESA, California incorporated the categories of "threatened" and "endangered" species into CESA, and it converted all "rare" animals on previous state lists into CESA as threatened species, but did not do so for rare plants. Thus, the NPPA and CESA together provide the legal framework for protection of California-listed rare, threatened, and endangered plant and animal species. The California Department of Fish and Wildlife (CDFW) implements NPPA and CESA, and its Wildlife and Habitat Data Analysis Branch maintains the CNDDB, a computerized inventory of information on the general location and status of California's rarest plants, animals, and natural communities. During the California Environmental Quality Act review process, the CDFW is given the opportunity to comment on the potential of a proposed project to affect listed plants and animals as a Trustee Agency.

California Native Plant Protection Act

The NPPA of 1977 (CFGC, §§ 1900 through 1913) directed the CDFW to carry out the Legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA is administered by the CDFW, which has the authority to designate native plants as endangered or rare and to protect them from "take."

California Environmental Quality Act

CEQA was enacted in 1970 to provide for full disclosure of environmental impacts to the public before issuance of a permit by state and local public agencies. CEQA (Public Resources Code Sections 21000 et. seq.) requires public agencies to review activities which may affect the quality of the environment so that consideration is given to preventing damage to the environment. CEQA Guidelines Section 15380 defines endangered, threatened, and rare species for purposes of CEQA and clarifies that CEQA review extends to other species that are not formally listed under CESA or FESA, but that meet specified criteria, such as plants listed by the California Native Plant Society (CNPS), and identified sensitive habitats, as described below.

The California Native Plant Society (CNPS), a non-profit plant conservation organization, publishes and maintains an Inventory of Rare and Endangered Vascular Plants of California in both hard copy and electronic version (http://www.cnps.org/cnps/rareplants/inventory/).

The Inventory assigns plants to the following categories:

1A Presumed extinct in California;

1B Rare, threatened, or endangered in California and elsewhere;

2 Rare, threatened, or endangered in California, but more common elsewhere;

3 Plants for which more information is needed – A review list; and

4 Plants of limited distribution – A watch list.

Additional endangerment codes are assigned to each taxon as follows:

1 Seriously endangered in California (over 80% of occurrences threatened/high degree of immediacy of threat).

2 Fairly endangered in California (20-80% occurrences threatened).

3 Not very endangered in California (20% of occurrences threatened or no current threats known).

Plants on Lists 1A, 1B, and 2 of the CNPS Inventory consist of plants that may qualify for listing, and the CDFW, as well as other state agencies (e.g., California Department of Forestry and Fire Protection). As part of the CEQA process, such species should be fully considered, as they meet the definition of threatened or endangered under the NPPA and Sections 2062 and 2067 of the CFGC. California Rare Plant Rank (CRPR) 3 and 4 species are plants about which more information is needed or are uncommon enough that their status should be regularly monitored. Such plants may be eligible or may become eligible for state listing, and CNPS and CDFW recommend that these species be evaluated for consideration during the preparation of CEQA documents (CNPS 2018, CDFW 2018b).

Sensitive natural communities are habitats that are either unique in constituent components, of relatively limited distribution in the region, or of particularly high wildlife value. These communities may or may not necessarily contain special-status species. Sensitive natural communities are usually identified in local or regional plans, policies or regulations, or by the CDFW or the USFWS. The CNDDB identifies many natural communities as rare, which are given the highest inventory priority (CDFW 2018a). Impacts to sensitive natural communities and habitats must be considered and evaluated under the CEQA (CCR: Title 14, Div. 6, Chap. 3, Appendix G)

Fully Protected Species and Species of Special Concern

The classification of “fully protected” (CFP) was the CDFW’s initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibian and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA. The CFGC sections (fish at §5515,

amphibian and reptiles at §5050, birds at §3511, and mammals at §4700) dealing with "fully protected" species states that these species "…may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species," (CDFW Fish and Game Commission 1998) although take may be authorized for necessary scientific research. This language makes the "fully protected" designation the strongest and most restrictive regarding the "take" of these species. In 2003, the code sections dealing with fully protected species were amended to allow the CDFW to authorize take resulting from recovery activities for state-listed species.

Species of special concern (CSSC) are broadly defined as animals not listed under the FESA or CESA, but which are nonetheless of concern to the CDFW because they are declining at a rate that could result in listing or historically occurred in low numbers and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals by the CDFW, land managers, consulting biologist, and others, and is intended to focus attention on the species to help avert the need for costly listing under FESA and CESA and cumbersome recovery efforts that might ultimately be required. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them. Although these species generally have no special legal status, they are given special consideration under CEQA during project review.

California Fish and Game Code Sections 3503 and 3513

According to Section 3503 of the CFGC, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically protects birds in the orders Falconiformes and Strigiformes (birds-of-prey). Section 3513 essentially overlaps with the MBTA, prohibiting the take or possession of any migratory non-game bird. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by the CDFW.

California Fish and Game Code Sections 4150-4155

Sections 4150-4155 of the CFGC protects non-game mammals, including bats. Section 4150 states "A mammal occurring naturally in California that is not a game mammal, fully protected mammal, or fur-bearing mammal is a nongame mammal. A non-game mammal may not be taken or possessed except as provided in this code or in accordance with regulations adopted by the commission". The non-game mammals for which "take" is typically authorized are primarily those that cause crop or property damage. All bats are classified as a non-game mammal and are protected under CFGC.

California Fish and Game Code Section 1600-1603

Streams, lakes, and riparian vegetation, as habitat for fish and other wildlife species, are subject to jurisdiction by the CDFW under Sections 1600-1616 of the CFGC. Any activity that will do one or more of the following: (1) substantially obstruct or divert the natural flow of a river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake generally require a 1602 Lake and Streambed Alteration Agreement (LSAA).

The term "stream", which includes creeks and rivers, is defined in the California Code of Regulations (CCR) as follows: "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life". This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 CCR 1.72). In addition, the term stream can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFW 1994). Riparian vegetation is defined as, "vegetation which occurs in

and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself" (CDFW 1994). In addition to impacts to jurisdictional streambeds, removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from the CDFW.

3.4.3 Discussion

Would the project:

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

Less than Significant with Mitigation.

Amphibians and Reptiles. The alignment between the water tank on Vista del Valle Court and Elena Road crosses through coast live oak woodland that is near Deer Creek, where CRLF could occur. There is a low likelihood that CRLF would occur in the alignment, but a pre-construction survey is warranted. The rest of the project is in the roadbed and will not impact special-status amphibian or reptile species.

Impact BIO-1: The portion of the project in coast live oak woodland has a low potential to impact CRLF.

Measure BIO-1: A qualified biologist will conduct a pre-construction survey within the project footprint between the water tank and Elena Road for the presence of CRLF. The survey will be conducted immediately prior to the start of project activities, including vegetation removal, grubbing, grading, installation of fencing, and construction. If any CRLF are found, work will not commence until the appropriate state and/or federal resource agencies are contacted and avoidance measures are in place.

If an animal is found at the work site after the survey has been completed and is believed to be a protected species, work must be stopped, and the project biologist be contacted for guidance. Care must be taken not to harm or harass the species. No wildlife species will be handled and/or removed from the project footprint by anyone except a qualified biologist.

The contractor shall avoid the use of monofilament netting, including its use in temporary and permanent erosion control materials to avoid entanglement and entrapment of wildlife. All holes greater than one-foot deep must be sealed overnight to prevent the entrapment of wildlife. Where holes or trenches cannot be sealed, escape ramps that are no greater than 30% slope will be positioned such that entrapped wildlife will be able to escape. The escape ramps should be at least one-foot wide and covered/fitted with a material that provides traction.

Open trenches or holes for CRLF and other special-status species will be inspected every day (by a biologist or a trained inspector/job foreman) before construction activities commence. If any special-status species are found, construction activities will not be allowed to start and the biologist shall consult USFWS and CDFW on an appropriate course of action.

Food items may attract wildlife onto the construction site, which will expose them to construction-related hazards. The construction site shall be maintained in a clean condition. All trash (e.g., food scraps, cans, bottles, containers, wrappers, and other discarded items) will be placed in closed containers and properly disposed of.

Effectiveness: This measure would prevent impacts to CRLF.

Implementation: The District and its contractors

Timing: Prior to ground disturbance including vegetation removal, grubbing, grading, installation of fencing, and construction

Monitoring: The District and a qualified biologist. The results of the preconstruction survey report shall be submitted to the District.

Measure BIO-2: A biologist will provide environmental training for each of the workers trenching and installing the waterline between the water tank on Vista del Valle Court and Elena Road. The training will include a brief presentation to explain biological resources concerns to contractors, their employees, and any other personnel involved in construction of the alignment. The program will include the following: a description of relevant special-status species, nesting birds, and bats along with their habitat needs as they pertain to the project; a report of the occurrence of these species in the project vicinity, as applicable; an explanation of the status of these species and their protection under the federal and state regulations; a list of measures being taken to reduce potential impacts to natural resources during project construction and implementation; and instructions if a special-status species is found onsite. A fact sheet conveying this information will be prepared for distribution to the above-mentioned people and anyone else who may enter the project footprint. Upon completion of training, employees will sign a form stating that they attended the training and agree to all the conservation and protection measures.

Effectiveness: This measure would prevent impacts to sensitive amphibian and reptile species.

Implementation: The District and its contractors

Timing: Prior to ground disturbance including vegetation removal, grubbing, grading, installation of fencing, and construction by a qualified biologist. The training can be completed in conjunction with the safety briefing prior to the initiation of construction activities in the Elena Tank area.

Monitoring: The District and a qualified biologist

Birds. Nesting birds, including raptors, protected under the MBTA and California Fish and Game Code are potentially present in the trees and shrubs in the project area. Construction activities proposed in the roadway are not unusual, and birds nesting near the roadway are expected to be acclimated to roadway and construction noise and regular disturbance. However, the portion of the alignment between the water tank and Elena Road crosses through natural habitat where nesting birds may be more prone to disturbance. If construction activities in this area occur during the avian breeding season (February 1 to September 15), injury to individuals or nest abandonment could occur. Noise and increased construction activity could temporarily disturb nesting or foraging activities, potentially resulting in the abandonment of nest sites. However, with the implementation of mitigation measure BIO-3, the impacts from the project would be less than significant.

Impact BIO-3: The portion of the project in coast live oak woodland (water tank to Elena) could impact nesting birds if it is built during the nesting season.

Measure BIO-3: To avoid impacts to nesting birds and violation of state and federal laws pertaining to birds, all construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation,

demolition, and grading) should occur outside the avian nesting season (that is, prior to February 1 or after September 15). If construction and construction noise occurs within the avian nesting season (from February 1 to September 15), all suitable habitats located within the project's area of disturbance including staging and storage areas plus a 250-foot (passerines) and 1,000-foot (raptor nests) buffer around these areas shall be thoroughly surveyed, as feasible, for the presence of active nests by a qualified biologist no more than five days before commencement of any site disturbance activities and equipment mobilization. If project activities are delayed by more than five days, an additional nesting bird survey shall be performed. Active nesting is present if a bird is building a nest, sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of the surveys shall be documented.

If pre-construction nesting bird surveys result in the location of active nests, no site disturbance and mobilization of heavy equipment (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, fence installation, demolition, and grading), shall take place within 250 feet of non-raptor nests and 1,000 feet of raptor nests, or as determined by a qualified biologist in consultation with the California Department of Fish and Wildlife, until the chicks have fledged. Monitoring shall be required to insure compliance with MBTA and relevant California Fish and Game Code requirements. Monitoring dates and findings shall be documented.

Effectiveness: This measure would prevent impacts to nesting birds.

Implementation: The District shall implement this measure with a qualified biologist

Timing: Prior to, and within 5 days initial ground disturbance including vegetation removal, grubbing, grading, installation of fencing, and construction by a qualified biologist

Monitoring: The District and a qualified biologist

Mammals. The stick houses of the San Francisco dusky-footed woodrat were found in the oak woodland near the alignment between the water tank and Elena Road. Indirect effects from noise and vibration associated with construction could have negative impacts on woodrats, including flushing of woodrats from their houses, thereby exposing them to an increased risk from predation or injury/death from construction activities. With the implementation of measure BIO-4, the impacts from the project would be less than significant.

Several bat species could occur in the project area. No riparian vegetation, trees, or dense vegetation will be removed for the proposed project and construction will be limited to the roadbed except in a 100-ft alignment from the water tank to Elena Road that crosses coast live oak woodland. The project does not require any tree removal. Therefore, no direct impact to roosting or foraging bats is expected to occur. Indirect effects from additional noise and vibration associated with construction could have negative impacts on nearby roosting bats, including flushing of roosting bats, thereby exposing them to an increased risk from predation or abandonment of a maternity roost. However, with the implementation of measure BIO-5, the impacts from the project would be less than significant.

Impact BIO-4: Construction of the alignment between the water tank and Elena Road could adversely impact San Francisco dusky-footed woodrat.

Measure BIO-4**:** Fourteen (14) days prior to the start of construction activities in the portion of the alignment that crosses oak woodland (between Elena Road and the water tank), a qualified biologist will map all San Francisco dusky-footed woodrat houses

within a 50-foot buffer around the project footprint. All mapped woodrat houses will be clearly marked with flagging to avoid physical disturbance of the woodrat house from construction activities. A 10-foot radius buffer will be marked around each woodrat house found within fifty feet of project activities. The buffers shall be left undisturbed and no construction activities or staging of equipment shall take place within the buffer areas.

Effectiveness: This measure would prevent impacts to San Francisco dusky-footed woodrat.

Implementation: The District shall implement this measure with a qualified biologist

Timing: Prior to, and within 5 days initial ground disturbance including vegetation removal, grubbing, grading, installation of fencing, and construction by a qualified biologist

Monitoring: The District and a qualified biologist

Impact BIO-5: Construction of the project alignment between the water tank and Elena Road could impact roosting bats protected by state law.

Measure BIO-5: At least five days before the start of construction-related activities in the alignment that crosses oak woodland between the water tank at Vista del Valle Court and Elena Road a biologist shall conduct a pre-construction survey for bat roosts. Construction activities include mobilization and staging, clearing, grubbing, tree removal, vegetation removal, fence installation, demolition, and grading. If an occupied maternity or colony roost is detected, CDFW shall be consulted to determine appropriate measures if disturbance of the roost cannot be avoided. The results of the surveys shall be documented.

Effectiveness: This measure would prevent impacts to roosting bats.

Implementation: The District shall implement this measure

Timing: Prior to, and within 5 days initial ground disturbance including vegetation removal, grubbing, grading, installation of fencing, and construction in the vicinity of the Elena Tank cross-country alignment, by a qualified biologist

Monitoring: The District and a qualified biologist

Plants. There is suitable habitat for Western leatherwood in the vicinity of the project, but not within any of the proposed alignments. No rare plant species will be impacted by the project.

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

No Impact. The 100-foot alignment between the Elena water tank and Elena Road crosses oak woodland, but the alliance that is present is not listed as a sensitive natural habitat by CDFW. To the north of the water tank, the water main will cross Elena Road above a storm drain culvert where a creek crosses the road. The water line will be several feet above the culvert and will not affect creek or riparian habitat. The project will have no impact on riparian or other sensitive natural community.

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

No Impact. There are no federally protected wetlands in or adjacent to the project alignments. Therefore, the project would not have an adverse effect on federally protected wetlands.

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

No Impact. The project would not include any above ground structures that could interfere with wildlife movement or impede the use of wildlife nursery sites.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (including the County Heritage and Significant Tree Ordinances)?

Less than Significant Impact with Mitigation. The project may require tree trimming and trenching within the root zone of several trees, however no tree removal is anticipated. Trimming and disturbance within the 100-foot alignment to be trenched between two mature valley oak trees could impact the root systems and harm the trees. Measure BIO-6 is recommended to protect the oak trees where trenching will occur in oak woodland.

Impact BIO-6: Tree trimming and trenching activities in oak woodland could impact the root zone and damage the health of mature oak trees.

Measure BIO-6: The District shall obtain and the contractor shall implement a tree protection plan from an arborist that includes measures and construction monitoring to protect mature trees during trenching in oak woodland.

Effectiveness: This measure would prevent impacts to oak trees.

Implementation: The District and its contractors shall implement this measure

Timing: Prior to initial ground disturbance including vegetation removal, grubbing, grading, installation of fencing, and construction in the vicinity of the Elena Tank cross-country alignment, by a qualified arborist

Monitoring: The District and a qualified arborist

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

No Impact. There is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan that applies to the project area. Thus, the proposed project would not conflict with such a plan.

3.4.4 References

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3.5 CULTURAL RESOURCES

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

3.5.1 Environmental Setting

Prehistoric

The Ohlone Native Americans inhabited the project area prior to invasion by the Spanish in 1769 and were named Costanoans by the Spanish. The Ohlones were hunters and gatherers, living in “tribelets” – small independent groups of usually related families occupying a specific territory and speaking the same language or dialect. Both linguistic and archaeological evidence suggests that the ancestors of the Ohlone arrived in the Bay Area around 500 A.D., moving south from the San-Joaquin-Sacramento river delta (Levy 1978).

The group of Ohlones in the project area would have likely spoken the Tamyen Dialect of the Costanoan language (Kroeber 1975/1925) and numbered approximately 1,200 people at the time of the Spanish invasion (Levy 1976).

Historic

The first Europeans to reach the San Francisco area were Spanish explorers in 1769 as part of the Portolá expedition. In 1774, the de Anza expedition had set out to convert the Native American tribes to Christianity, resulting in the establishment of (among others) Mission San Francisco de Asis (Mission Dolores) (founded in 1776), Mission Santa Clara de Asis (founded in 1777) and Mission San José (founded in 1779). The El Camino Real became a heavily traveled route between the 21 California Missions. This route led to the establishment of inns and roadhouses to serve travelers along the way. In this historic period, the Ohlone people were subjugated and absorbed into the mission system for compulsory baptism and conversion to Christianity that resulted in the loss of their freedom of movement, their culture, and customs. The area of modern-day Los Altos Hills remained undeveloped and largely unexploited by the early Spanish settlers.

From the year 1822, the Mexican government issued land grants to various favored people, often cattle ranchers and hide and tallow traders. Ultimately there were 41 land grants issued in the County of Santa Clara, between 1831 and 1846 (none were issued in the years between 1822 and 1831). Additionally, three more grants had been issued in County of Santa Clara under prior Spanish rule.

In the year 1836, control of Mission Santa Clara was taken from the padres and turned over to government appointed civil commissioners who were supposed to oversee the "return of the land to the native population." However, by and large, this did not happen and squatters took

over the church buildings and land. Disorder and decay set in and by 1839, there were only 300 Indians remaining in the vicinity of Mission Santa Clara (City of Santa Clara 2019).

The recipients of one of these land grants were José Gorgonio and his son José Ramon, who were Native Americans at the Mission Santa Clara de Asís. In 1844 Gorgonio sold the one square league Rancho to Juana Briones de Miranda (1802-1889). Juana Briones named the grant La Purísima Concepción (literally translated as "The land of the Immaculate Conception"). Land within this grant would eventually become the Town of Los Altos Hills.

With the cession of California to the United States following the Mexican-American War, the 1848 Treaty of Guadalupe Hidalgo provided that the land grants would be honored. As required by the Land Act of 1851, a claim for Rancho La Purísima Concepción was filed with the Public Land Commission in 1852, and the grant was patented to Juana Briones de Miranda in 1871.

Juana Briones sold about three quarters of her rancho in 1861 to Martin Murphy Jr. of Sunnyvale, who had come to California with the Stephens-Townsend-Murphy Party in 1844. She gave the remaining 1,130 acres of her rancho to her children, who bore their father's name, Miranda.

In 1863, Martin and Mary gave 2,800 acres of the Rancho La Purísima Concepción portion of their ranch to their daughter Elizabeth Yuba as a wedding present when she married San Francisco dry goods merchant William Post Taaffe. William expanded his San Francisco dry goods business to San Jose, but the couple did not live on the ranch for long, as less then five years after their marriage, both died from illnesses, leaving Mary and Martin Murphy to raise their four children, William, Martin and twins Mary and Mathilda (Town of Los Altos Hills, 2016).

William Taaffe became one of the most extensive farmers in Santa Clara Valley after graduating from Santa Clara College in 1884. However, by 1897, he divorced and lost most of his money to his uncle's San Jose Commercial and Savings Bank that failed during the Panic of 1893. He lost his ranch property in a foreclosure suit. The unmarried twin sisters Mary (Mollie) and Mathilda (Mattie) were deemed incompetent for mismanaging their finances and were institutionalized in separate insane asylums, where they spent the rest of their lives and died as virtually anonymous inmates (Town of Los Altos Hills, 2016).

Martin Joseph Taaffe is the only sibling who makes the ranch his permanent home. M.J. Taaffe called his 1,100-acre tract of land Rose Hill after his bride Rose Hoffman. From 1887 to 1901, he operated a stock and grain ranch there (Town of Los Altos Hills, 2016). A U.S. survey map from 1889 shows the extent of the 1,100 acre tract, labeled "M.J. Taafe (sic) et al" (Britton & Rey.1890). He called this ranch, "Rose Hill" after his wife.

Martin Taaffe's health suffered in 1894 following a pump engine explosion and he eventually died in 1901. His wife was left with mounting debts and eventually lost the ranch in 1916. After the family lost Rose Hill, Martin Jr. purchased 11 acres of property that once belonged to his Uncle Will on Purissima Road and established M.J. Taaffe Company. The construction company remained in operation until 1994 and became one of two commercial businesses in Los Altos Hills history to be permitted to operate in the residential-only town (Town of Los Altos Hills 2016).

Modern

The land that would become Los Altos Hills changed hands many times after 1916 and subdivided into small residences and farm houses. Residents in the area eventually voted to incorporate the Town in 1956.

Los Altos Hills has a ban on commercial zones and has only two retail commercial operations; the book store on the campus of Foothill College and the gift shop on the grounds of the Immaculate Heart Monastery of the Poor Clare Colettines. The town does not have a post office or library, with mail delivery provided from nearby Los Altos.

Project Site at the Present Time

The proposed project site has water main alignments within existing road beds (Moody Road, and sections of fully paved Elena Road, Taaffe Road, Vista Del Valle Court, and Old Snakey Road) and a short section proposed as a “cross country” route across an undeveloped hillside.

All work in the roadways would be completely within the existing right-of-way (ROW). There are no above ground structures in the project site, with the exception of the water tank and appurtenant tank site facilities.

Records Search Results

A California Historical Resources Information System (CHRIS) record search of the project site within a 0.5 mile study area was conducted through the Northwest Information Center (NWIC). The search results were returned on June 10, 2019. There were no known resources identified within or crossing the project area. Three resources were identified within the 0.5 mile study area, (P-43-001730, P-43-000989, & 428C-001).

- Resource P-43-001730 is a historic building, St. Luke's Chapel in the Hills, located to the east of the northern segment of the project site, on Duval Way in the Town.
- Resource P-43-000989 is a prehistoric habitation site which contained at least 17 human burials as well as a number of chert and obsidian tools, faunal shell and bone artifacts, fire altered rock and other artifacts. Due to site conditions and property boundaries, the extent of the site could not be fully determined and was not fully excavated. The CHRIS search locates the site close to the eastern extent of the southern segment of the project, along Moody Road. The extent of the site remains unknown and could extend into the planned area of excavation for the proposed project.
- Resource 428C-001 is an informally recorded resource, with no recorded information other than being a site located close to the southern segment of the project, on Adobe Creek.

The CHRIS search also identified a single report within the project area, and a further six reports within the study area. Two reports were noted by the NWIC as having relevance to the project and were reviewed.

Report S-16691 is a survey report along Adobe Creek. It details findings and archaeological sites along the length of the creek.

Report S-19995 is the archaeological monitoring and burial removal report from resource P-43-000989. It details the exact findings and methodology of the archaeological excavation of the resource.

The Native American Heritage Commission (NAHC) was contacted for a record search of the Sacred Lands File (SLF) search. The results, returned on May 16, 2019, showed no known Tribal Cultural Resources within the project vicinity.

3.5.2 Regulatory Setting

California Environmental Quality Act

Pursuant to CEQA, a historical resource is a resource listed in, or eligible for listing in, the California Register of Historical Resources (CRHR). In addition, resources included in a local register of historic resources or identified as significant in a local survey conducted in accordance with state guidelines are also considered historic resources under CEQA, unless a preponderance of the facts demonstrates otherwise. Per CEQA, the fact that a resource is not listed in or determined eligible for listing in the CRHR or is not included in a local register or survey shall not preclude a Lead Agency, as defined by CEQA, from determining that the resource may be a historic resource as defined in California Public Resources Code (PRC) Section 5024.1. CEQA applies to archaeological resources when (1) the archaeological resource satisfies the definition of a historical resource or (2) the archaeological resource satisfies the definition of a "unique archaeological resource." A unique archaeological resource is an archaeological artifact, object, or site that has a high probability of meeting any of the following criteria:

1. The archaeological resource contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information.

2. The archaeological resource has a special and particular quality such as being the oldest of its type or the best available example of its type.

3. The archaeological resource is directly associated with a scientifically recognized important prehistoric or historic event or person.

Health and Safety Code, Sections 7050 and 7052

Health and Safety Code Section 7050.5 declares that, in the event of the discovery of human remains outside a dedicated cemetery, all ground disturbances must cease, and the county coroner must be notified. Section 7052 establishes a felony penalty for mutilating, disinterring, or otherwise disturbing human remains, except by relatives.

Penal Code Section 622.5

Penal Code Section 622.5 provides misdemeanor penalties for injuring or destroying objects of historic or archaeological interest located on public or private lands but specifically excludes the landowner.

Government Code Section 6254(r)

Government Code explicitly authorizes public agencies to withhold information from the public relating to Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission.

Government Code Section 6250 et. seq.

Records housed in the Information Centers of the California Historical Resources Information System (CHRIS) are exempt from the California Public Records Act.

3.5.3 Discussion

Would the project:

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

No Impact. Four sites or structures on Moody Road are listed on the Town's Inventory of Historic Sites and Structures (Town of Los Altos Hills 2007). The road itself is listed as a local historic resource. However, the alignment of the road would not be changed, the paving covering is modern, and the project would not impact the road's historic status. There are no additional historic resources near the project alignment. The project footprint would be restricted to existing paved roadways and the Elena tank site, and all project features would be installed underground. Therefore, the project would not impact the historic sites or structures along Moody Road, or any other historic resources.

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

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

Less than Significant Impact with Mitigation (Responses b – c). There are no previously known archaeological resources, as identified in the CHRIS search from the NWIC directly within the project site. However, resource P-43-000989 is located close to the eastern end of the Moody Road project segment and is known to extend beyond its mapped boundaries. There is potential for the site to overlap into the area of disturbance, and therefore the potential for discovery of archaeological resources and human remains during project construction.

The northern segment of the project site (Elena Road, Taaffe Road, Vista Del Valle Court) is not located near any known archaeological resources, although the water main would encounter native soils on the undeveloped hillside and has the potential for the unanticipated discovery of archaeological resources. Both segments of water main are located near creeks, which are known to contain Native American archaeological resources. With the incorporation of Mitigation Measure CULT-1, the project would have a less than significant impact to archaeological resources and human remains.

Impact CULT-1: Project excavation could disturb buried archaeological resources and human remains.

Mitigation Measure CULT-1a: Prior to any ground disturbing activity, all supervisors and workers engaging in ground disturbing activity will receive cultural resource training from an archaeologist who meets the Secretary of the Interior's Standards for Archaeology. The training will describe the kinds of resources that the project could encounter and will help workers identify resources during excavation.

Mitigation Measure CULT-1b: All project plans shall clearly state that ground disturbing activities have the potential for the discovery of human remains.

Mitigation Measure CULT-1c: Archaeological monitoring shall be instigated for all ground disturbing activities along the Moody Road segment of the water main. An archaeologist who meets the Secretary of the Interior's Standards for Archaeology shall be present at the project site during ground disturbing activities, including machine or hand excavation. No ground disturbing activities, with the exception of road surface removal, shall be allowed to take place if the archaeologist is not present. An archaeological report meeting the Secretary of the Interior's Standards detailing the findings of the monitoring will be submitted to the Northwest Information Center after monitoring has ceased.

Mitigation Measure CULT-1d: All excavator machinery on Moody Road shall use toothless buckets during ground disturbing activity to allow the monitoring archaeologist to more clearly identify archaeological features, if present.

Mitigation Measure CULT-1e: If archaeological remains from either a historic or prehistoric period are discovered (or have been suspected to have been discovered) during project construction, all ground disturbing work on the water main segment shall cease. An archaeologist shall assess the discovery before any additional ground disturbing work within the site shall be allowed to continue. If archaeological remains are found on the northern segment of water main, archaeological monitoring will be instigated for that segment. No further ground disturbing work shall be allowed to continue until the archaeologist has fully evaluated the find and permits work to continue. Dependent on the evaluation by the archaeologist, archaeological excavation and recordation may be required before construction can continue. An Archaeological Resource Treatment Plan (ARTP) will be written in consultation with the District.

If a newly discovered resource is, or is suspected to be, Native American in origin, a Native American cultural monitor will be retained, as directed by the NAHC. Additionally, the resource shall be treated as a significant Tribal Cultural Resource, pursuant to Public Resources Code 21074, until the County has determined otherwise with the consultation of a qualified archaeologist and local tribal representative.

Mitigation Measure CULT-1f: If human remains are unearthed during construction, the County Coroner will be notified immediately, and no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC shall then identify the person(s) thought to be the Most Likely Descendent (MLD). All applicable laws pertaining to the discovery of human remains will be followed.

Effectiveness: This measure would minimize and/or avoid impacts to unknown archaeological resources.

Implementation: By the contractor and by the Purissima Hills Water District.

Timing: Measures to be implemented during construction.

Monitoring: In the event archaeological resources are discovered, the archaeologist shall write a report detail their findings and submit it to the Northwest Information Center and the District.

3.5.4 References

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NWIC, 2019. Report number 18-2215. Unpublished confidential report containing search results from site specific survey. Kept on file at NWIC and with MIG. Inc.

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3.6 ENERGY

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

3.6.1 Environmental Setting

Energy consumption is closely tied to the issues of air quality and GHG emissions, as the burning of fossil fuels and natural gas for energy has a negative impact on both, and petroleum and natural gas currently supply most of the energy consumed in California.

In general, California's per capita energy consumption is relatively low, in part due to mild weather that reduces energy demand for heating and cooling, and in part due to the government's proactive energy-efficiency programs and standards. According to the California Energy Commission's (CEC) 2015 Integrated Energy Policy Report, Californians consumed about 280,500 gigawatt hours (GWh) of electricity in 2014 and 13,240 million British thermal units (BTU) of natural gas in 2013. The CEC estimates that by 2025, California's electricity consumption will reach between 297,618 GWh and 322,266 GWh, an annual average growth rate of 0.54 to 1.27 percent (CEC 2015), and natural gas consumption is expected to reach between 12,673 million and 13,731 million BTU by 2024, an average annual growth rate of -0.4 to 0.33 percent (CEC 2015).

In 2017, total electricity use in Santa Clara County was 17,190 million kilowatt hours (kWh), including 13,139 million kWh of consumption for non-residential land uses and 4050 million kWh for residential land uses (CEC 2019a). Natural gas consumption was 445 million therms in 2017, including 205 million therms from non-residential uses and 239 million therms from residential uses (CEC 2019b).

Energy conservation refers to efforts made to reduce energy consumption to preserve resources for the future and reduce pollution. It may involve diversifying energy sources to include renewable energy, such as solar power, wind power, wave power, geothermal power, and tidal power, as well as the adoption of technologies that improve energy efficiency and adoption of green building practices. Energy conservation can be achieved through increases in efficiency in conjunction with decreased energy consumption and/or reduced consumption from conventional energy sources.

3.6.2 Regulatory Setting

Since increased energy efficiency is so closely tied to the State's efforts to reduce GHG emissions and address global climate change, the regulations, policies, and action plans aimed at reducing GHG emissions also promote increased energy efficiency and the transition to renewable energy sources. The U.S. EPA and the State address climate change through numerous pieces of legislation, regulations, planning, policy-making, education, and implementation programs aimed at reducing energy consumption and the production of GHG.

The proposed project would not involve the development of facilities that include energy intensive equipment or operations. While there are numerous regulations that govern GHG emissions

reductions through increased energy efficiency, the following regulatory setting description focuses only on regulations that: 1) provide the appropriate context for the proposed project's potential energy usage; and 2) may directly or indirecly govern or influence the amount of energy used to develop and operate the proposed improvements. For example, the project would not result in permanently occupied buildings and thus the State building code requirements pertaining to energy efficiency are not discussed below. See the Environmental and Regulatory Setting discussion in Section 3.8, Greenhouse Gas Emissions, for a description of the key regulations related to global climate change, energy efficiency, and GHG emission reductions.

CARB Low Carbon Fuel Standard Regulation (LCFSR)

CARB initially approved the LCFS regulation in 2009, identifying it as one of the nine discrete early action measures in its original 2008 Scoping Plan to reduce California's GHG emissions. Originally, the LCFS regulation required at least a 10% percent reduction in the carbon intensity of California's transportation fuels by 2020 (compared to a 2010 baseline). On September 27, 2018, CARB approved changes to the LCFS regulation that require a 20% reduction in carbon intensity by 2030. These regulatory changes exceed the assumption in CARB's 2017 Climate Change Scoping Plan, which targeted an 18% reduction in transportation fuel carbon intensity by 2030 as one of the primary measures for achieving the state's GHG 2030 target.

3.6.3 Discussion

Would the project:

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

No Impact The proposed project consists of the installation and replacement of existing water main facilities. The construction activities would require the use of construction equipment and generate construction-related vehicle trips that would combust fuel, primarily diesel and gasoline. The use of this fuel energy is necessary to repair and replace the aging water main facilities and is not wasteful. No impact would occur.

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

No Impact. The proposed water main improvements would not affect day to day operations of the District's infrastructure. The improvements would allow for increased efficiency (reduction in pump cycling times) as compared to existing conditions.Therefore, no overall changes in energy use are anticipated due to project implementation.

3.6.1 References

California Energy Commission (CEC) 2015. 2015 Integrated Energy Policy Report. Sacramento, CA. 2015.

_____. 2019a. "Electricity Consumption by County." *Electricity Consumption by County.* CEC, Energy Consumption Database. n.d. Accessed June 10, 2019 at http://ecdms.energy.ca.gov/elecbycounty.aspx.

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3.7 GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? *Note: Refer to Division of Mines and Geology Special Publication 42.*	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

3.7.1 Environmental Setting

The information contained in the following Setting section was obtained from the Town's General Plan Safety Element (2007).

Regional Geologic Setting

The primary geologic hazards within Los Altos Hills are landslides and seismic impacts related to earthquakes. Seismically induced ground shaking, surface fault rupture, liquefaction and other various forms of earthquake-triggered ground failure are anticipated during major earthquakes. These geologic hazards present potential risks to property and public safety.

Regional Seismicity

The Town of Los Altos Hills is located in the San Francisco Bay Area, which is recognized as one of the most active seismic regions in the United States. The U.S. Geological Survey estimates that there is a 62% probability that at least one earthquake of magnitude 6.7 or greater will occur in the San Francisco Bay region before 2032. The greatest probability is that a major earthquake will occur on the Hayward Fault. There is a 21% chance of it occurring on the San Andreas Fault, which would more directly affect Los Altos Hills.

While the effects of a major earthquake would be widespread, the effects would be most intense on lands with steeper slopes and weak soils, which represent much of the remaining undeveloped land within Los Altos Hills and its Sphere of Influence.

The Town is traversed by three major fault lines, all of which are considered to be potentially active:

- Berrocal Fault, which runs from the western Town border to the southeastern tip of the Town boundaries.
- Altamont Fault, which runs parallel to the Berrocal Fault to the north.
- Monte Vista Fault, which meanders from the northwest quadrant to the southeast quadrant of the Town.

Additionally, there are two large fault lines within Santa Clara County that are known to be currently active and could endanger the stability of hillsides in Los Altos Hills:

- San Andreas Fault, located along the west coast.
- Calaveras Fault, located further inland.

Although these two faults do not traverse Los Altos Hills, it is likely that more earth movement would result within Town limits than within nearby communities due to the Town's steep topography and unstable soils.

3.7.2 Regulatory Setting

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act regulates development in California near known active faults due to hazards associated with surface fault ruptures. There are no Alquist-Priolo earthquake fault zones on the project site (California Geological Survey, 2002b).

Seismic Hazard Mapping Act

The Seismic Hazard Mapping Act was passed in 1990 following the Loma Prieta earthquake to reduce threats to public health and safety and to minimize property damage caused by earthquakes. The act directs the U.S. Department of Conservation to identify and map areas prone to the earthquake hazards of liquefaction, earthquake-induced landslides, and amplified ground shaking. The act requires site-specific geotechnical investigations to identify potential seismic hazards and formulate mitigation measures prior to permitting most developments designed for human occupancy within the Zones of Required Investigation.

California Building Code

The 2016 California Building Codes (CBC) covers grading and other geotechnical issues, building specifications, and non-building structures.

3.7.3 Discussion:

Consistent with the California Supreme Court decision in *California Building Industry Association v. Bay Area Air Quality Management District* (62 Cal. 4th 369; 2015), the impact discussion presented below focuses on the project's effect on geology and soils rather than the effect of

geologic hazards and site conditions upon the proposed project. The project is evaluated to determine whether it would create or exacerbate soil or geologic conditions identified in each of the above significance threshold criteria.

Would the project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other significant evidence of a known fault?

Less Than Significant Impact. The project involves the installation and replacement of potable water mains. None of the proposed water main alignments cross the Alquist-Priolo Earthquake Fault Zoning Map for the Mindego Hill Quadrangle (California Geological Survey 1974). However the water mains are within or cross one or more identified fault rupture hazard zones according to the Town's Geotechnical and Seismic Hazard Zones map contained in the Safety Element of the General Plan (p. 7, 2007). The project does not propose housing or other above-ground structures that could expose people to loss, injury, or death from the rupture of a fault. The new water mains would be designed and constructed according to relevant District and American Water Works Association (AWWA) standards and the majority of the segments replace existing segments which are old and prone to failure.

ii) Strong seismic ground shaking?

Less Than Significant Impact. The project would be located in the seismically active San Francisco Bay Region. Significant earthquakes have occurred in the San Francisco Bay Area and are believed to be associated with crustal movements along a system of subparallel fault zones that generally trend in a northwesterly direction. The water mains cross identified liquefaction hazard and earthquake induced landslide hazard zones (California Geological Survey 2005) and is mapped within areas of identified slope instability, fault rupture, and ground defamation hazard zones according to the Los Altos Hills General Plan Safety Element (Los Altos Hills 2007).

Strong ground-shaking at the project site will probably occur during the design life of the project as a result of a major earthquake on one of the active faults in the region. The purpose of the project is to replace old water mains that are susceptible to rupture in the event of an earthquake. Therefore, the proposed water mains are specifically designed to accommodate seismic hazards including the choice of water main material (ductile iron pipe) as well as being restrained per District standards by use of Field LOK gaskets, mechanical joints and flanged connections.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction occurs when loose, saturated sandy soils lose strength and flow like a liquid during earthquake shaking. Ground settlement often accompanies liquefaction. Soils most susceptible to liquefaction are saturated, loose, silty sands, and uniformly graded sands.

The portions of the proposed water main along Moody Road is located in a liquefaction zone (California Geological Survey 2005). The purpose of the project is to replace old water mains that are susceptible to rupture in the event of an earthquake. Therefore, the proposed water mains are specifically designed to accommodate seismic hazards including the choice of water main material (ductile iron pipe) as well as being restrained per District standards by use of Field LOK gaskets, mechanical joints and flanged connections. Compliance with District and American Water Works Association (AWWA) standards would ensure the construction works are designed to accommodate anticipated site conditions and liquefaction. The replacement water mains would not affect the existing conditions along the installation alignment. Therefore, the project would have a less than significant impact related to seismic-related ground failure.

iv) Landslides?

Less than Significant Impact. The portions of water main along Elena Road are located in an earthquake induced landslide hazard zone (California Geological Survey 2005). In addition, the project includes installation of a water main across a steep slope located on District property to connect the Elena tank site with Elena Road. Standard erosion and slope control measures would be implemented to ensure disturbed areas are not subject to erosion during and after construction. In addition, the project does not create significant new cut slopes that would be susceptible to landslides. There is a short (2-foot high) wooden retaining wall at the base of the slope up to the Elena tank site from Elena Road. If sections of the wall are disturbed by construction, they would be replaced in-kind. The proposed project would not create or exacerbate landslide conditions on or adjacent to the site.

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

Less Than Significant Impact. The water mains would be installed using open trench construction. Most of the segments occur within existing road right-of-way. One segment is across undeveloped land (cross-country) and down a slope. In order to reduce temporary erosion during project construction, erosion control measures would be implemented. Once the water main is installed, disturbed soils would be returned to pre-project conditions (either repaved as roadway or restored to existing slopes and hydroseeding for the cross-country alignment). See Section 3.9 of this document for a complete discussion regarding erosion.

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

Less Than Significant Impact. Subsidence is the sinking of the Earth's surface in response to geologic or man-induced causes. Lateral spreading involves the lateral movement of a liquefied soil layer (and overlying layers) toward a free face.

As stated above, portions of the Moody Road alignment are located in a liquefaction hazard area and could become unstable due to liquefaction subsidence, collapse, or lateral spreading. Portions of the Elena Road water main are located in an earthquake induced landslide hazard zone (California Geological Survey 2005). (See response to question a) iv).

As stated above, the area of the proposed project has been mapped as an area within slope instability, fault rupture, and ground defamation hazard zones according to the Town's General Plan Safety Element (2007). This is determined to have a less than significant impact because the improvements proposed would improve potable water infrastructure and will not house people for residence or work.

The project construction would not exacerbate existing site conditions related to unstable geologic conditions. The project would have a less than significant impact on landslide potential, lateral spreading, subsidence, liquefaction or collapse.

d) Be located on expansive soil, as noted in the 2010 California Building Code, creating substantial direct or indirect risks to life or property?

Less Than Significant Impact. The project involves the installation of water main within existing road right-of-way, and across District-owned property. The project may occur in expansive soils, however, it would not include construction of habitable structures and is not expected to create substantial risks to life or property because of expansive soil. The impact is considered less than significant.

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?

No Impact The proposed project consists of the installation and replacement of existing water main facilities. There would be no septic tanks or alternative wastewater facilities included as part of the proposed project.

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

No Impact. The project predominantly occurs within existing paved roadways. A small segment of alignment is in unpaved hillside, between existing right-of-way. There are no known unique geological features in the project vicinity.

Proposed project excavation would occur at a depth of around four feet. Fossils are found in sedimentary rock strata and gravel layers. Ground disturbing works is anticipated to be predominantly in previously disturbed ground. Where excavation is not in disturbed ground, it is anticipated to be in surficial soils. As there are no unique geological features, and excavated soils would not be in bedrock, or gravels where there is potential for fossil discovery, there would be no impact.

3.7.4 References

California Geological Survey. 2005. Earthquake Zones of Required Investigation – Mindego Hill Quadrangle. Seismic Hazard Zones Official Map. Released August 11. Accessed at http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/MINDEGO_HILL_EZRIM.pdf on June 11, 2019.

California Geological Survey. 1974. Earthquake Zones of Required Investigation – Midego Hill Quadrangle. Earthquake Fault Zones Official Map. Released July 1. Accessed at http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/MINDEGO_HILL_EZRIM.pdf on June 11, 2019.

Town of Los Altos Hills. 2007. General Plan. Safety Element.

Town of Los Altos Hills. 2019. Interactive GIS Map. Accessed at http://www2.lynxgis.com/Html5Viewer/Index.html?configBase=http://www2.lynxgis.com/Geocortex/Essentials/REST/sites/Los_Altos_Hills/viewers/LAH/virtualdirectory/Resources/Config/Default on July 3, 2019.

3.8 GREENHOUSE GAS EMISSIONS

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

3.8.1 Environmental Setting

Gases that trap heat in the atmosphere and affect regulation of the Earth's temperature are known as greenhouse gases (GHGs). Many chemical compounds found in the earth's atmosphere exhibit the GHG property. GHGs allow sunlight to enter the atmosphere freely. When sunlight strikes the earth's surface, it is either absorbed or reflected back toward space. Earth that has absorbed sunlight warms up and emits infrared radiation toward space. GHGs absorb this infrared radiation and "trap" the energy in the earth's atmosphere. Entrapment of too much infrared radiation produces an effect commonly referred to as "Global Warming", although the term "Global Climate Change" is preferred because effects are not just limited to higher global temperatures.

GHGs that contribute to climate regulation are a different type of pollutant than criteria or hazardous air pollutants because climate regulation is global in scale, both in terms of causes and effects. Some GHGs are emitted to the atmosphere naturally by biological and geological processes such as evaporation (water vapor), aerobic respiration (carbon dioxide), and off-gassing from low oxygen environments such as swamps or exposed permafrost (methane); however, GHG emissions from human activities such as fuel combustion (e.g., carbon dioxide) and refrigerants use (e.g., hydrofluorocarbons) significantly contribute to overall GHG concentrations in the atmosphere, climate regulation, and global climate change.

Human production of GHG has increased steadily since pre-industrial times (approximately pre-1880) and atmospheric carbon dioxide concentrations have increased from a pre-industrial value of 280 parts per million (ppm) in the early 1800's to 408 ppm in January 2018 (NOAA, 2018). The effects of increased GHG concentrations in the atmosphere include climate change (increasing temperature and shifts in precipitation patterns and amounts), reduced ice and snow cover, sea level rise, and acidification of oceans. These effects in turn will impact food and water supplies, infrastructure, ecosystems, and overall public health and welfare.

The 1997 United Nations' Kyoto Protocol international treaty set targets for reductions in emissions of four specific GHGs – carbon dioxide, methane, nitrous oxide, and sulfur hexafluoride – and two groups of gases – hydrofluorocarbons and perfluorocarbons. These GHGs are the primary GHGs emitted into the atmosphere by human activities. The six common GHGs are described below.

Carbon Dioxide (CO_2). CO_2 is released to the atmosphere when fossil fuels (oil, gasoline, diesel, natural gas, and coal), solid waste, and wood or wood products are burned.

Methane (CH_4). CH_4 is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from the decomposition of organic waste in municipal solid waste landfills and the raising of livestock.

Nitrous oxide (N_2O). N_2O is emitted during agricultural and industrial activities, as well as during combustion of solid waste and fossil fuels.

Sulfur hexafluoride (SF_6). SF_6 is commonly used as an electrical insulator in high voltage electrical transmission and distribution equipment such as circuit breakers, substations, and transmission switchgear. Releases of SF_6 occur during maintenance and servicing as well as from leaks of electrical equipment.

Hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs). HFCs and PFCs are generated in a variety of industrial processes.

GHG emissions from human activities contribute to overall GHG concentrations in the atmosphere and the corresponding effects of global climate change (e.g., rising temperatures, increased severe weather events such as drought and flooding). GHGs can remain in the atmosphere long after they are emitted. The potential for a GHG to absorb and trap heat in the atmosphere is considered its global warming potential (GWP). The reference gas for measuring GWP is CO_2, which has a GWP of one. By comparison, CH_4 has a GWP of 25, which means that one molecule of CH_4 has 25 times the effect on global warming as one molecule of CO_2. Multiplying the estimated emissions for non-CO_2 GHGs by their GWP determines their carbon dioxide equivalent (CO_2e), which enables a project's combined global warming potential to be expressed in terms of mass CO_2 emissions.

Existing GHG Emission Sources at the Project Site

As described in Air Quality 3.3, the project consists of the replacement and installation of potable water mains. There are no existing GHG emission sources at the project site.

3.8.2 Regulatory Setting

California Global Warming Solutions Act (AB32) and Related Legislation

California Air Resources Board (CARB) is the lead agency for implementing Assembly Bill (AB) 32, the California Global Warming Solutions Act adopted by the Legislature in 2006. AB 32 requires the CARB to prepare a Scoping Plan containing the main strategies that will be used to achieve reductions in GHG emissions in California.

Executive Order B-30-15, 2030 Carbon Target and Adaptation, issued by Governor Brown in April 2015, sets a target of reducing GHG emissions by 40 percent below 1990 levels in 2030. By directing state agencies to take measures consistent with their existing authority to reduce GHG emissions, this order establishes coherence between the 2020 and 2050 GHG reduction goals set by AB 32 and seeks to align California with the scientifically established GHG emissions levels needed to limit global warming below two degrees Celsius.

To reinforce the goals established through Executive Order B-30-15, Governor Brown went on to sign SB-32 and AB-197 on September 8, 2016. SB-32 made the GHG reduction target to reduce GHG emissions by 40 percent below 1990 levels by 2030 a requirement as opposed to a goal. AB-197 gives the Legislature additional authority over CARB to ensure the most successful strategies for lowering emissions are implemented, and requires CARB to, "protect the state's most impacted and disadvantaged communities …[and] consider the social costs of the emissions of greenhouse gases."

On December 14, 2017 CARB adopted the second update to the Scoping Plan, the *2017 Climate Change Scoping Plan Update* (*2017 Scoping Plan Update*). The primary objective of the *2017 Scoping Plan Update* is to identify the measures needed to achieve the mid-term GHG reduction target for 2030 (i.e., reduce emissions by 40 percent below 1990 levels by 2030), as established under Executive Order B-30-15 and SB 32. The *2017 Scoping Plan Update* identifies an increasing need for coordination among state, regional, and local governments to achieve the GHG emissions reductions that can be gained from local land use planning and decisions. It notes

emission reduction targets set by more than one hundred local jurisdictions in the state could result in emissions reductions of up to 45 $MMTCO_2E$ and 83 $MMTCO_2E$ by 2020 and 2050, respectively. To achieve these goals, the *2017 Scoping Plan Update* includes a recommended plan-level efficiency threshold of six metric tons or less per capita by 2030 and no more than two metric tons by 2050.

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BAAQMD 2017 Clean Air Plan

As discussed in Section 3.3, Air Quality, the BAAQMD's *2017 Clean Air Plan* is a multi-pollutant plan focused on protecting public health and the climate. The *2017 Clean Air Plan* lays the groundwork for a long-term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050, consistent with GHG reduction targets adopted by the state of California. As opposed to focusing solely on the nearer 2030 GHG reduction target, the *2017 Clean Air Plan* makes a concerted effort to imagine and plan for a successful and sustainable Bay Area in the year 2050. In 2050, the Bay area is envisioned as a region where:

- Energy efficient buildings are heated, cooled, and powered by renewable energy;
- The transportation network has been redeveloped with an emphasis on non-vehicular modes of transportation and mass-transit;
- The electricity grid is powered by 100 percent renewable energy; and
- Bay Area residents have adopted lower-carbon intensive lifestyles (e.g., purchasing low-carbon goods in addition to recycling and putting organic waste to productive use).

The *2017 Clean Air Plan* includes a comprehensive, multipollutant control strategy that is broken up into 85 distinct measures and categorized based on the same economic sector framework used by CARB for the AB 32 Scoping Plan Update.[1] The accumulation of all 85 control measures being implemented support the three overarching goals of the plan. These goals are:

- Attain all state and national air quality standards;
- Eliminate disparities among Bay Area communities in cancer health risk from toxic air contaminants; and
- Reduce Bay Area GHG Emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

The Town of Los Altos Hills Climate Action Plan

The Town of Los Altos Hills Preliminary 2025 Climate Action Plan (CAP) presents a set of community generated strategies to guide the Town and its residents in reducing greenhouse gas (GHG) emissions consistent with state goals for addressing California's contributions to rapid climate change. Local communities are encouraged to reduce GHGs 15% below 2005 levels by 2020 and must address climate change effects in general plans and project environmental reviews. The CAP strategies are aimed at reducing the Town of Los Altos Hills's GHG emissions 30% below 2005 levels by 2025, while providing tools for addressing GHG emissions of future developments.

[1] The sectors included in the AB 32 Scoping Plan Update are: stationary (industrial) sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and super-GHG pollutants.

3.8.3 Discussion

Global climate change is the result of GHG emissions worldwide; individual projects do not generate enough GHG emissions to influence global climate change. Thus, the analysis of GHG emissions is by nature a cumulative analysis focused on whether an individual project's contribution to global climate change is cumulatively considerable.

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

Less Than Significant Impact. No land use changes are proposed as part of the project. The District is not seeking purchase of additional water supplies to support development in the area. The project does not include additional housing, commercial, industrial, retail, or other development. The majority of the water mains included in the project are replacing existing and old water mains that are prone to failure due to age and construction materials. The area served is largely already built-out and therefore the water mains would not directly or indirectly foster new growth or development in the service area. All water mains and extensions proposed are in areas that already receive water services. There are a limited number of new water main segments proposed which would allow the abandonment of cross-country alignments that are harder to access and maintain by the District. Therefore, indirect operational GHG emissions is expected to be negligible.

Direct emissions of GHG would result from the operation of heavy equipment during construction activities. The scope and intensity of the construction activities is minor and of limited duration.

Construction is planned to begin in the Winter of 2019. The water main installation can be accomplished at a rate of approximately 100 to 200 feet per day and is therefore expected to last approximately eight (8) months. The expected construction equipment type and numbers of days in use on the project are as follows:

Project Construction Equipment Estimates		
Equipment Type	**No. on Site**	**No. of Working Days In Use**
Loader (duals as an excavator)	2	~150
Paver	1	~15
Roller	2	~15
F-250 Trucks	4	~150
End Dump Trucks	2-3	~150

Total off-haul is estimated at approximately 3,000 cubic yards (length of trench (approximately 9,000 linear feet) by cross sectional area (9 square feet) on average). Assuming 9 cubic yard capacities, this would result in approximately 350 trips for the off-haul of spoils and material deliveries over the eight-month construction period. Therefore, the impact is considered less than significant.

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

No Impact. The proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions, including the Town's Climate Action Plan and the BAAQMD *Clean Air Plan*. The policies contained in these plans generally apply to larger projects and uses that result in trip generation (e.g., commercial buildings, residential structures, etc.), and not to a water main replacement project. No impact would occur.

3.8.4 References:

Town of Los Altos Hills. 2016. Climate Action Plan 2025 Summary. Accessed on June 11, 2019 at http://losaltoshills.granicus.com/MetaViewer.php?event_id=267&meta_id=53391

3.9 HAZARDS AND HAZARDOUS MATERIALS

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

3.9.1 Environmental Setting

The project alignment is in a rural residential area. Residential uses do not typically use significant amounts of hazardous materials. There are several closed leaking underground storage tank (LUST) sites within the Town, however none are within 300 feet of the proposed project alignments (Envirostor 2019).

3.9.2 Discussion

Would the project:

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

Less Than Significant Impact. The proposed project is not expected to create a hazard to the public or the environment because it would not include the routine transport, use or disposal of hazardous materials. Use of hazardous materials would be limited to small quantities of construction fuels and fluids during the short-term construction period. The use, storage, and application of any toxic or hazardous substances would be regulated by federal, state, and local regulations. The compliance with existing hazardous materials regulations would reduce any chance of upset conditions to less than significant levels.

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

Less Than Significant Impact. The proposed project would not include the use of hazardous materials after project completion; however, small quantities of construction fuels or fluids could be accidentally released into the environment during construction. The contractor would keep all construction equipment well-maintained and would have on-hand at all times adequate absorbent materials to clean-up the largest possible spill (see BMPs for storm water, Section 2.6). Such measures would prevent a significant hazard to the public or the environment related to the accidental release of hazardous materials. With the compliance of applicable regulations and the implementation of standard construction hazardous materials BMPs, the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving hazardous materials.

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

Less Than Significant Impact. The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or hazardous waste within one-quarter mile of an existing or proposed school. There are no schools along the project water main alignments. Foothill College's athletic fields are located just over 0.25 miles from the Elena Road /Robleda intersection and approximately 0.4 mile from the Moody Road/Rhus Ridge Road intersection. The next closest school to the project site is St. Nicholas Catholic school, located over one mile east from the project site.

The project follows linear roadway alignments and the water mains are expected to be installed at a rate of 100 to 200 linear feet per day. Therefore, construction emissions would be temporary and continue along the alignment as construction progresses. Therefore, the proposed project would not create a significant hazard to schools in the vicinity.

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

No Impact. The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (otherwise known as the Cortese List). The Cortese List Data Resources (CalEPA 2019, DTSC 2019, SWRCB 2019) were searched and the project alignment did not appear adjacent to any of the hazardous materials sites.

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?

No Impact. The project alignment is not within an airport land use plan or within two miles of a public or public use airport. The closest airport to the project site is Moffett Field, located approximately six miles east of the project alignments, and the closest public use airport is the Palo Alto Airport, approximately nine miles northeast of the alignments.

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

Less Than Significant Impact. Moody Road is identified as an evacuation route within the Town's Emergency Operations Plan (2018). The contractor would maintain access to emergency vehicles for the duration of construction and therefore would not significantly impair or physically interfere with an adopted emergency evacuation plan. The project specifications will require the contractor to cease construction activities in the event of an emergency or evacuation should their work interfere with said event. After project construction is completed, there would be no impediment to vehicular access as the water mains would be installed underground. Thus, the proposed project would have a less-than-significant impact to emergency plans.

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

No Impact. The Town is within the wildland-urban interface (ABAG 2019) and therefore considered a community at risk for fire. However, all project features would be installed underground. The project does not propose new structures or for human habitation. District standard specifications require the contractor to have fire extinguishers on site during construction activities. The project would improve the District's ability to move water between the District's storage tanks in the event of an emergency such as an earthquake or wildland fire. Therefore, the project would not expose people or structures to significant risk of loss due to wildland fires.

3.9.3 References

Association of Bay Area Governments (ABAG). Bay Area Hazards: Wildland-Urban Interface. Accessed June 26, 2019 at http://gis.abag.ca.gov/website/Hazards/?hlyr=firePerimeters

California Department of Toxic Substances (DTSC). 2019. EnviroStor Database. Accessed June 26, 2019 at https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=Los+Altos+Hills.

California Environmental Protection Agency (CalEPA). 2019. Cortese List Data Resources. Accessed June 26, 2019 at https://calepa.ca.gov/sitecleanup/corteselist/.

Town of Los Altos Hills. 2018. Los Altos Hills Emergency Operations Plan (EOP) Anenx E. Evacuation and Repopulation Plan. October 18. Accessed July 8, 2019 at: https://www.losaltoshills.ca.gov/DocumentCenter/View/2322/LAH-Evacuation-Plan?bidId=.

State Water Resources Control Board (SWRCB). 2019. GeoTracker. Accessed June 26, 2019 at https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=los+altos+hills+

3.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☐	☒
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	☒
iv) Impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

3.10.1 Environmental Setting

The Town of Los Altos Hills is in the Lower Peninsula Watershed, which drains 98 square miles and includes six municipalities and seven creeks (Valley Water 2019). The closest creeks to the project alignment are the Adobe Creek, which runs south of Moody Road, and Deer Creek, which crosses Elena Road through an underground culvert.

The Town of Los Altos Hill's storm drainage system consists of a combination of roadside drainage ways, cross culverts, and underground pipes. Storm water in Los Altos Hills initially flows over land, following the natural contours of the terrain and then moving to roadside flow routes (Town of Los Altos Hills 2007). In addition to the natural drainage system, a network of storm drains collects runoff from streets and roads in Los Altos Hills and carries it to the creeks and San Francisco Bay (Town of Los Altos Hills 2007).

3.10.2 Regulatory Setting

In addition to CEQA, other federal and state laws apply to the hydrology and water quality identified in this report. Each of these laws is identified and discussed below.

Surface Water Quality

Under Section 303(d) of the Clean Water Act, states, territories and authorized tribes are required to develop a list of water quality limited segments. These waters on the list do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. The Clean Water Act requires that these jurisdictions establish priority rankings for water on the lists and develop action plans, called as Total Maximum Daily Loads (TMDL), to improve water quality. None of the creeks in the project area are on the 303(d) list of impaired waters (SWRCB 2010).

Storm Water Drainage

The discharge of storm water from the Town's municipal storm sewer system is regulated primarily under the federal Clean Water Act (CWA) and California's Porter-Cologne Water Quality Control Act. The San Francisco Bay Regional Water Quality Control Board (RWQCB) implements these regulations at the regional level. Under the CWA, the RWQCB has regulatory authority over actions in waters of the United States, through the issuance of water quality certifications.

As authorized by the CWA, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches. The State and Regional Water Quality Control Boards administer the NPDES permit program in California for general and individual permits. The Town is a co-permittee with other members of a regional association known as the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP), which shares a joint permit issued by the RWQCB to discharge stormwater into the San Francisco Bay. The permit must be reissued every five years (Town of Los Altos Hills 2007).

If activities, discharges, or proposed activities and discharges from a property could affect California's surface, coastal, or ground waters, in most cases a permit will need to be acquired from the RWQCB. Dischargers whose projects disturb one or more acres of disturbance are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ). The project is not required to obtain coverage under this permit as it disturbs less than one acre of soil.

Flood Zone Mapping

The National Flood Insurance Program branch of the Federal Emergency Management Agency (FEMA) maintains maps of floodways and floodplains for the United States. FEMA maps these areas on Flood Insurance Rate Maps or FIRMs. A typical FIRM will show specific flood hazard areas, flood risk zones, and floodplains at a local level of detail. In some identified flood hazard zones, certain types of construction and/or uses are prohibited or are required to carry flood insurance. The majority of the Town is project site is located within Zone X, which includes areas of 0.2 percent annual chance of flood; areas of 1 percent annual chance of flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1 percent annual chance of flood (FEMA 2019). Land adjacent to Adobe Creek, located south of Moody Road contain areas mapped as Zone AE which includes areas subject to inundation by the 1-percent-annual-chance flood event. The zone is shown to cross into the Moody Road right-of-way in the vicinity of the proposed project construction area (FEMA 2019).

Valley Water (formerly the Santa Clara Valley Water District, SCVWD)

Valley Water is a water resources agency responsible for balancing flood protection needs with the protection of natural water courses and habitat in the Santa Clara Valley. Valley Water serves 16 cities and 1.8 million residents; providing wholesale water supply, operating three water treatment plants, and providing flood protection along the creeks and rivers within the county.

Santa Clara Valley Urban Runoff Pollution Prevention Program

The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) is an association of thirteen Cities and Towns in the Santa Clara Valley, together with the County of Santa Clara and Valley Water. The RWQCB has permitted Bay Area municipalities, including the member agencies of SCVURPPP, to implement storm water regulations. SCVURPPP incorporates regulatory, monitoring, and outreach measures aimed at improving the water quality of South San Francisco Bay and the streams of the Santa Clara Valley to reduce pollution in urban runoff to the "maximum extent practicable." SCVURPPP promotes storm water pollution prevention within that context.

Participating agencies (including the Town of Los Altos Hills) must meet the provisions of the Municipal Regional Stormwater Permit by ensuring that new development and redevelopment mitigate water quality impacts to storm water runoff both during the construction and operation of projects. In addition, other provisions of the Municipal Regional Stormwater Permit include construction site control, water quality monitoring program, pollutants of concern control programs (including litter, PCBs, mercury, pesticides, and copper), watershed management, illicit discharge detection and elimination, industrial and commercial site controls, municipal operations, and public information/participation.

3.10.3 Discussion

Would the project:

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

Less Than Significant Impact. The proposed project would not violate any water quality standards or waste discharge requirements. The proposed project could impact water quality during the short-term construction period through the accidental release of construction fuels or fluids along the entire alignment or through an increase in sedimentation or erosion due to ground disturbance. The construction contractor would keep all construction equipment well-maintained and would always have on-hand adequate absorbent materials to clean-up the largest possible spill (see stormwater BMPs in Section 2.6).

The project is not required to obtain coverage under the State Water Resources Control Board General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ) as the project is a linear underground project that would involve less than one acre of disturbance. The area of disturbance (36,000 square feet) was calculated using the length of the water main alignment (36,000approximately 9,000 lineal feet multiplied by the width of the excavation, which is 4 feet), or approximately 0.84 acres.

It is standard practice for the District incorporate additional BMPsto protect water quality such as the use of fiber rolls, sand bags/filter covers for drains, plastic over stock piles, and to suspend construction during rain (see Section 2.6). The project would have no impact on water quality after construction as disturbed areas would be returned to pre-project conditions.

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

No Impact. The proposed project would not use groundwater supplies or interfere substantially with groundwater recharge. The proposed new or enlarged water mains would not use additional water or serve new residences or businesses. All proposed water mains would be with existing roadways or on District property. No increase in impervious area is anticipated as a result of the project. Therefore, the project is not expected to interfere with groundwater recharge.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation on- or off-site;

Less than Significant Impact. The proposed project would not alter the existing drainage pattern of the site or area nor result in substantial erosion or siltation. The project does not alter the course of a stream or river, nor does it add impervious surfaces. Most of the proposed water mains would be installed within existing paved roadways. The one cross-country alignment installation occurs over undeveloped land, however erosion control BMPs (see Section 2.6) would be implemented throughout project construction to prevent erosion or siltation. All disturbed sites would be returned to pre-project conditions following construction, therefore drainage patterns along the project alignment would be the same as under existing conditions after project completion. The impact is considered less than significant.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

No Impact. The project site is confined to existing paved roadways and a short cross-country segment (across undeveloped/pervious land) on District owned land. All disturbed areas would be returned to pre-project conditions following the water main installations. No increase in impervious surface area is anticipated. Therefore, the proposed project would not alter the rate or amount of surface water runoff in a manner which would result in flooding on- or off-site.

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

No Impact. As stated above, the project would not add impervious areas or increase stormwater runoff as a result of construction. The District would require that the construction contractor implement standard BMPs to protect water quality during construction. Therefore, there would be no impact from additional runoff, or polluted runoff.

iv) Impede or redirect flood flows?

No Impact. The project includes the installation of underground potable water infrastructure. No features would be above ground. Therefore, the project would not impede or redirect flood flows.

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

No Impact. The terms tsunami or seiche are described as ocean waves or similar waves in large water bodies, usually created by undersea fault movement or by a coastal or submerged landslide. The site is approximately five miles west of the San Francisco Bay and 13 miles east of the Pacific Ocean and is not near any large inland water bodies. Therefore, the project is not at risk of inundation by seiche or tsunami. In addition, the project installs potable water mains underground and therefore there is no risk for release of pollutants due to inundation.

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

No Impact. The project does not include the addition of impermeable surfaces. Therefore, the project would not affect groundwater supplies, quality, or management.

3.10.4 References

FEMA 2019. FEMA Flood Map Service Center. Accessed June 26, 2019 at https://msc.fema.gov/portal/search?AddressQuery=los%20altos%20hills#searchresultsanchor

Los Altos Hills, Town of. 2007. Town of Los Altos Hills General Plan Update. Adopted April 26. http://www.losaltoshills.ca.gov/documents-forms/browse/cat_view/61-general-plan, accessed June 26, 2019.

Valley Water. 2019. Lower Peninsula Watershed Fast Facts. Accessed June 26, 2019 at https://www.valleywater.org/learning-center/lower-peninsula-watershed-fast-facts

Santa Clara Valley Urban Runoff Pollution Prevention Program. 2019. HMP Applicability Map. Accessed June 26, 2019 at http://www.scvurppp-w2k.com/HMP_app_maps/Los_Altos_HMP_Map.pdf

3.11 LAND USE AND PLANNING

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

3.11.1 Environmental Setting

The project site is located in the Town of Los Altos Hills and mostly located within existing road right-of-way which do not carry land use or zoning designations. One alignment is located on District land consisting of the Elena Tank site which is designated as "Residential" according to the Town's General Plan Land Use Diagram and zoned R-A (Residential Agricultural). Portions of the water mains to be replaced or installed also fall within areas marked as "Open Space Conservation Area." Deer creek is located in the vicinity of the Elena Road North water main, however, the proposed water main is located within the road right-of-way and Deer Creek is confined to a culvert beneath the roadway, more than 8 feet below the proposed water main installation.

3.11.2 Discussion

Would the project:

a) Physically divide an established community?

No Impact. The project would be located in road right-of-way and a portion of the Elena Tank Site. All improvements would be installed underground. The project does not include any physical barriers such as new roads or fences such that existing land use patterns would change resulting in a division of an established community.

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

No Impact. The project would involve Town review of the traffic control and staging plan. The proposed project consists of installation or replacement of existing infrastructure. There would be no conflict with a land use plan, policy, or regulation.

3.11.3 References

Town of Los Altos Hills. 2008. Town of Los Altos Hills Land Use Diagram. March. Accessed at http://www.losaltoshills.ca.gov/DocumentCenter/View/149/General-Plan---2a-Land-Use-Diagram-PDF on June 10, 2019.

3.12 MINERAL RESOURCES

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

3.12.1 Environmental Setting

Mineral resources that have been found and extracted in the Los Altos Hills area are primarily construction aggregate deposits. Neary Quarry, which supplied base rock for the construction of Moffett Field and crushed rock for Highways 101 and 280, is no longer in operation. The nearest quarry currently in operation is Permanente Quarry owned by Hanson Cement and Gypsum Company located on unincorporated lands in Santa Clara County, within the Sphere of Influence of the City of Cupertino (Los Altos Hills 2007).

3.12.2 Discussion

Would the project:

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

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

No Impact (Responses a – b). There are no known mineral resources on or near the project alignment, either of regional value or local importance. Ground disturbance is planned under existing Town roads and at the Elena Tank site. Therefore, the project would not result in the loss of availability of known mineral resources

3.12.3 References

Los Altos Hills. 2007. General Plan Conservation Element. Adopted April 26. Accessed on June 27, 2019 at http://www.losaltoshills.ca.gov/DocumentCenter/View/151/General-Plan---4-Conservation-PDF.

3.13 NOISE

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

3.13.1 Environmental Setting

Noise may be defined as loud, unpleasant, or unwanted sound. The frequency (pitch), amplitude (intensity or loudness), and duration of noise all contribute to the effect on a listener, or receptor, and whether the receptor perceives the noise as objectionable, disturbing, or annoying.

The Decibel Scale (dB)

The decibel scale (dB) is a unit of measurement that indicates the relative amplitude of a sound. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a tenfold increase in acoustic energy, while 20 dBs is 100 times more intense, 30 dBs is 1,000 more intense, and so on. In general, there is a relationship between the subjective noisiness, or loudness of a sound, and its amplitude, or intensity, with each 10 dB increase in sound level perceived as approximately a doubling of loudness.

Sound Characterization

There are several methods of characterizing sound. The most common method is the “A-weighted sound level,” or dBA. This scale gives greater weight to the frequencies of sound to which the human ear is typically most sensitive. Thus, most environmental measurements are reported in dBA, meaning decibels on the A-scale.

Human hearing matches the logarithmic A-weighted scale, so that a sound of 60 dBA is perceived as twice as loud as a sound of 50 dBA. In a quiet environment, an increase of 3 dB is usually perceptible, however, in a complex noise environment such as along a busy street, a noise increase of less than 3 dB is usually not perceptible, and an increase of 5 dB is usually perceptible. Normal human speech is in the range from 50 to 65 dBA. Generally, as environmental noise exceeds 50 dBA, it becomes intrusive and above 65 dBA noise becomes excessive. Nighttime activities, including sleep, are more sensitive to noise and are considered affected over a range of 40 to 55 dBA. Table 2-1 lists typical outdoor and indoor noise levels in terms of dBA.

Table 3-1: Typical Outdoor and Indoor Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	-110-	Rock Band
Jet flyover at 1,000 feet		
	-100-	
Gas lawn mower at 3 feet		
	-90-	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	-80-	Garbage disposal at 3 feet
Noise urban area, daytime		
Gas lawnmower, 100 feet	-70-	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	-60-	
		Large business office
Quiet urban daytime	-50	Dishwasher next room
Quite urban nighttime	-40-	Theater, large conference room (background)
Quiet suburban nighttime		
	-30-	Library
Quite rural nighttime		Bedroom at night
	-20-	
		Broadcast/recording studio
	-10-	
Lowest threshold of human hearing	-0-	Lowest threshold of human hearing

Source: Caltrans 2009

Sound levels are typically not steady and can vary over a short time period. The equivalent noise level (Leq) is used to represent the average character of the sound over a period of time. The Leq represents the level of steady noise that would have the same acoustical energy as the sum of the time-varying noise measured over a given time period. Leq is useful for evaluating shorter time periods over the course of a day. The most common Leq averaging period is hourly, but Leq can describe any series of noise events over a given time period.

Variable noise levels are values that are exceeded for a portion of the measured time period. Thus, L01 is the level exceeded one percent of the time and L90 is the level exceeded 90 percent of the time. The L90 value usually corresponds to the background sound level at the measurement location.

Noise exposure over the course of an entire day is described by the day/night average sound level, or Ldn, and the community noise equivalent level, or CNEL. Both descriptors represent the 24-hour noise impact on a community. For Ldn, the 24-hour day is divided into a 15-hour daytime period (7 AM to 10 PM) and a nine-hour nighttime period (10 PM to 7 AM) and a 10 dB “penalty” is added to measure nighttime noise levels when calculating the 24-hour average noise level. For

example, a 45 dBA nighttime sound level would contribute as much to the overall day-night average as a 55 dBA daytime sound level. The CNEL descriptor is similar to Ldn, except that it includes an additional 5 dBA penalty beyond the 10 dBA for sound events that occur during the evening time period (7 PM to 10 PM). The artificial penalties imposed during Ldn and CNEL calculations are intended to account for a receptor's increased sensitivity to sound levels during quieter nighttime periods.

Sound Propagation

The energy contained in a sound pressure wave dissipates and is absorbed by the surrounding environment as the sound wave spreads out and travels away from the noise generating source. Theoretically, the sound level of a point source attenuates, or decreases, by 6 dB with each doubling of distance from a point source. Sound levels are also affected by certain environmental factors, such as ground cover (asphalt vs. grass or trees), atmospheric absorption, and attenuation by barriers. Outdoor noise is also attenuated by the building envelope so that sound levels inside a residence are from 10 to 20 dB less than outside, depending mainly on whether windows are open for ventilation or not.

When more than one point source contributes to the sound pressure level at a receiver point, the overall sound level is determined by combining the contributions of each source. Decibels, however, are logarithmic units and cannot be directly added or subtracted together. Under the dB scale, a doubling of sound energy corresponds to a 3 dB increase in noise levels. For example, if one noise source produces a sound power level of 70 dB, two of the same sources would not produce 140 dB – rather, they would combine to produce 73 dB.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear can discern 1-dB changes in sound levels when exposed to steady, single-frequency ("pure-tone") signals in the mid-frequency (1,000–8,000 Hz) range. In typical noisy environments, changes in noise of 1 to 2 dB are generally not perceptible. However, it is widely accepted that people can to begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5-dB increase is generally perceived as a distinctly noticeable increase, and a 10-dB increase is generally perceived as a doubling of loudness.

Noise Effects

Noise effects on human beings are generally categorized as:

- Subjective effects of annoyance, nuisance, and/or dissatisfaction
- Interference with activities such as speech, sleep, learning, or relaxing
- Physiological effects such as startling and hearing loss

Most environmental noise levels produce subjective or interference effects; physiological effects are usually limited to high noise environments such as industrial manufacturing facilities or airports.

Predicting the subjective and interference effects of noise is difficult due to the wide variation in individual thresholds of annoyance and past experiences with noise; however, an accepted method to determine a person's subjective reaction to a new noise source is to compare it to the existing environment without the noise source, or the "ambient" noise environment. In general, the more a new noise source exceeds the ambient noise level, the more likely it is to be considered annoying and to disturb normal activities.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear is able to discern 1-dB changes in sound levels when exposed to steady, single-frequency ("pure-tone") signals in the mid-frequency (1,000–8,000 Hz) range. In typical noisy environments, changes in noise of 1 to 2 dB are generally not perceptible. However, it is widely accepted that people are able to begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5

dB increase is generally perceived as a distinctly noticeable increase, and a 10 dB increase is generally perceived as a doubling of loudness that would almost certainly cause an adverse response from community noise receptors.

Existing Noise Environment

Ambient noise sources in the project area are from traffic on Town roads. Development in the areas where project activities are planned include single-family homes on large lots. No other significant commercial, retail, or industrial uses are present adjacent to the tank site or along the proposed water main alignments.

Sensitive Receptors

Noise sensitive receptors are areas where unwanted sound or increases in sound may have an adverse effect on people or land uses. Residential areas, hospitals, schools, and parks are examples of noise receptors that could be sensitive to changes in existing environmental noise levels. The closest noise sensitive receptors in proximity to the project site include the single-family residential homes immediately east of the site on project roads, which are adjacent to where construction activities would be undertaken.

3.13.2 Regulatory Setting

Los Altos Municipal Code

The Town's Municipal Code (Title 5, Chapter 6, Article 02) limits the hours and days of outside construction activities to 8:00 a.m. to 5:30 p.m. Monday through Saturday, with no construction allowed on Sundays or public holidays.

California Code of Regulations

California Code of Regulations (13 CCR § 2485) prohibits diesel engine idling for greater than five minutes at any location.

3.13.3 Discussion

Would the project result in:

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

Less than Significant Impact. The water mains would be installed underground, therefore there would be no noise associated with District daily operations. The project would result in temporary construction noise during installation. Construction noise is considered a less than significant impact because of the temporary nature of the noise and because the hours of construction are limited by the project specifications within the hours of 8:00 am and 5:00 pm Monday through Friday, with no construction on Saturdays, Sundays or Holidays. The specifications will require the contractor to cease laying water main at 3:00 pm to ensure there is enough time to clean up and re-open the roadway by 5:00 pm. Since construction activities would move around the respective project areas as construction proceeds (100 to 200 linear feet installed per day), it is unlikely that any one location would experience high noise levels continuously for extended periods of time. Construction equipment to be used includes loaders (duals as an excavator because it has a bucket on the opposite end), a paver, roller, trucks and end dump trucks. The noise levels for most of this equipment at 50 feet ranges from 80 dBA (decibels, A-weighted) to 90 dBA, with the backhoes being the loudest.

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

Less Than Significant Impact. The installation of the water mains would result in noise from construction machinery and vehicles and could temporarily expose persons to some minor groundborne vibration and noise due to cutting of the pavement and excavation. Construction is expected to be approximately eight months beginning in the winter of 2019. Construction related noise is temporary and therefore considered less than significant. Water main installation is expected to progress at approximately 100-200 linear feet per day. No generation of ground borne vibration or ground borne noise is associated with water main operations.

Although some vibration associated with construction activities may be felt by the residences along the water main alignments, it is not considered significant because it would be intermittent (occurring only when equipment was in operation), infrequent (equipment would not operate every day), and at no time would vibration from project construction damage buildings or structures. This impact would be less than significant.

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

No Impact. The project site is not within an airport land use plan nor is it within two miles of a public or private airport. Moffett Air Field is the closest runway to the project site, approximately six miles to the east. The operation of the proposed water main facilities do not produce noise and would not expose people residing or working in the area to excessive noise levels. There will be temporary and periodic increases in the ambient noise levels at the site resulting from project construction. However, because the noise would be temporary and limited to daytime hours per the Town's noise ordinance, the impact is considered less than significant.

3.13.4 References

Town of Los Altos. Municipal Code. Accessed June 27, 2019 at: http://www.losaltoshills.ca.gov/199/Municipal-Code

3.14 POPULATION AND HOUSING

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

3.14.1 Discussion

Would the project:

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

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

No Impact. (Responses a – b). The project area is completely built out and the project would not serve new homes or businesses. Although the project would include new or enlarged water mains, they are intended to provide increased reliability (replacing old and failing water mains with upgraded materials to better withstand an earthquake) and efficiency (increased water main diameter to move water more quickly, reducing pump run times) moving water between the existing Elena and Altamont water tanks. The new or enlarged water mains would not use additional water or serve new residences or businesses. Connection to Cal Water's infrastructure would improve system reliability in the event of a catastrophic event such as an earthquake. Considering the project area is already built out and no changes in surrounding land uses are proposed, the proposed project would not induce population growth, either directly or indirectly.

The proposed project would not remove any existing housing, nor would it displace any people necessitating the construction of replacement housing elsewhere. No impact would occur.

3.15 PUBLIC SERVICES

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

3.15.1 Environmental Setting

Fire protection, suppression and safety services are provided to the Town of Los Altos Hills by the Los Altos Hills County Fire District (LAHCFD). The LAHCFD contracts with the Santa Clara County Fire Department for paramedic and fire protection services in the Town and neighboring unincorporated areas. The LAHCFD augments County Fire Department services by purchasing equipment such as specialized fire apparatus for use in the high hazard brush and grass fire areas, and funding programs for fire prevention such as fuel reduction and replacement of under-sized water mains and installation of new water mains or fire hydrants. The LAHCFD also maintains emergency access roads and provides citizen emergency preparedness training and peak-load staffing (additional personnel during the fire season). Ambulance service is provided to the Town by EMS Santa Clara County on contract with the LAHCFD (Town of Los Altos Hills 2007).

The Town of Los Altos Hills contracts with the Santa Clara County Sheriff's Department for law enforcement and public safety services. The Sheriff has an office in the Heritage House next to Town Hall (Town of Los Altos Hills 2007).

The project alignments are in the Los Altos School District. The closest grade schools to the project are the St. Nicholas Catholic School, over one mile to the east. Foothill College is located over 0.25 miles to the east of the nearest project alignment (at the intersection of Elena Road and Robleda Road).

The Byrne Preserve, Rhus Ridge Preserve, and the Rancho San Antonio Open Space Preserve are located in or adjacent to the Town. The Town owns and manages the Byrne and Rhus Ridge Preserves, while the San Antonio Open Space Preserve is a Santa Clara County park managed by the Mid-peninsula Regional Open Space District.

3.15.2 Discussion

Would the project:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i) Fire protection?

ii) Police?

iii) Schools?

iv) Parks?

v) Other public facilities?

No Impact. The proposed project is the installation of water mains. The project does not include structures for human habitation or flammable materials. Therefore, the project would not increase the demand for fire protection, police, or emergency services, and would not affect service ratios or response times, or require the provision of new or physically altered stations.

The proposed project would not induce population growth (see Response 3.14a); therefore, it would not increase enrollment at local schools, or require the provision of new or physically altered schools nor increase the use of local and regional parks or require the provision of new or physically altered parks, or other governmental facilities.

3.16 RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

3.16.1 Discussion

Would the project:

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

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

No Impact. (Responses a – b). The project includes the installation, replacement, and abandonment of potable water supply infrastructure. The proposed project would not induce population growth (see Response 3.14a); therefore, it would not increase the use of existing neighborhood and regional parks or other recreational facilities. The project does not include or require the construction or expansion of recreational facilities.

3.17 TRANSPORTATION

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

3.17.1 Environmental Setting

Regional access is provided to the project alignment by Highway 280 and local access from Highway 280 is provided via El Monty Road and Page Mill Road. The water mains would be installed in several local streets including Moody Road, Elena Road, Vista Del Valle Court, Old Snakey Road, and Taaffe Road. A short cross-country alignment is proposed on the Elena tank site that would connect to Elena Road. Elena and Taaffe Roads are classified as neighborhood connector roads, while Moody Road is classified as a collector road (Town of Los Altos Hills 2015).

There is no transit service along the proposed project's water main alignment. The nearest transit routes serve Foothill College (VTA 2019). A portion of Elena Road (between Robleda Road and Moody Road) is a designated local bikeway (Town of Los Altos Hills 2015), but no project activities are proposed along this portion of Elena Road. No other roads in the project area are designated bikeways. However, given the rural setting and low traffic volumes of the project roadways, all project road lanes in the project area allow for on-road riding. There are roadside paths or sidewalks along portions of the alignment.

3.17.2 Discussion

Would the project:

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

Less Than Significant Impact. The proposed project consists of the installation, replacement, and abandonment of water main infrastructure. As such, the proposed project would not generate a permanent increase in traffic on the local or regional road network and would therefore not conflict with any plan, ordinance, or policy establishing performance standards for transportation and circulation system.

Project construction would add temporary vehicle trips to project roadways from construction crews, and delivery of equipment and materials. Anticipated heavy equipment includes two loaders (duals as an excavator), one paver, two rollers, four F-250 trucks and two to three end dump trucks. Project construction-related vehicle trips would be temporary and intermittent,

occurring throughout the day, but also during the AM (7 AM – 9 AM) and PM (4 PM – 6 PM) peak hour time periods. These impacts are temporary and therefore considered a less than significant impact.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3(b), which pertains to vehicle miles travelled?

Less Than Significant Impact. The project would not generate new permanent traffic on the local or regional road network as there are no on-site employees associated with water main operations. Operational traffic related to maintenance of the existing tanks and water mains would not change significantly from existing maintenance activities. Therefore, no change in vehicle miles traveled is anticipated as a result of the project.

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

Less Than Significant. The proposed project would involve the installation, replacement, and abandonment of water mains, mostly within existing road right-of-way. The contractor is required by the District to prepare a Traffic Control Plan to manage traffic during construction and maintain access to emergency vehicles and residents' access to their homes during construction. Therefore, the impact is considered less than significant.

d) Result in inadequate emergency access?

No Impact. Despite anticipated proposed road closures during construction, emergency vehicles would be allowed passage during construction, and the project would not cause an increase in traffic that could delay emergency vehicles as emergency vehicles would be waived through the work area during construction. The proposed project would not result in inadequate emergency access.

3.17.3 References

Town of Los Altos Hills. 2007. General Plan Circulation and Scenic Roadways Element. Accessed on June 27, 2019 at http://www.losaltoshills.ca.gov/DocumentCenter/View/150/General-Plan---3-Circulation-PDF.

Valley Transportation Authority. 2019. Bus and Rail Map Effective April 8, 2019. Accessed on June 27, 2019 at: http://www.vta.org/sfc/servlet.shepherd/document/download/069A0000001csszIAA

3.18 TRIBAL CULTURAL RESOURCES

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

3.18.1 Environmental Setting

The land surrounding the project site is in the traditional territory of the Ohlone (or Costanoans as they were known by the Spanish) Native American Tribe. The Ohlone lived in tribelets or nations that were dialect distinct from each other, autonomous, and territorially separated from each other. Each tribelet consisted of one or more permanent villages, with various seasonal temporary encampments located throughout their territory for the gathering of raw material resources, hunting and fishing. The Ohlone lived in extended family units in domed dwellings constructed from tule, grass, wild alfalfa, and ferns. The subsistence practices included the consumption of plant resources such acorns, buckeyes, and seeds that were supplemented with the hunting of elk, deer, grizzly bear, mountain lions, sea lions, whales, and waterfowl. The Costanoan peoples practiced controlled burning on an annual basis throughout their territory as a form of land management to insure plant and animal yields for the coming year (Levy 1978).

Both linguistic and archaeological evidence suggests that the ancestors of the Ohlone arrived in the Bay Area around 500 A.D., moving south from the San-Joaquin-Sacramento river delta (Levy 1978).

The group of Ohlones in the project area would have likely spoken the Tamyen Dialect of the Costanoan language (Kroeber 1975/1925) and numbered approximately 1200 people at the time of the Spanish invasion (Levy 1976).

The first Europeans to reach the San Francisco area were Spanish explorers in 1769 as part of the Portolá expedition. In 1774, the de Anza expedition had set out to convert the Native American tribes to Christianity, resulting in the establishment of (among others) Mission San Francisco de

Asis (Mission Dolores) (founded in 1776), Mission Santa Clara de Asis (founded in 1777) and Mission San José (founded in 1779). The El Camino Real became a heavily traveled route between the 21 California Missions. This route led to the establishment of inns and roadhouses to serve travelers along the way. In this historic period, the Ohlone people were subjugated and absorbed into the mission system for compulsory baptism and conversion to Christianity that resulted in the loss of their freedom of movement, their culture, and customs.

In the year 1836, control of Mission Santa Clara was taken from the padres and turned over to government appointed civil commissioners who were supposed to oversee the "return of the land to the native population." However, by and large, this did not happen and squatters took over the church buildings and land. Disorder and decay set in and by 1839, there were only 300 Indians remaining in the vicinity of Mission Santa Clara (City of Santa Clara 2019).

3.18.2 Regulatory Setting

Native American Graves Protection and Repatriation Act of 1990

The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally funded institution housing Native American remains or artifacts to compile an inventory of all cultural items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

Native American Heritage Commission, Public Resources Code Sections 5097.9 – 5097.991

Section 5097.91 of the Public Resources Code (PRC) established the Native American Heritage Commission (NAHC), whose duties include the inventory of places of religious or social significance to Native Americans and the identification of known graves and cemeteries of Native Americans on private lands. Under Section 5097.9 of the PRC, a state policy of noninterference with the free expression or exercise of Native American religion was articulated along with a prohibition of severe or irreparable damage to Native American sanctified cemeteries, places of worship, religious or ceremonial sites or sacred shrines located on public property. Section 5097.98 of the PRC specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a county coroner. Section 5097.5 defines as a misdemeanor the unauthorized disturbance or removal of archaeological, historic, or paleontological resources located on public lands.

California Native American Graves Protection and Repatriation Act of 2001

Codified in the California Health and Safety Code Sections 8010–8030, the California Native American Graves Protection Act (NAGPRA) is consistent with the federal NAGPRA. Intended to “provide a seamless and consistent state policy to ensure that all California Indian human remains and cultural items be treated with dignity and respect,” the California NAGPRA also encourages and provides a mechanism for the return of remains and cultural items to lineal descendants. Section 8025 established a Repatriation Oversight Commission to oversee this process. The act also provides a process for non–federally recognized tribes to file claims with agencies and museums for repatriation of human remains and cultural items.

Assembly Bill 52

Assembly Bill (AB) 52 specifies that a project that may cause a substantial adverse change in the significance of a tribal cultural resource, as defined, is a project that may have a significant effect on the environment. AB 52 requires a lead agency to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project, if the tribe requests in writing to the lead agency, to be informed by the lead agency of proposed projects in that geographic area and the tribe requests consultation, prior to determining whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project.

No Native American tribes contacted the Town under AB52, and thus AB52 consultation was not required as part of the project.

3.18.3 Discussion

Would the project:

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

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

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe?

a) Less Than Significant with Mitigation. Under CEQA, significant resource is one that is listed in a California or local historic register or is eligible to be listed. As such, lead agencies have a responsibility to evaluate such resources against the California Register criteria prior to making a finding as to a proposed project's impacts to historical resources (PRC § 21084.1, 20174, 14 CCR § 15064.5(3).

It is possible for a lead agency to determine that an artifact, site, or feature is considered significant to a local tribe, without necessarily being eligible for the CRHR. A determination of such by a lead agency would make an artifact a significant resource under CEQA.

Ground disturbing activity has the potential of archaeological discovery. Resource P-43-000989 is located close to the eastern end of the Moody Road project segment and is known to extend beyond its mapped boundaries. As such, there is potential for discovery of archaeological resources and human remains during project works. The northern segment of the project site is not located near any known archaeological resources, although the water main would encounter native soils on the undeveloped hillside and has the potential for the unanticipated discovery of archaeological resources. Both segments of the water main are located near creeks, which are known to contain Native American archaeological resources.

The implementation of Mitigation Measure CULT-1 (see Section 3.5.3) and TRIB-1, below, would safeguard any TCRs if they are found to be present.

Impact TRIB-1: Project construction could disturb or damage unknown tribal cultural resources resulting in an adverse change in the significance of the tribal resource.

Mitigation Measure TRIB-1: It is possible for a lead agency to determine that an artifact is considered significant to a local tribe, and thus considered a significant resource under CEQA, even if it would not otherwise be considered significant under CEQA. As such, all Native American tribal finds are to be considered significant until the lead agency has enough evidence to make a determination of significance.

Effectiveness: This measure would minimize or avoid impacts on potential Tribal Cultural Resources.

Implementation: By the Purissima Hills Water District.

Timing: After discovery of artifacts.

Monitoring: The District shall review the find in consultation with an archaeologist and Native American monitor before making a determination. Additionally, the find will be analyzed by a qualified archaeologist in order to determine if it meets the requirements for inclusion on a historic register.

3.18.4 References

Archaeological Resource Management, 1994. Cultural Resource Evaluation of the Adobe Creek Project. Report Number S-16691. Unpublished confidential archaeological report. On file at NWIC.

Britton & Rey 1890. Official map of the County of Santa Clara, California: compiled from U.S. surveys, county records, and private surveys and the tax-list of 1889, by order of the Hon. Board of Supervisors. San Jose, Calif. Herrmann Bros., 1890 Stored at the Library of Congress. Accessed June 25, 2019 at https://www.loc.gov/resource/g4363s.la000039/?r=0.031,0.127,0.16,0.068,0

City of Santa Clara, 2019. Santa Clara "The Mission City" Accessed June 25, 2019 at http://santaclaraca.gov/visitors/santa-clara-history/the-mission-city

Holman & Associates, 1998. Report Number S-19995. Results of Archaeological Monitoring and Burial Removal. Unpublished confidential archaeological report. On file at NWIC.

Kroeber, A.L. 1976. Handbook of the Indians of California. Dover Publications Inc. New York. (Originally Published 1925)

Levy, Richard, L. 1976. Costanoan Internal Relationships. University of California. Berkeley.

_____ 1978. Handbook of North American Indians. Washington: Smithsonian Institution. Washington D.C. (Ed. Robert F. Heizer).

NAHC, 2019. Unpublished letter containing search results from Sacred Lands File search. Kept on file at NAHC and with MIG. Inc.

NWIC, 2019. Report number 18-2215. Unpublished confidential report containing search results from site specific survey. Kept on file at NWIC and with MIG. Inc.

3.19 UTILITIES AND SERVICE SYSTEMS

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

3.19.1 Discussion

Would the project:

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

No Impact. The proposed project consists of the installation and replacement of existing water mains mostly located within existing roadways. No new impervious areas are proposed as part of the project. Thus, there are no new or expanded water, wastewater treatment, electric power, natural gas, or telecommunication facilities included as part of the project. Any existing stormwater drainage facilities damaged by construction would be repaired and replaced in place and would not be increased in size or relocated. Therefore, the project would have no impact.

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

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

No Impact. (Responses b - c). No additional water supply is being sought as part of the project. Water demand by construction workers and construction uses would be negligible. Operation of the proposed project would not result in any permanent increase in water demand.

Although the project would include new segments (to replace abandoned segments) or enlarged water mains, they are intended to provide improved transmission between the pump station and tank site. The new or enlarged water mains would not use additional water or serve new residences or businesses. Therefore, the project would not require or result in the construction of new water or wastewater treatment facilities or the expansion of existing facilities.

During project construction, portable toilets would be provided by the contractor which would be processed at a local facility, in accordance with State and local regulations. The wastewater created from portable toilets used during project constriction is also negligible

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

Less than Significant Impact. (Responses d - e). Although a small amount of construction waste would be generated by the project over the short-term, the project would not generate solid waste after construction. Construction waste is expected to be minimal and would not exceed the capacity of the landfill that serves the area.

e) Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?

No Impact. The project would not conflict with any federal, state or local statutes and regulations related to solid waste.

3.20 WILDFIRE

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

3.20.1 Environmental Setting

The project site is situated within the Town of Los Altos Hills, adjacent to the City of Los Altos, Cupertino, Palo Alto and unincorporated Santa Clara County. The Town of Los Altos Hills is within the urban-wildland interface (Town of Los Altos Hills 2015). The Town and project features are located in an incorporated city and therefore in a Local Responsibility Area; or LRA and area in a mapped area that is considered a “Non-Very High Fire Hazard Severity Zone” (CalFire 2008). Rancho San Antonio Open Space Preserve is located to the south of the Town of Los Altos Hills and is a State Responsibility Area (SRA) and also has a “Non-Very High Fire Hazard Severity Zone” designation (CalFire 2008).

3.20.2 Discussion

Would the project:

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

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

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

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

Less than Significant Impacts. The project site is within the Town of Los Altos Hills which is located in an LRA that is designated a Non-Very High Fire Hazard Severity Zone" (CalFire 2008). The nearest SRA is the Rancho San Antonio Open Space Preserve which is located to the south of the Town of Los Altos Hills and also has a "Non-Very High Fire Hazard Severity Zone" designation (CalFire 2008).

The nearest SRA with a "Very High Fire Hazard Severity Zone" designation is in Portola Valley, west of Portola Road, about 3.5 miles northwest of the project site and in Saratoga, approximately 5 miles southeast of the project site.

The project is near a state responsibility area (Rancho San Antonio Open Space Preserve) that is designated as a Non-Very High Fire Hazard Severity Zone" designation (CalFire 2008). As stated above in Response 3.9(f), the project would require temporary closure of some roads during construction. However, access would be maintained at all times for residents and emergency vehicles which would be waved through construction sites as needed. Contractors shall comply with all Town or local fire authority requirements for evacuation in the event of an emergency.

The project would not exacerbate wildfire risks as it is the installation of water mains located below ground and mostly within road right-of-way. The one cross-country alignment would not significantly alter vegetated areas so as to exacerbate wildfire risk by introducing dense plantings near structures. The water mains do not require additional infrastructure to support their operation. By abandoning certain cross-country segments, the District reduces the need for maintenance in less disturbed/developed areas. The project does not include housing or structures for habitation that would be at risk for significant risks due to downstream flooding or landslides as a result of post-fire slope instability as the project installs water mains below the ground and would not change drainage patterns. All disturbed areas would be slope protected and returned to pre-project conditions following water main installation. The impacts are considered less than significant.

3.20.3 References

CalFire. 2008. Santa Clara County Very High Fire Severity Zones in LRA.

Town of Los Altos Hills. 2015. Staff Report to the Planning Commission, SU: Modification to the Town of Los Altos Hills Wildland-Urban Interface Fire area Map, File #395-14-MISC. Accessed July 8, 2019 at: http://losaltoshills.granicus.com/MetaViewer.php?clip_id=304&meta_id=42404

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

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

3.21.1 Discussion

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

Less Than Significant with Mitigation. The proposed project would not 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, 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. There are sensitive biological resources (San Francisco dusky footed woodrat and California Oak Woodland habitat) along the cross-country project alignment that would be protected through Mitigation Measures BIO-1 through BIO-6. No tree removal is proposed however, there would be some tree trimming (under the supervision of an arborist, per BIO-6). The remainder of the project footprint would be restricted to paved roads. The project would largely be constructed outside of the bird nesting season and preconstruction surveys for nests would prevent impacts to nesting birds for any work that would occur during the nesting season (see BIO-3). Mitigation is incorporated into the project to prevent potentially significant impacts to Cultural Resources and Tribal Cultural Resources (Mitigation Measures CULT-1 and TRIB-1).

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

Less Than Significant. The project will not have environmental effects that are individually limited but cumulatively considerable because it does not cause any long term or growth-related impacts. The project will replace existing water main infrastructure and eliminate "cross-country" alignments. The new facilities would mainly be along existing paved roads and will not significantly increase the impervious surfaces in the area. The one cross-country alignment is on vegetated land which would be returned to pre-project conditions following installation and would not involve new pavement. The area is mostly built-out already and therefore would not serve new homes or businesses. Therefore, the cumulative impacts are considered less than significant.

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

Less Than Significant with Mitigation. Project construction could result in adverse short-term construction impacts. The project could have potentially significant impacts on biological resources, and cultural and tribal cultural resources. However, mitigation measures have been identified and included in the project (BIO-1 through BIO-6, CUL-1 and TRIB-1) to reduce these impacts to less-than-significant levels. The project also includes the District's standard measures for dust and erosion control during construction and would adhere to the Town's Municipal Code requirements for construction noise. The project would have a less than significant impact on all other resource areas.

Chapter 4. List of Preparers

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