INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

FOR THE

MAINTENANCE DISTRICT NO. 8A NORTH FORK WATER SYSTEM IMPROVEMENTS

JUNE 2019

Prepared for:

County of Madera
Community & Economic Development Department
200 West 4th Street
Madera, CA 93637

Prepared by:

De Novo Planning Group
1020 Suncast Lane, Suite 106
El Dorado Hills, CA 95762
(916) 949-3231

De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm

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Proposed Mitigated Negative Declaration for the Maintenance District No. 8A North Fork Water System Improvements

Lead Agency:
County of Madera
Community & Economic Development Department
200 West 4th Street
Madera, CA 93637

Project Title: Maintenance District No. 8A North Fork Water System Improvements

Project Location: The Maintenance District No. 8A (MD-8A) North Fork Water System Improvement project site (project site) is located throughout North Fork, California. North Fork is an unincorporated community in central portion of Madera County. North Fork lies is located approximately 4.3 miles south of Bass Lake, 10.5 miles southeast of Oakhurst, and 13.3 miles northwest of Shaver Lake. MD-8A is located south of Bass Lake along the North Fork of Willow Creek, near the intersection of County Road (CR) 222 and CR 225. The existing water system (public water system number 2000561) consists of two wells (Well No. 1 and the Pizza Well), a 200,000- gallon storage tank, distribution piping, and appurtenances. The proposed improvements are generally located along CR 222 and CR 225, as well as near North Fork Elementary School (33087 CR 228), Mountain Oaks High School (33030 CR 228), and North Fork Town Hall (33060 CR 228). The project area has elevations ranging between approximately 2,592 and 2,743 feet above sea level.

Project Description: The proposed project includes development of the following water system improvements: 1) New Buckhorn Saloon and Restaurant; 2) North Fork Elementary School; 3) John Hovannisian Water System; 4) Bass lake Mobile Home Park; and 5) North Fork Community Development Council (CDC). Metered service connections at each of these water systems and water piping along CR 222, CR 225, and CR 228 will be constructed to consolidate these systems. Water piping, valves, fire hydrants, and appurtenances will be installed within North Fork Elementary School to provide a potable water distribution system that is separate from existing school wells and irrigation infrastructure.

Water sources for the consolidated system will include Well No. 1, the Pizza Well, and Well No. 2. Site improvements such as fencing will also be constructed. A storage and booster pumping facility will be constructed in the vicinity of the Town Hall and the community wastewater treatment facility, on property currently owned by Chawanakee Unified School District. Additionally, the existing 200,000-gallon storage tank has a common inlet/outlet pipe. To improve water circulation in the tank, a new separate outlet will be constructed.

The purpose of the improvements is to achieve compliance with the arsenic maximum contaminant level (MCL). All of the wells exceed the arsenic MCL, and a centralized treatment facility will be constructed to achieve compliance.

Findings:

In accordance with the California Environmental Quality Act, the County of Madera has prepared an Initial Study to determine whether the proposed project may have a significant adverse effect on the environment. The Initial Study and Proposed Mitigated Negative Declaration reflect the independent judgment of County of Madera staff. On the basis of the Initial Study, the County of Madera hereby finds:

> *Although the proposed project could have a significant adverse effect on the environment, there will not be a significant adverse effect in this case because the project has incorporated specific provisions to reduce impacts to a less than significant level and/or the mitigation measures described herein have been added to the project. A Mitigated Negative Declaration has thus been prepared.*

The Initial Study, which provides the basis and reasons for this determination, is attached and/or referenced herein and is hereby made a part of this document.

_____ _____

Signature Date

Proposed Mitigation Measures:

The following Mitigation Measures are extracted from the Initial Study. These measures are designed to avoid or minimize potentially significant impacts, and thereby reduce them to an insignificant level. A Mitigation Monitoring and Reporting Program (MMRP) is an integral part of project implementation to ensure that mitigation is properly implemented by the City and the implementing agencies. The MMRP will describe actions required to implement the appropriate mitigation for each CEQA category including identifying the responsible agency, program timing, and program monitoring requirements. Based on the analysis and conclusions of the Initial Study, the impacts of proposed project would be mitigated to less-than-significant levels with the implementation of the mitigation measures presented below.

AIR QUALITY

Mitigation Measure AIR-1: *Prior to the commencement of grading activities, the County shall require the contractor hired to complete the grading activities to prepare a construction emissions reduction plan that meets the requirements of SJVAPCD Rule VIII. The construction emissions reductions plan shall be submitted to the SJVAPCD for review and approval. The County of Madera shall ensure that all required permits from the SJVAPCD have been issued prior to commencement of grading activities.*

Mitigation Measure AIR- 2: *The following mitigation measures, in addition to those required under Regulation VIII of the SJVAPCD, shall be implemented by the project's contractor during all phases of project grading and construction to reduce fugitive dust emissions:*

- *Water previously disturbed exposed surfaces (soil) a minimum of two-times/day or whenever visible dust is capable of drifting from the site or approaches 20 percent opacity.*
- *Dust from all on-site and off-site unpaved access roads shall be effectively stabilized by applying water or other approved suppressants.*
- *Reduce speed on unpaved roads to less than 15 miles per hour.*
- *Restrict vehicular access to the area*
- *Limit and remove the accumulation of mud and/or dirt from adjacent public roadways at the end of each workday. (Use of dry rotary brushes is prohibited except when preceded or accompanied by sufficient wetting to limit visible dust emissions and the use of blowers is expressly forbidden.)*
- *Cease grading activities during periods of high winds (greater than 20 mph over a one-hour period).*
- *Asphalt-concrete paving shall comply with SJVAPCD Rule 4641 and restrict use of cutback, slow-sure, and emulsified asphalt paving materials.*

BIOLOGICAL RESOURCES

Mitigation Measure BIO-1: *To minimize the risk of introducing additional non-native species into the area, weed-free erosion control applications shall be used. No dry-farmed straw shall be used and certified weed-free straw shall be required where erosion control straw is to be used. In addition, hydro-seed mulch or any other erosion control application must also be certified weed-free. If a revegetation seed mix is to be used, the mix shall also be certified weed-free and contain native species appropriate for the project area.*

All off-road equipment to be cleaned of potential noxious weed sources (mud, vegetation) before entry onto the project site, to help ensure noxious weeds are not introduced into the project area. The contractor shall employ whatever cleaning methods (typically with the use of a high-pressure water hose) are necessary to ensure that equipment is free of noxious weeds. Equipment shall be considered free of soil, seeds, and other such debris when a visual inspection does not disclose such material. Disassembly of equipment components or specialized inspection tools is not required.

Mitigation Measure BIO-2: *In order to avoid affects to nesting raptors and migratory birds, project activities will occur, where possible, outside the nesting season. The nesting season is generally February 15-September 1. This requirement shall be noted on the project improvement plans, subject to review and approval by the County of Madera.*

Mitigation Measure BIO-3: *If project activities must occur during the nesting season (February 15-September 1), a qualified biologist will conduct pre-construction surveys within the project site for active raptor and migratory bird nests within 30 days of the onset of these activities. If no active nests are found within the project site, no further mitigation is required. This requirement shall be noted on the project improvement plans, subject to review and approval by the County of Madera.*

Mitigation Measure BIO-4: *Should any active nests be discovered within the project site, the biologist will determine the appropriate construction setback distances based on applicable CDFW guidelines and/or the biology of the affected*

species. Construction-free buffers will be identified on the ground with flagging, fencing, or by other easily visible means, and will be maintained until the biologist has determined that the young have fledged. This requirement shall be noted on the project improvement plans, subject to review and approval by the County of Madera.

Mitigation Measure BIO-5: *To avoid effects to bats, a qualified biologist will conduct pre-construction surveys for bats within 30 days of the onset of construction activities. If no evidence of bats is found, no further mitigation is required. If it is determined that bats are roosting within the PIA, it should be determined by the biologist whether the use is for maternal roosting (generally May – August). If it is not a maternal roost site, a buffer should be established to ensure that there are no incidental impacts to the bats at the roost. If a buffer cannot be established, exclusionary devices will be installed at least seven days before work can commence. By waiting the seven days, the bats can exit the roost and relocate to another location in the vicinity. Once these devices have been installed, they must be maintained and kept in good working order. These requirements shall be noted on the project improvement plans, subject to review and approval by the County of Madera.*

Mitigation Measure BIO-6*: Within fourteen days prior to commencing construction, send a notice to the CDFW indicating the date that construction will commence. Within fourteen days of completing construction, send a notice to the CDFW indicating the date that construction was completed. The notices shall include photographs of the before and after conditions of the construction zone. These requirements shall be noted on the project improvement plans, subject to review and approval by the County of Madera.*

Mitigation Measure BIO-7*: Prior to the commencement of construction, all workers shall be educated by a qualified biologist regarding the special status species and sensitive habitats located proximate to the construction zone. This requirement shall be noted on the project improvement plans, subject to review and approval by the County of Madera.*

Mitigation Measure BIO-8*: The first construction task shall be the installation of construction fencing at the boundary of the Project Impact Area (PIA) to ensure that all construction activities are prevented from encroaching into areas not intended for disturbance. This requirement shall be noted on the project improvement plans, subject to review and approval by the County of Madera.*

Mitigation Measure BIO-9*: Grading activities that occur within the vicinity of Willow Creek during the rainy season shall be avoided to the extent feasible. This requirement shall be noted on the project improvement plans, subject to review and approval by the County of Madera.*

CULTURAL RESOURCES

Mitigation Measure CUL-1: *If cultural resources (i.e., prehistoric sites, historic sites, isolated artifacts/features, and paleontological sites) are discovered, work shall be halted immediately within 50 meters (165 feet) of the discovery, the County of Madera shall be notified, and a qualified archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology (or a qualified paleontologist in the event paleontological resources are found) shall be retained to determine the significance of the discovery. The County of Madera shall consider recommendations presented by the professional for any unanticipated discoveries and shall carry out the measures deemed feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. Specific measures are developed based on the significance of the find.*

Mitigation Measure CUL-2: *If any human remains are found during grading and construction activities, all work shall be halted immediately within 50 meters (165 feet) of the discovery and the County Coroner must be notified, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed. Additionally, if the Native American resources are identified, a Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, may also be required and, if required, shall be retained at the applicant's expense.*

GEOLOGY AND SOILS

Mitigation Measure GEO-1: *Prior to earthmoving activities for each phase of the project, a certified geotechnical engineer, or equivalent, shall be retained to perform a final geotechnical evaluation of the soils at a design-level as required by the requirements of the California Building Code Title 24, Part 2, Chapter 18, Section 1803.1.1.2 related to expansive soils and other soil conditions. The evaluation shall be prepared in accordance with the standards and requirements outlined in California Building Code, Title 24, Part 2, Chapter 16, Chapter 17, and Chapter 18, which addresses structural design, tests and inspections, and soils and foundation standards. The final geotechnical evaluation*

shall include design recommendations to ensure that soil conditions do not pose a threat to the health and safety of people or structures, including threats from liquefaction or lateral spreading. The grading and improvement plans for each phase of the project shall be designed in accordance with the recommendations provided in the final geotechnical evaluation.

Mitigation Measure GEO-2: *The project applicant shall submit a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) to the RWQCB in accordance with the NPDES General Construction Permit requirements. The SWPPP shall be designed to control pollutant discharges utilizing Best Management Practices (BMPs) and technology to reduce erosion and sediments. BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater runoff from the project site. Measures shall include temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) that will be employed to control erosion from disturbed areas. Final selection of BMPs will be subject to approval by the County of Madera and the RWQCB. The SWPPP will be kept on site during construction activity and will be made available upon request to representatives of the RWQCB.*

NOISE

Mitigation Measure NOI-1: *The project shall adhere to and implement the following requirements during project construction:*

- *Hours of construction shall be limited to between 7 AM and 6 PM on weekdays and from 8 AM to 5 PM on Saturdays.*
- *Construction equipment noise shall be minimized during project construction by muffling and shielding intakes and exhaust on construction equipment (per the manufacturers' specifications) and by shrouding or shielding impact tools.*
- *Construction staging areas shall be located as far as possible from noise-sensitive uses.*

These requirements shall be noted on the project improvement plans, subject to review and approval by the County of Madera.

TABLE OF CONTENTS

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INITIAL STUDY CHECKLIST

PROJECT TITLE

Maintenance District No. 8A North Fork Water System Improvements

LEAD AGENCY NAME AND ADDRESS

County of Madera
Community & Economic Development Department
200 West 4th Street
Madera, CA 93637

CONTACT PERSON AND PHONE NUMBER

Raymundo Gutierrez, Engineer II
County of Madera
Community & Economic Development Department
200 West 4th Street
Madera, CA 93637
Raymundo.Gutierrez@maderacounty.com
(559) 675-7811

PROJECT LOCATION AND SETTING

The Maintenance District No. 8A (MD-8A) North Fork Water System Improvement project site (project site) is located throughout North Fork, California. See Figures 1 and 2 for the regional location and the project vicinity. North Fork is an unincorporated community in central portion of Madera County. North Fork lies is located approximately 4.3 miles south of Bass Lake, 10.5 miles southeast of Oakhurst, and 13.3 miles northwest of Shaver Lake.

MD-8A is located south of Bass Lake along the North Fork of Willow Creek, near the intersection of County Road (CR) 222 and CR 225. The existing water system (public water system number 2000561) consists of two wells (Well No. 1 and the Pizza Well), a 200,000- gallon storage tank, distribution piping, and appurtenances. See Figure 3 for the existing improvements. The proposed improvements are generally located along CR 222 and CR 225, as well as near North Fork Elementary School (33087 CR 228), Mountain Oaks High School (33030 CR 228), and North Fork Town Hall (33060 CR 228). See Figures 4 and 5 for the proposed improvements and area of potential effects (APE).

The project area has elevations ranging between approximately 2,592 and 2,743 feet above sea level.

PROJECT BACKGROUND

The County of Madera received grants through the California Safe Drinking Water State Revolving Fund (SRF) and Proposition 1 for planning system improvements within MD-8A. After the funding and planning efforts were complete, a consolidation concept was proposed by the State Water Resources Control Board (SWRCB) and County staff.

The County of Madera needs to enhance and expand the water system improvements within MD-8A, North Fork. The improvements that are needed include the following: 1) construction of water piping along County Roads 225 and 228 and metered service connections for Bass Lake Mobile Home Park, John Hovannisian Water System, Buckhorn Saloon and Restaurant, North

Fork Elementary School, and the North Fork Community Development Council; 2) construction of water piping within North Fork Elementary School; 3) construction of a deeper annular seal, reconstruction of the well head, replacement of the pump and motor, installation of new electrical and control equipment, and disinfection of the Pizza Well; 4) equipping of Well No.2; 5) construction of a storage and booster pumping facility; 6) construction of a centralized treatment facility; 7) construction of raw water piping from Well No.1, Well No.2, and the Pizza Well to the centralized treatment facility; and 8) modifications to the existing MD-8A storage tank inlet/outlet piping.

The purpose of the improvements is to achieve compliance with the arsenic maximum contaminant level (MCL). All of the wells exceed the arsenic MCL, and a centralized treatment facility will be constructed to achieve compliance.

PROJECT DESCRIPTION

Madera County and SWRCB staff are planning a consolidation project that will involve connecting the following small water systems to the MD-8A water system: 1) New Buckhorn Saloon and Restaurant; 2) North Fork Elementary School; 3) John Hovannisian Water System; 4) Bass lake Mobile Home Park; and 5) North Fork Community Development Council (CDC). Metered service connections at each of these water systems and water piping along CR 222, CR 225, and CR 228 will be constructed to consolidate these systems. Water piping, valves, fire hydrants, and appurtenances will be installed within North Fork Elementary School to provide a potable water distribution system that is separate from existing school wells and irrigation infrastructure.

Water sources for the consolidated system will include Well No. 1, the Pizza Well, and Well No. 2. Well No. 1 is located behind the North Fork Library and is the only active water source for MD-8A. The Pizza Well is located off of CR 222 and is in need of a deeper annular seal, well head reconstruction (above ground surface), pump and motor replacement, disinfection, and electrical and control equipment upgrades. Well No. 2 will be one of two wells already drilled, School Test Well No.1 or MD-8A Test Well No.1. School Test Well No.1 is located off of CR 225 on property currently owned by Chawanakee Unified School District. MD-8A Test Well No.1 is located off of CR 222 on private property. Underground utility and access easements will be acquired for either location. Well No.2 will be equipped with a pump and motor, well head discharge piping, and electrical control equipment. Site improvements such as fencing will also be constructed.

A storage and booster pumping facility will be constructed in the vicinity of the Town Hall and the community wastewater treatment facility, on property currently owned by Chawanakee Unified School District. The storage and booster pumping facility will have electrical utility service and a diesel generator for emergency purposes only. Water piping to and from this site will be constructed in either CR 228 or in a previously-disturbed access road off of CR 225. Underground utility and access easements will be acquired for either location.

All of the wells exceed the arsenic MCL, and a centralized treatment facility will be constructed to achieve compliance. Raw water piping will be constructed to convey water from Well No.1, Well No.2, and the Pizza Well to the treatment facility. Site alternatives for the treatment facility are as follows: 1) adjacent to the proposed storage and booster pumping facility; or 2) in the vicinity of the MD-8A Test Well No.1. Under alternative 1, water piping to and from the site will be constructed in either CR 228 or in a previously disturbed access road off of CR 225. Under alternative 2) piping to and from the site will be constructed in a previously disturbed access road off of CR 222. Underground utility and access easements will be acquired for either location.

Additionally, the existing 200,000-gallon storage tank has a common inlet/outlet pipe. To improve water circulation in the tank, a new separate outlet will be constructed.

The County of Madera needs to enhance and expand the water system improvements within Maintenance District No. 8A, North Fork (MD-8A). The improvements that are needed include the following: 1) construction of water piping along County Roads 225 and 228 and metered service connections for Bass Lake Mobile Home Park, John Hovannisian Water System, Buckhorn Saloon and Restaurant, North Fork Elementary School, and the North Fork Community Development Council; 2) construction of water piping within North Fork Elementary School; 3) construction of a deeper annular seal, reconstruction of the well head, replacement of the pump and motor, installation of new electrical and control equipment, and disinfection of the Pizza Well; 4) equipping of Well No.2; 5) construction of a storage and booster pumping facility; 6) construction of a centralized treatment facility; 7) construction of raw water piping from Well No.1, Well No.2, and the Pizza Well to the centralized treatment facility; and 8) modifications to the existing MD-8A storage tank inlet/outlet piping.

The purpose of the improvements is to achieve compliance with the arsenic MCL. All of the wells exceed the arsenic MCL, and a centralized treatment facility will be constructed to achieve compliance.

REQUESTED ENTITLEMENTS AND OTHER APPROVALS

The County of Madera is the Lead Agency for the proposed project, pursuant to the State Guidelines for Implementation of CEQA, Section 15050.

This document will be used by the County of Madera to take the following actions

- Adoption of the Mitigated Negative Declaration (MND);
- Adoption of the Mitigation Monitoring and Reporting Program;
- County review and approval of the proposed water system improvements.

The following agencies may be required to issue permits or approve certain aspects of the proposed project:

- RWQCB – Construction activities would be required to be covered under the National Pollution Discharge Elimination System (NPDES);
- RWQCB – The Storm Water Pollution Prevention Plan (SWPPP) would be required to be approved prior to construction activities pursuant to the Clean Water Act;
- San Joaquin Valley Air Pollution Control District (SJVAPCD) – Approval of construction-related air quality permits.

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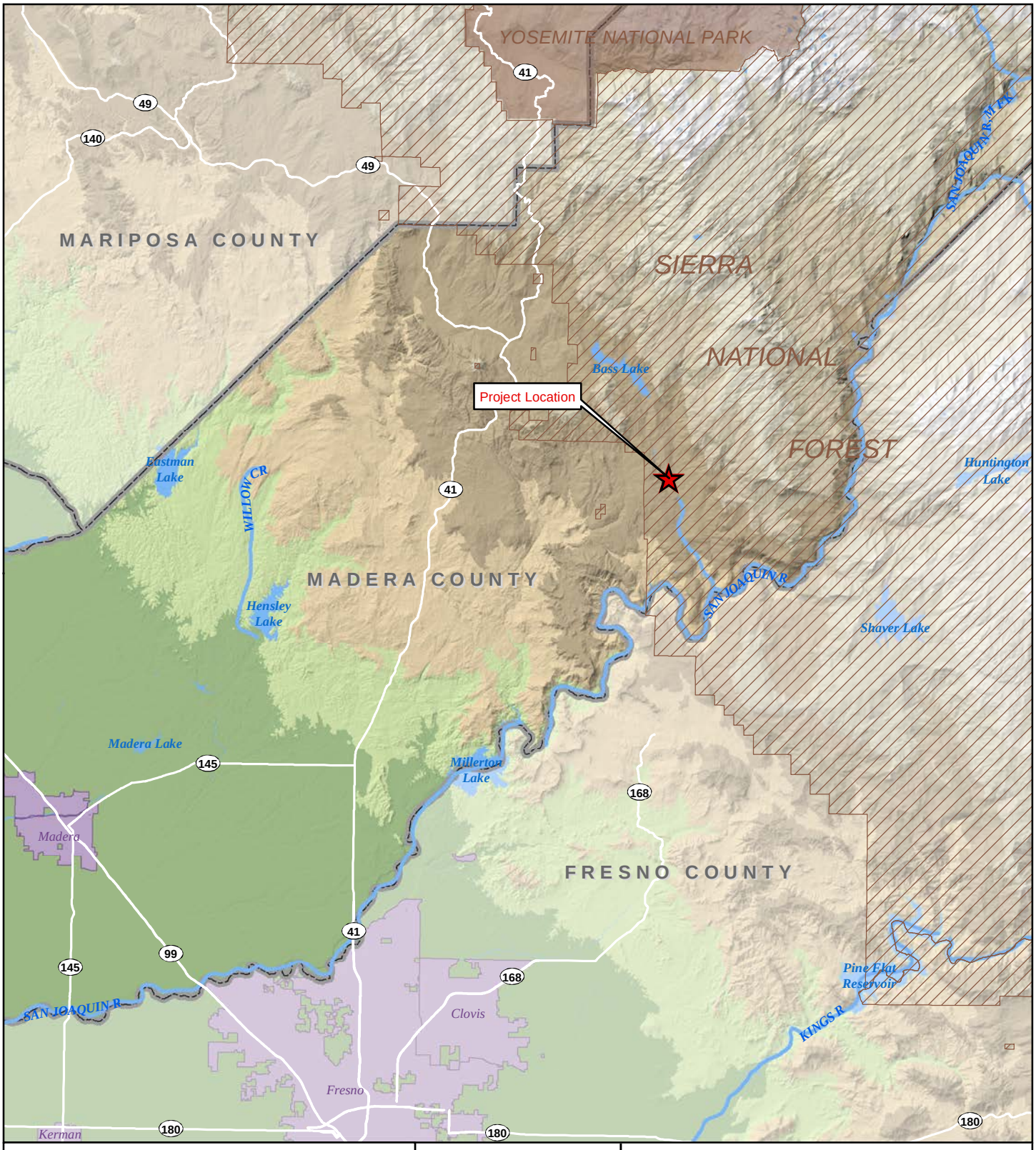

Legend

- City Area
- County Boundary
- National Park
- National Forest

Sources: CalAtlas; Fresno County; Madera County; National Park Service; US Forest Service. Map date: February 11, 2019.

0 2½ 5
Miles

MAINTENANCE DISTRICT NO. 8A
NORTH FORK WATER SYSTEM IMPROVEMENTS

Figure 1. Regional Location Map

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Legend

APE Boundary

N

0 250 500

Feet

MAINTENANCE DISTRICT NO. 8A
NORTH FORK WATER SYSTEM IMPROVEMENTS

Figure 2. Vicinity Map

Sources: NV5 Engineers; OpenStreets; ArcGIS Online Imagery Service; Google Maps; California Streams Database. Map date: February 18, 2019.

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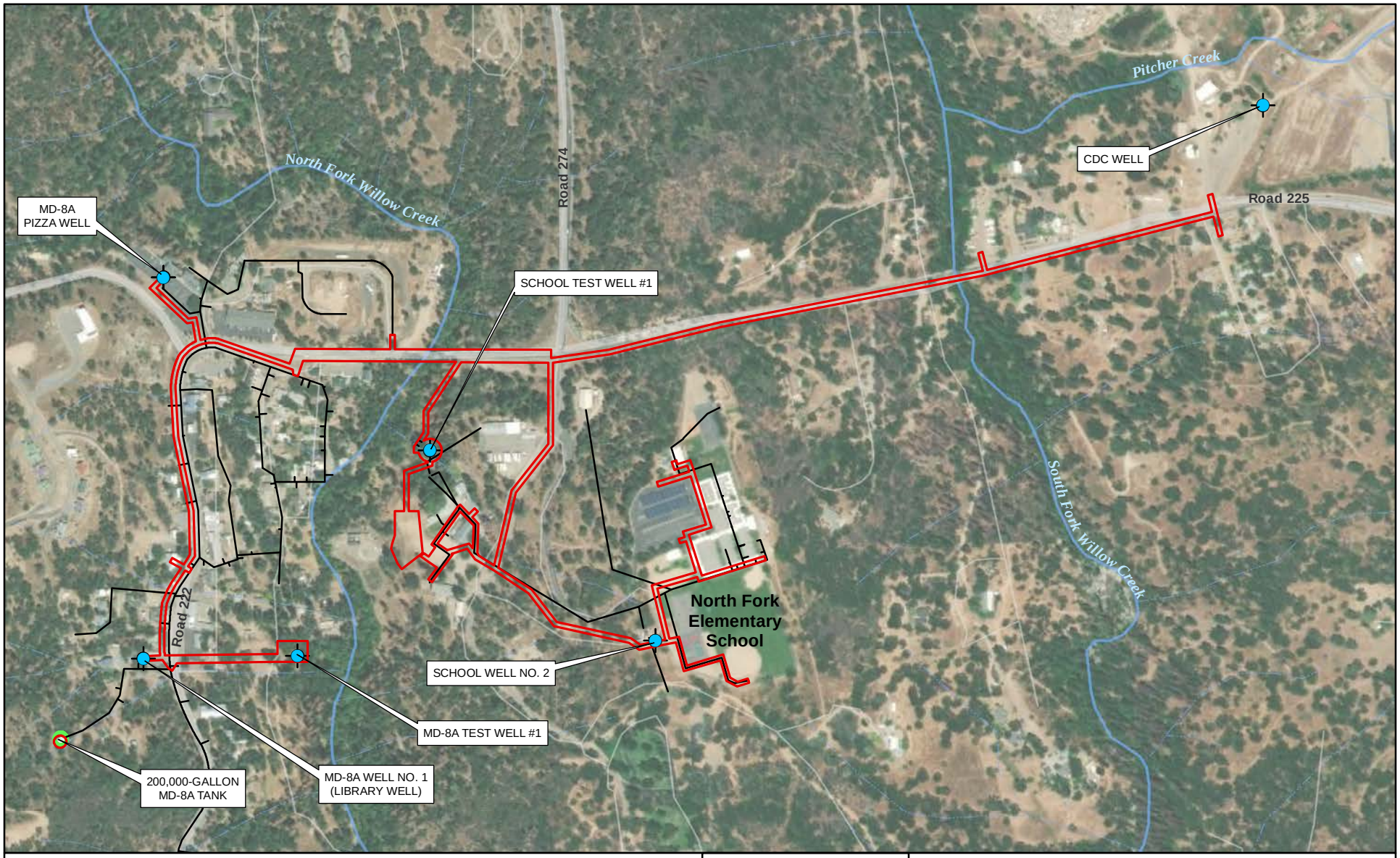

Legend

- APE Boundary
- Existing Waterline
- Existing Well
- Existing Tank

N

0 250 500

Feet

Sources: NV5 Engineers; OpenStreets; ArcGIS Online Imagery Service; California Streams Database. Map date: March 19, 2019.

MAINTENANCE DISTRICT NO. 8A
NORTH FORK WATER SYSTEM IMPROVEMENTS

Figure 3. Existing Improvements

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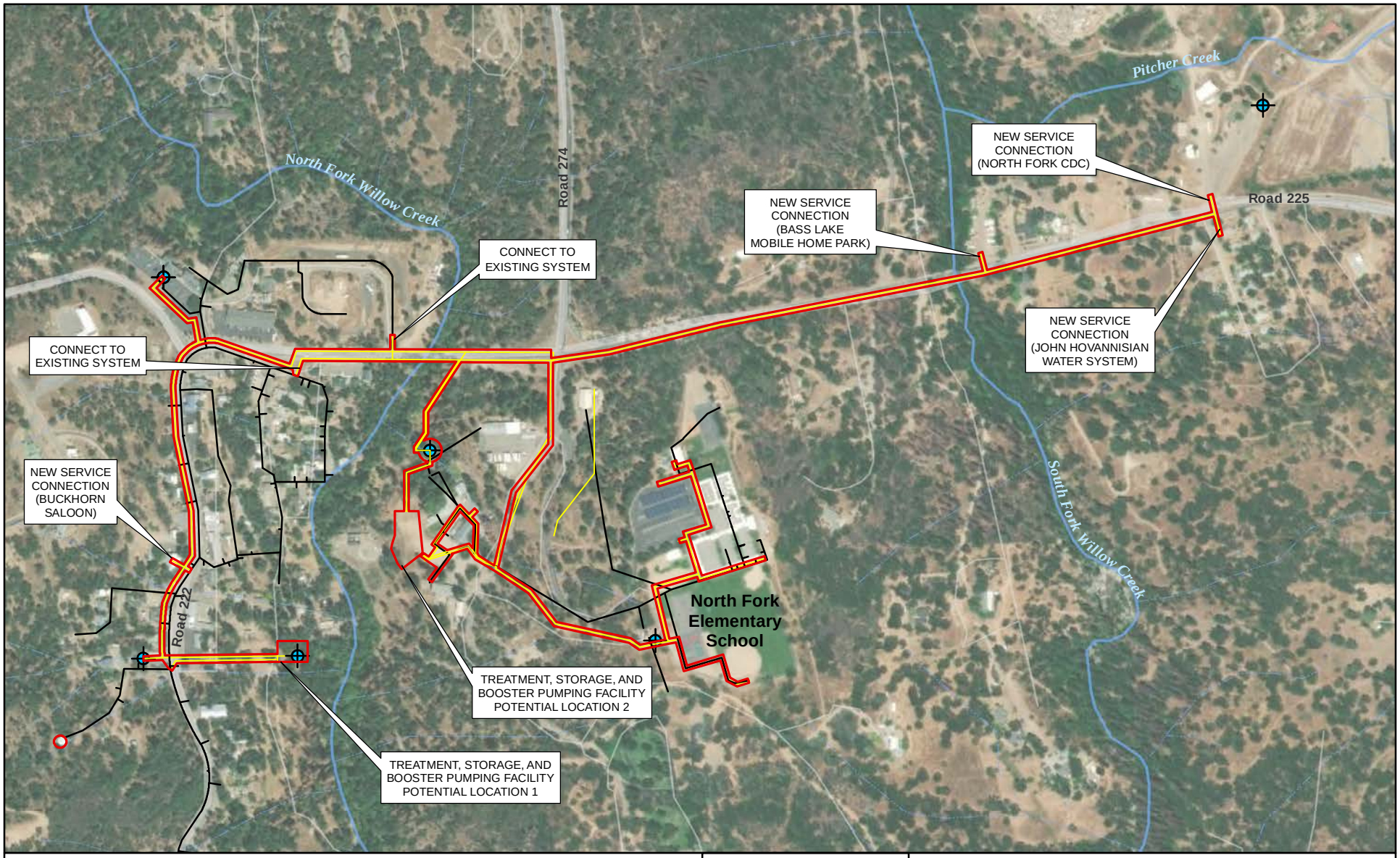

Legend

- APE Boundary
- Existing Waterline
- Proposed Waterline
- Existing Well
- Existing Tank

N

0 250 500

Feet

Sources: NV5 Engineers; OpenStreets; ArcGIS Online Imagery Service; California Streams Database. Map date: March 19, 2019.

MAINTENANCE DISTRICT NO. 8A
NORTH FORK WATER SYSTEM IMPROVEMENTS

Figure 4. Proposed Improvements

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Legend

APE Boundary

N

0 250 500

Feet

MAINTENANCE DISTRICT NO. 8A
NORTH FORK WATER SYSTEM IMPROVEMENTS

Figure 5. APE Map

Sources: NV5 Engineers; OpenStreets; ArcGIS Online Imagery Service; California Streams Database. Map date: March 19, 2019.

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ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

Eight of the environmental factors listed below would have potentially significant impacts as a result of development of this project, as described on the following pages.

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

DETERMINATION

On the basis of this initial evaluation:

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

EVALUATION INSTRUCTIONS

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 Section XVII, "Earlier Analyses," 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 significant.

EVALUATION OF ENVIRONMENTAL IMPACTS

In each area of potential impact listed in this section, there are one or more questions which assess the degree of potential environmental effect. A response is provided to each question using one of the four impact evaluation criteria described below. A discussion of the response is also included.

- Potentially Significant Impact. This response is appropriate when there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries, upon completion of the Initial Study, an EIR is required.
- Less than Significant With Mitigation Incorporated. This response applies when 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.
- Less than Significant Impact. A less than significant impact is one which is deemed to have little or no adverse effect on the environment. Mitigation measures are, therefore, not necessary, although they may be recommended to further reduce a minor impact.
- No Impact. These issues were either identified as having no impact on the environment, or they are not relevant to the project.

ENVIRONMENTAL CHECKLIST

This section of the Initial Study incorporates the most current Appendix "G" Environmental Checklist Form contained in the CEQA Guidelines. Impact questions and responses are included in both tabular and narrative formats for each of the 21 environmental topic areas.

I. AESTHETICS

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

Responses to Checklist Questions

Responses a), c): The County of Madera General Plan does not specifically designate any scenic viewsheds within the city.

For analysis purposes, a scenic vista can be discussed in terms of a foreground, middleground, and background viewshed. The middleground and background viewshed is often referred to as the broad viewshed. Examples of scenic vistas can include mountain ranges, valleys, ridgelines, or water bodies from a focal point of the forefront of the broad viewshed, such as visually important trees, rocks, or historic buildings. An impact would generally occur if a project would change the view to the middle ground or background elements of the broad viewshed, or remove the visually important trees, rocks, or historic buildings in the foreground.

Development of the majority of the proposed improvements will not significantly disrupt views from public viewpoints. The project would result in development of infrastructure facilities within currently developed areas (i.e., existing roadway right-of-way), as well as development of water lines and a treatment, storage, and booster pumping facility within existing woodland areas or public areas. This would contribute to changes in the visual character of the site. However, the majority of the proposed alterations to the project site would be at the terrestrial ground level and would not be visible from surrounding areas. The pumping facility would be off CR 222, opposite Buckhorn Court, or south of the North Fork Town Hall. Overall, the proposed pumping facilities would also blend with the built environment and would not significantly alter the visual character of the area.

Implementation of the project would not greatly alter the areas overall characteristics. Therefore, implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

Response b): The project site is not located within view of a state scenic highway. Only one highway section in Madera County is listed as a Eligible State Scenic Highway by the Caltrans Scenic Highway Mapping System; the segment of State Route (SR) 49 and SR 41 near the north-central Madera County boundary. North Fork, including the proposed improvement area, is not visible from this roadway segment. Therefore, the proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. Implementation of the proposed project would have ***no impact*** relative to this topic.

Response d): There is a potential for the implementation of the proposed project to introduce new sources of light and glare into the project area in the short-term only. Contributors to light and glare impacts would include temporary construction lighting that would create ongoing light impacts to the area. Nighttime construction activities are not anticipated to be required as part of construction. Operational lighting would not likely be required. However, should outdoor street lighting be required for operation of the facilities, the lighting would be subject to Section 17.48.050 of the County's Municipal Code, which requires lighting to be of a type approved by the County engineer. Therefore, implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

II. AGRICULTURE AND FORESTRY RESOURCES

Would the project:	***Potentially Significant Impact***	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526)?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Responses to Checklist Questions

Response a): The project site is located within an "are not mapped" by the Farmland Mapping and Monitoring Program. The project site does not contain area mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The proposed project will not permanently convert any agricultural land. Implementation of the proposed project would have ***no impact*** relative to this issue.

Response b): The project site is not zoned for agricultural use nor is it under a Williamson Act contract. The proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. Implementation of the proposed project would have ***no impact*** relative to this issue.

Response c): The project site is not forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526). The proposed project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland. Implementation of the proposed project would have ***no impact*** relative to this issue.

Response d): The project site is not forest land. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. Implementation of the proposed project would have ***no impact*** relative to this issue.

Response e): The project site contains woodland areas and developed land. There is no agricultural land or forest land in the immediate project area. The proposed project will not permanently convert any agricultural land or forest land. Implementation of the proposed project would have ***no impact*** relative to this issue.

III. AIR QUALITY

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

Existing Setting

The project site is located within the San Joaquin Valley Air Pollution Control District (SJVAPCD). This agency is responsible for monitoring air pollution levels and ensuring compliance with federal and state air quality regulations within the San Joaquin Valley Air Basin (SJVAB) and has jurisdiction over most air quality matters within its borders.

Responses to Checklist Questions

Responses a-c): Air quality emissions would be generated during construction of the proposed project. Operational emissions would be negligible as the project does not propose any new structures or uses that would increase trip generation or VMT's. Construction-related air quality impacts are addressed below.

Construction would result in numerous activities that would generate dust. Fine, silty soils and often strong afternoon winds exacerbate the potential for dust, particularly during the summer months. Grading, leveling, earthmoving and excavation are the activities that generate the most particulate emissions. Impacts would be localized and variable. The initial phase of project construction would involve grading and leveling the various project site areas and associated improvements such as underground infrastructure.

Construction activities that could generate dust and vehicle emissions are primarily related to grading and other ground-preparation activities in order to prepare the various project site areas for paving, where necessary. All construction activities shall comply with all applicable measures from SJVAPCD Rule VIII which limits construction related emissions and particulates.

In addition to construction emissions, the SJVAPCD has thresholds applicable to CO emissions that require projects to perform localized CO modeling. These thresholds include the following:

- Project traffic would impact signalized intersections operating at level of service (LOS) D, E or F or would cause LOS to decline to D, E or F.
- Project traffic would increase traffic volumes on nearby roadways by 10 percent or more.
- The project would contribute to CO concentrations exceeding CAAQS of 9 parts per million (ppm) averaged over 8 hours and 20 ppm for one hour.

As described in greater detail under the traffic impact analysis section in this document, the proposed project is not a traffic generator and would not cause an intersection to decline to LOS D, E, or F. Additionally, the proposed project would not increase traffic volumes on nearby roadways by 10 percent or more. Therefore, localized CO modeling is not warranted for this project.

Because construction activities could generate dust and vehicle emissions, the following mitigation shall be incorporated into the construction plans of this project. With implementation of the following measures, this impact would be ***less than significant.***

Mitigation Measure(s)

Mitigation Measure AIR-1: *Prior to the commencement of grading activities, the County shall require the contractor hired to complete the grading activities to prepare a construction emissions reduction plan that meets the requirements of SJVAPCD Rule VIII. The construction emissions reductions plan shall be submitted to the SJVAPCD for review and approval. The County of Madera shall ensure that all required permits from the SJVAPCD have been issued prior to commencement of grading activities.*

Mitigation Measure AIR- 2: *The following mitigation measures, in addition to those required under Regulation VIII of the SJVAPCD, shall be implemented by the project's contractor during all phases of project grading and construction to reduce fugitive dust emissions:*

- *Water previously disturbed exposed surfaces (soil) a minimum of two-times/day or whenever visible dust is capable of drifting from the site or approaches 20 percent opacity.*
- *Dust from all on-site and off-site unpaved access roads shall be effectively stabilized by applying water or other approved suppressants.*
- *Reduce speed on unpaved roads to less than 15 miles per hour.*
- *Restrict vehicular access to the area*
- *Limit and remove the accumulation of mud and/or dirt from adjacent public roadways at the end of each workday. (Use of dry rotary brushes is prohibited except when preceded or accompanied by sufficient wetting to limit visible dust emissions and the use of blowers is expressly forbidden.)*
- *Cease grading activities during periods of high winds (greater than 20 mph over a one-hour period).*
- *Asphalt-concrete paving shall comply with SJVAPCD Rule 4641 and restrict use of cutback, slow-sure, and emulsified asphalt paving materials.*

Response d): Sensitive receptors are those parts of the population that can be severely impacted by air pollution. Sensitive receptors include children, the elderly, and the infirm. The residents located in the immediate vicinity of the project site are considered sensitive receptors. However, as described below, the construction and operation of the proposed project would not contribute substantial concentrations of pollutants to sensitive receptors. Additionally, the proposed project would not contribute to any CO hotspots.

Due to the community-wide scope of the project area, there are existing schools in the project vicinity. Similarly, there are several existing residences located in the project vicinity. However, implementation of the proposed project would not expose these sensitive receptors to substantial pollutant concentrations. Air emissions would be generated during the construction phase of the project, but would be short term in duration. The construction phase of the project would be temporary and short-term, and the implementation of Mitigation Measures 1 and 2 would greatly reduce pollution concentrations generated during construction activities, and

prevent spillover into residential areas. Operation of the proposed project would not result in increased emissions from vehicle trips. As described under Response a) – c) above, the proposed project would not generate significant concentrations of air emissions. Implementation of the proposed project would not result in a significant increased exposure of sensitive receptors to localized concentrations of TACs, or create a CO hotspot. This project would have a ***less than significant*** impact relative to this topic.

Mitigation Measure(s)

Implement ***Mitigation Measure AIR-1*** *and* ***Mitigation Measure AIR-2***

Response d): The proposed project would not generate objectionable odors. People in the immediate vicinity of construction activities may be subject to temporary odors typically associated with construction activities (diesel exhaust, hot asphalt, etc.). However, any odors generated by construction activities would be minor and would be short and temporary in duration.

Examples of facilities that are known producers of operational odors include: Wastewater Treatment Facilities, Chemical Manufacturing, Sanitary Landfill, Fiberglass Manufacturing, Transfer Station, Painting/Coating Operations (e.g. auto body shops), Composting Facility, Food Processing Facility, Petroleum Refinery, Feed Lot/Dairy, Asphalt Batch Plant, and Rendering Plant. If a project would locate receptors and known odor sources in proximity to each other further analysis may be warranted; however, if a project would not locate receptors and known odor sources in proximity to each other, then further analysis is not warranted. The project does not propose sensitive receptors that could be exposed to odors in the vicinity. Implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

IV. BIOLOGICAL RESOURCES

Would the project:	***Potentially Significant Impact***	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?		X		
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?		X		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		X		
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

Regional Setting

The County of Madera is located in the western portion of the Sierra Nevada Geomorphic Province of California. The Sierra is a tilted fault block nearly 400 miles long. The east face is a high, rugged, multiple scarp, contrasting with the gentle western slope that disappears under sediments of the Great Valley. Deep river canyons are cut into the western slope. The high crest culminates in Mt. Whitney with an elevation of 14,495 feet above sea level near the eastern scarp. The metamorphic bedrock contains gold-bearing veins in the northwest trending Mother Lode. The northern Sierra boundary is marked where bedrock disappears under the Cenozoic volcanic cover of the Cascade Range.

The area within the project limits is composed of a woodland habitat with herbaceous and shrub understory, some riparian/aquatic habitat mostly associated with Willow Creek, and rural developed areas. The rural developed areas are mostly void of vegetation. The woodland habitat was dominated by foothill pine (*Pinus sabiniana*), interior live oak (*Quercus wislizenii*), and buckeye (*Aesculus californica*), which form a contiguous, multi-layered canopy. Various shrubs occur in the understory, including birch leaf mountain mahogany (*Cercocarpus betuloides* ssp. *betuloides*), yerba santa (*Eriodictyon californica*), California buckbrush (*Ceanothus cuneatus* ssp.

cuneatus), and whiteleaf manzanita (*Arctostaphylos viscida*). A few native and non-native grasses also occur in the shrub-dominated openings, including California brome (*Bromus californicus*), melic grass (*Melica imperfecta*), soft chess brome (*Bromus hordeaceus*), and ripgut brome (*Bromus diandrus*). The understory is otherwise mostly shaded, and has a variety of forbs, including tincture plant (*Collinsia tinctoria*) and torilis (*Torilis arvensis*). Native wildflowers occurring in the understory include wallflower (*Erysimum capitatum* ssp. *capitatum*) and harlequin lupine (*Lupinus stiversii*). Along the riparian habitat common plants included common monkeyflower (*Mimulus guttatus*), miner's lettuce (*Claytonia* spp.), knotweed (*Polygonum* spp.), and greensheath sedge (*Carex feta*), these species only occur sporadically within the riparian areas and do not form contiguous wetland habitat.

Wildlife species typically associated within the woodland habitat in the region include the following year-round residents: Sierra Nevada ensatina (*Ensatina eschscholtzii platensis*), western fence lizard (*Sceloporus occidentalis*), southern alligator lizard (*Elgaria multicarinata*), common kingsnake (*Lampropeltis getula*), gopher snake (*Pituophis catenifer*), northern pacific rattlesnake (*Crotalus oreganus*), Northern Pygmy Owl (*Glaucidium gnoma*), Western Screech-Owl (*Megascops kennicottii*), Anna's Hummingbird (Calypte anna), Acom Woodpecker (*Melanerpes formicivorus*), Nuttall' s Woodpecker (*Pico ides nuttallii*), Hairy Woodpecker (*P . villosus*), Northern Flicker (*Colaptes auratus*), Hutton's Vireo (*Vireo huttoni*), Warbling Vireo (*V. gilvus*), Cassin's Vireo (*V. cassinii*), Western Scrub-Jay (*Aphelocoma californica*), Oak Titmouse (Oak Titmouse (*Baeolophus inornatus*), White-breasted Nuthatch (*Sitta carolinensis*), American Robin (*Turdus migratorius*), Purple Finch (*Carpodacus pwpureus*), western gray squirrel (*Sciurus griseus*), Streator dusky-footed woodrat (*Neotoma fuscipes streaton*), North American deermouse (*Peromyscus maniculatus*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), bobcat (*Lynx rufus*), and mule deer (*Odocoileus hemionus*). Agricultural and ruderal vegetation found on the project site provides habitat for both common and a few special-status wildlife populations. For example, some commonly observed wildlife species in the region include: California ground squirrel (*Spermophilus beecheyi*), California vole (*Microtus californicus*), coyote (*Canis latrans*), raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), red-tailed hawk (*Buteo jamaicensis*), northern harrier (*Circus cyaneus),* American kestrel (*Falco sparverius*), white-tailed kite (*Elanus leucurus*), American killdeer (*Charadrius vociferus*), gopher snake (*Pituophis melanoleucus*), garter snake (*Thamnophis species*), and western fence lizard (*Sceloporus occidentalis*), as well as many native insect species. There are also several bat species in the region. Bats often feed on insects as they fly over agricultural and natural areas.

Neotropical migratory birds breed in this habitat and spend the winter in the neotropics, including: Western WoodPewee (*Contopus sordidulus*), Ash-throated Flycatcher (*Myiarchus cinerascens*), Orangecrowned Warbler (*Vermivora celata*), Black-headed Grosbeak (*Pheucticus melanocephalus*), and Lesser Goldfinch (*Carduelis psaltria*). Several bird species are winter visitors that breed in more northerly latitudes, or at higher elevations in the Sierra Nevada. Such species include: Redbreasted Nuthatch (*Sitta canadensis*), Yellow-rumped Warbler (*Dendroica coronata*), Whitecrowned Sparrow (*Zonotrichia leucophrys*), Golden-crowned Sparrow (*Z. atricapilla*), Cassin's Finch (*Carpodacus cassinii*), Pine Siskin (*Carduelis pinus*), and Evening Grosbeak (*Coccothraustes vespertinus*). Other birds migrate through the habitat, but breed at higher latitudes or higher elevations, including: Hammond's, Gray, and Dusky flycatchers, Blackthroated Gray Warbler (*Dendroica nigrescens*), Hermit Warbler (*Dendroica occidentalis*), and Western Tanager (*Piranga ludoviciana*).

The larger trees, particularly those with cavities or exfoliating bark, provide potential roosting and breeding habitat for several species of bats, including the California myotis (*Myotis*

californicus), western small-footed myotis (*Myotis ciliolabrum*), long-eared myotis (*Myotis evotis*), Yuma myotis· (*Myotis yumanensis*), silver-haired bat (*Lasionycteris noctivagans*), bigbrown bat (*Eptesicus fuscus*), and pallid bat (*Antrozous pallidus*). Other species that are expected to migrate through the site, and possibly roost but not breed, include the hoary bat (*Lasiurus cinereus*), western red bat (*Lasiurus blossevillii*), and Mexican free-tailed bat (*Tadarida brasiliensis*). Because tall cliffs occur in areas adjacent to the project site, western mastiff bat (*Eumops perotis*) and spotted bat (*Euderma maculatum*) may forage over the site.

The following information is based on the project-specific Biological Evaluation that was completed for the project site (De Novo Planning Group, 2019).

Responses to Checklist Questions

Response a): As part of the Biological Evaluation, a background search of special-status species that are documented in the California Natural Diversity Database (CNDDB), the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants, and the U.S. Fish and Wildlife Service's (USFWS) records of listed endangered and threatened species from the Information Planning and Conservation System (IPaC) database were completed. The background search was regional in scope and focused on the documented occurrences within 10 miles of the project site. Table 1 provides a list of special-status plants and Table 2 provides a list of special-status animals**.**

Following the preliminary analysis of the database records, as part of the Biological Evaluation, De Novo Planning Group conducted one general biological survey to evaluate the project area and assess the current conditions. The surveys were conducted under clear and moderate weather conditions and consisted of walking the project impact area and documenting the vegetation types, wildlife, and current land use practices. Additional visual observations were conducted with the aid of a Vortex 20-60x80 spotting scope, and Bushnell 10x42 binoculars with the intent of documenting habitat areas and identifying any features (e.g., trees and telephone poles) that may provide habitat for wildlife species.

Table 1: Special-Status Plant Species Which May Occur in Project Area

Common Name	*Scientific Name*	*Status (Fed/CA /CNPS)*	*General Habitat Description*	*Habitat Present/ Absent*	*Rationale*
Plants					
Boggs Lake hedge-hyssop	*Gratiola heterosepala*	--/SE/ 1B.2	Marshes and swamps (freshwater), vernal pools. Clay soils; usually in vernal pools, sometimes on lake margins. 4-2410 m. Apr-Aug.	A - Not present	Appropriate habitat not present.
Hartweg's golden sunburst	*Pseudobahia bahiifolia*	FE/SE/ 1B.1	Valley and foothill grassland, cismontane woodland. Clay soils, often acidic. Predominantly on the northern slopes of knolls, but also along shady creeks or near vernal pools. 60-170 m. Mar-Apr.	HP - Low potential	Survey occurred in the very early spring season. Potential for later bloom is possible. Habitat conditions in some areas of the project site (i.e. Willow Creek, drainages, etc.) provide some potential for this species to occur.
Mariposa pussy-paws	*Calyptridium pulchellum*	FT/--/ 1B.1	Cismontane woodland, chaparral. On granite domes, restricted to	HP - Low potential	Survey occurred in the very early spring season. Potential for later bloom is possible.

Common Name	Scientific Name	Status (Fed/CA /CNPS)	General Habitat Description	Habitat Present/ Absent	Rationale
			exposed sites. 440-1040 m. Apr-Aug.		Habitat conditions in some areas of the project site provide some potential for this species to occur.
San Joaquin Valley Orcutt grass	*Orcuttia inaequalis*	FT/SE/ 1B.1	Vernal pools. 10-755 m. Apr-Sep.	A - Not present	Appropriate habitat not present.
succulent owl's-clover	*Castilleja campestris var. succulenta*	FT/SE/ 1B.2	Vernal pools. Moist places, often in acidic soils. 20-705 m. (Mar)Apr-May.	A - Not present	Appropriate habitat not present.
Tracy's eriastrum	*Eriastrum tracyi*	--/SR/ 3.2	Chaparral, cismontane woodland, valley and foothill grassland. Gravelly shale or clay; often in open areas. 315-2400 m. May-Jul.	HP - Low potential	Survey occurred in the very early spring season. Potential for later bloom is possible. Habitat within the project site is not ideal for this species.
tree-anemone	*Carpenteria californica*	--/ST/ 1B.2	Cismontane woodland, chaparral. A very localized endemic found on well-drained granitic soils, mostly in north-facing ravines and drainages. 335-1345 m. (Apr)May-Jul.	HP - Low potential	Survey occurred in the very early spring season. Potential for later bloom is possible.

SOURCE: CDFW CNDDB 2019, USFWS 2019, AND CNPS 2019.
HABITAT PRESENT/ABSENT: ABSENT [A]- NO HABITAT PRESENT AND NO FURTHER WORK NEEDED; HABITAT PRESENT [HP]- HABITAT IS, OR MAY BE PRESENT. THE SPECIES MAY BE PRESENT; PRESENT [P]- SPECIES IS PRESENT; CRITICAL HABITAT [CH] - PROJECT FOOTPRINT IS LOCATED WITHIN A DESIGNATED CRITICAL HABITAT UNIT, BUT DOES NOT NECESSARILY MEAN THAT APPROPRIATE HABITAT IS PRESENT.
STATUS: FEDERAL ENDANGERED (FE); FEDERAL THREATENED (FT); FEDERAL PROPOSED (FP, FPE, FPT); FEDERAL CANDIDATE (FC), FEDERAL SPECIES OF CONCERN (FSC); STATE ENDANGERED (SE); STATE THREATENED (ST); FULLY PROTECTED (FP); STATE RARE (SR); STATE SPECIES OF SPECIAL CONCERN (SSC); CALIFORNIA NATIVE PLANT SOCIETY (CNPS): 1B = RARE, THREATENED, OR ENDANGERED IN CALIFORNIA AND ELSEWHERE; 2 = RARE, THREATENED, OR ENDANGERED IN CALIFORNIA, BUT MORE COMMON ELSEWHERE; 3 = A REVIEW LIST – PLANTS ABOUT WHICH MORE INFORMATION IS NEEDED; 4 = PLANTS OF LIMITED DISTRIBUTION – A WATCH LIST; .1 = SERIOUSLY ENDANGERED IN CALIFORNIA (OVER 80% OF OCCURRENCES THREATENED-HIGH DEGREE AND IMMEDIACY OF THREAT); .2 = FAIRLY ENDANGERED IN CALIFORNIA (20-80% OCCURRENCES THREATENED); .3 = NOT VERY ENDANGERED IN CALIFORNIA (<20% OF OCCURRENCES THREATENED).

Table 2: Special-Status Wildlife and Fish Species Which May Occur in Project Area

Common Name	Scientific Name	Status (Fed/CA)	General Habitat Description	Habitat Present/ Absent	Rationale
Amphibians					
California tiger salamander	*Ambystoma californiense*	FT/ST	Central Valley DPS federally listed as threatened. Santa Barbara and Sonoma counties DPS federally listed as endangered. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	A - Absent	No evidence of documented occurrences within five miles of project site. Not believed to be present within the elevational range of the project site.
Yosemite toad	*Burfo canorus*	FT; SC	Endemic to the Sierra Nevada, the species ranges from the Alpine County to Fresno County and are only found in the montane to	A - Absent	Appropriate habitat not present within the project site.

Common Name	*Scientific Name*	*Status (Fed/CA)*	*General Habitat Description*	*Habitat Present/ Absent*	*Rationale*
			subalpine elevational zone of 1,950–3,445 m (6,398–11,302 ft) asl.		
California red-legged frog	*Rana draytonii*	FT; CSC	Streams, freshwater pools, and ponds with emergent or overhanging vegetation.	A - Absent	Believed to be extirpated from the region. Not observed during field surveys. No evidence of documented occurrences within five miles of project site.
foothill yellow-legged frog	*Rana boylii*	--/SC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	P - Present	Documented occurrences in the Willow Creek.
Birds					
bald eagle	*Haliaeetus leucoce-phalus*	--/SE (FP)	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	HP - Low potential	No foraging habitat present within project site, breeding habitat present in the region near large water bodies, which are not present in the project site.
great gray owl	*Strix nebulosa*	--/SE	Resident of mixed conifer or red fir forest habitat, in or on edge of meadows. Requires large diameter snags in a forest with high canopy closure, which provide a cool sub-canopy microclimate.	HP - Low potential	Not known within the region. Occurs at higher elevations. No records within the vicinity of the project site.
Crustaceans					
conservancy fairy shrimp	*Branch-inecta conservatio*	FE/ --	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	A - Absent	Appropriate habitat not present within the project site.
vernal pool fairy shrimp	*Branch-inecta lynchi*	FT/ --	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	A - Absent	Appropriate habitat not present within the project site.
vernal pool tadpole shrimp	*Lepidurus packardi*	FE/--	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass-bottomed	A - Absent	Appropriate habitat not present within the project site.

Common Name	*Scientific Name*	*Status (Fed/CA)*	*General Habitat Description*	*Habitat Present/ Absent*	*Rationale*
			swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid.		
Fish					
Delta smelt	*Hypomesus trans-pacificus*	FT/ST	Endemic to California that only occurs in the San Francisco Estuary. Life cycle follows the four seasons—spring spawning in fresh water, summer migration/rearing in the low salinity zone, fall maturation in the low salinity zone, and winter upstream migration shortly before spawning. Most spawning happens in tidally influenced backwater sloughs and channel edgewaters. Eggs are adhesive, and thought to be released in batches over firm substrates or sand. Delta Smelt is a euryhaline species, able to tolerate a wide salinity range.	A - Absent	Appropriate habitat not present within the project site.
Mammals					
Sierra Nevada red fox	*Vulpes necator*	FC/ST	Historically found from the Cascades down to the Sierra Nevada. Found in a variety of habitats from wet meadows to forested areas. Use dense vegetation and rocky areas for cover and den sites. Prefer forests interspersed with meadows or alpine fell-fields.	A - Absent	Appropriate habitat not present within the project site.
Insects					
valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	FT/--	Occurs only in the Central Valley of California, in association with blue elderberry (*Sambucus mexicana*). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	P - Present	Documented within the vicinity of the project site, however, no host plants were identified within the project site. Host plant is fairly common within the region.

SOURCE: CDFW CNDDB 2019, USFWS 2019, AND CNPS 2019.
HABITAT PRESENT/ABSENT: ABSENT [A]- NO HABITAT PRESENT AND NO FURTHER WORK NEEDED; HABITAT PRESENT [HP]- HABITAT IS, OR MAY BE PRESENT. THE SPECIES MAY BE PRESENT; PRESENT [P]- SPECIES IS PRESENT; CRITICAL HABITAT [CH] - PROJECT FOOTPRINT IS LOCATED WITHIN A DESIGNATED CRITICAL HABITAT UNIT, BUT DOES NOT NECESSARILY MEAN THAT APPROPRIATE HABITAT IS PRESENT.
STATUS: FEDERAL ENDANGERED (FE); FEDERAL THREATENED (FT); FEDERAL PROPOSED (FP, FPE, FPT); FEDERAL CANDIDATE (FC), FEDERAL SPECIES OF CONCERN (FSC); STATE ENDANGERED (SE); STATE THREATENED (ST); FULLY PROTECTED (FP); STATE RARE (SR); STATE SPECIES OF SPECIAL CONCERN (SSC).

Special Status Plant Species

There are seven special status plants identified as having the potential to occur on the project site based on known occurrences in the region. Of the seven species, four have a low potential to occur on the project site and three are absent from the project site.

The project site does not have the appropriate wetland habitat for Boggs Lake hedge-hyssop, San Joaquin Valley Orcutt grass, and succulent owl's-clover. These species are not documented within the project site, there is not appropriate habitat, nor were they observed during field surveys. These species are deemed absent from the project site.

The project site does contain woodland habitat, which is potential habitat for Hartweg's golden sunburst, Mariposa pussypaws, Tracy's eriastrum, and tree-anemone. These species were not observed during the field survey; however, it is noted that the survey occurred in the early spring season for this region and there were some late weather events that could push the blooming period out later.

Critical habitat has not been designated for any of the plant species listed in the above section.

Given the size of the project site, and the habitat conditions, there is some potential for these plants to occur. The site survey was completed early in the blooming season and may not have captured blooming. However, the Project Impact Area (PIA) is constrained to the existing roadways, parking lots, bridges, and a dirt road. These are all disturbed conditions with no potential for these species to occur. Beyond the PIA, and still within the project site, is many areas that are undisturbed and present some potential for these listed species. The areas outside the PIA will be avoided. As such, the proposed project would have a ***less than significant*** impact on these special status plant species.

Construction activities and soil disturbance from the proposed project could result in the introduction and spread of noxious weeds and other invasive plants, as could inappropriate erosion control measures. Erosion control measures such as use of straw bales and seed can also result in the inadvertent introduction of invasive plants within the project site and beyond. Implementation of Mitigation Measure BIO-1 would reduce the risk of spreading noxious weeds by ensuring that equipment and vehicles are weed free before entry into the project area, and that weed free erosion control measures are in place by the fall of the final construction season.

Special Status Wildlife and Fish Species

There are 12 special status wildlife and fish identified as having the potential to occur on the project site based on known occurrences in the region. Of the 12 species, two are present, two have a low potential to occur on the project site, and eight are absent from the project site.

The foothill yellow-legged frog and valley elderberry longhorn beetle (VELB) were both deemed present in the project site and are discussed in more detail below. The bald eagle and great gray owl are two species that have some potential to occur in the project area given their mobility, but the habitat conditions on the site make the potential for occurrence low. These species are discussed below. Special-status bat species are also discussed below. All other species were deemed absent due to habitat conditions and/or elevational range.

Foothill Yellow-legged Frog

The foothill yellow-legged frog occurs in partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. They need at least some cobble-sized substrate for egg-laying and at least 15 weeks to attain metamorphosis. Adults often bask on exposed rock surfaces near streams. When disturbed, they dive into the water and take refuge under submerged rocks or sediments. During periods of inactivity, especially during cold weather, individuals seek cover under rocks in the streams or on shore within a few meters of water. Egg clusters are attached to gravel or rocks in moving water near stream margins. Unlike most other ranid frogs in California,

this species is rarely encountered (even on rainy nights) far from permanent water. Tadpoles require water for at least three or four months while completing their aquatic development.

Significant seasonal movements or migrations from breeding areas have not been reported. Normal home ranges are probably less than 10 meters (33 feet) in the longest dimension. Occasional long-distance movements (up to 50 meters or 165 feet) may occur during periods with high water conditions. Breeding and egg laying usually await the end of spring flooding and may commence any time from mid-March to May, depending on local water conditions. The breeding season at any locality is usually about two weeks for most populations. Females deposit eggs in clusters of 200 to 300 (range 100 to 1,000). They hatch in about five days. Tadpoles reach maximum sizes of 50 to 55 millimeters (2.2 inches) and transform in three to four months.

Direct effects to this species would not occur, given that there is not instream construction. Additionally, construction activities would not occur in any of the upland areas adjacent to the Willow Creek. The extent of the project is the installation of a pipe within the existing roadway near Willow Creek, as well as hanging a pipe on the existing bridge that crosses Willow Creek. All construction equipment will be prevented from entering the riparian area associated with Willow Creek. Implementation of the Avoidance and Minimization Measures, along with implementation of BMP's while working in and around waterways will ensure that the proposed project will not directly injure or kill any individuals or impact its habitat. The areas outside the PIA will be avoided. As such, the proposed project would have a ***less than significant*** impact on this special status animal species.

Valley Elderberry Longhorn Beetle

VELB is federally listed as threatened and is documented within the project site. VELB is a wood borer and occurs only in association with blue elderberry, a common shrub of riparian and foothill woodland habitats. VELB's life cycle is completely dependent on blue elderberry as a host plant. The beetle's adult stage is short-lived and the entire larval stage is spent living within the elderberry plant stems. VELB has been documented in various habitats in the Sierra foothills and specifically documented in the community of North Fork.

Direct effects to this species would not occur, given that there are no elderberry plants within the PIA. Additionally, construction activities are largely focused to areas that have existing roadways, parking lots, buildings, and a dirt road. All construction equipment will be prevented from entering sensitive areas outside the PIA. As such, the proposed project would have a ***less than significant*** impact on this special status animal species.

Raptors

Raptors are fully protected under the California Fish and Game Code Section 3503.5. A variety of raptors are very common throughout the Central Valley, including the foothills of the Sierras, while several species are considered rare.

There were two listed raptor species identified in the CNDDB for the regional vicinity: the great grey owl and the bald eagle. The great grey owl is a resident of mixed conifer or red fir forest habitat, in or on edge of meadows. They require large diameter snags in a forest with high canopy closure, which provide a cool sub-canopy microclimate. This species is not known to inhabit the elevational range where the project site is located, as they are known to be a higher elevation species. Additionally, the project site does not contain any large diameter snags or other special conditions. Because of the high mobility of this species, it is possible that they travel through the area; however, they are not believed to inhabit the project site.

The bald eagle is also known to occur in the region. They are found along lake margins and rivers for both nesting and wintering. Most nests are within one mile of water. Nests are large and are typically found in old-growth, or dominant live trees with open branches, especially ponderosa pine. They are known to roost communally in the winter. There was no evidence of bald eagles within the project site. Because of the high mobility of this species, it is possible that they travel through the area; however, they are not believed to inhabit the project site.

There are a variety of other raptor species that are anticipated to be present in the region, either foraging or nesting, at various times. Some raptors are migratory and thus are only in the region during certain periods of the year, while many are residents. There was no evidence of a remnant or active nest located in the project site during the surveys. Nevertheless, Mitigation Measures BIO-2 and BIO-3 are required to ensure that impacts to raptors are ***less than significant***.

Migratory Birds

The Pacific Flyway, which is a migratory travel route for millions of birds, and more than 350 species, is located through the Central Valley of California. The project site is located just east, and on the fringe of the Pacific Flyway. Migratory birds travel this avian flyway each year from the Bering Strait to South America. Many of the birds travel from the north to overwinter in California, including the Central Valley region. The birds overwintering arrive as early as August. Other birds travel south to overwinter, and arrive back in California as early as February to nest/breed.

There is a wide variety of migratory birds, including water birds, which use the Central Valley for foraging. The foothill area is generally considered outside of this migratory path, but given that it is on the fringe, there is the possibility that migratory birds are present, perhaps at significantly lower densities when compared to the Central Valley. Migratory nesting birds generally move into the area for nesting from February through August. Migratory overwintering birds generally move into the area in late August through early February.

A review of the USFWS IPaC revealed the following two birds as potentially present: Cassin's Finch (*Carpodacus cassinii*) – Bird of Conservation Concern; and Olive-sided Flycatcher (*Contopus cooperi*) – Bird of Conservation Concern.

There was no evidence of active or remnant nests located in the project limits or immediate vicinity. The field survey was performed in the early season, which could have been prior to the breeding period in this location given the late snowfall. Additionally, annual nesting can occur in locations that had no evidence of nesting in prior years so the results of the field survey are not intended to be indicative of the results in future years.

The proposed project will not impact suitable nesting habitat for raptor species. The project will not require the removal of any trees, and it will be located in areas that are already disturbed from existing roadways, parking lots, buildings, and a dirt road. Implementation of the Avoidance and Minimization Measures will ensure that the proposed project will not directly or indirectly impact nesting birds or their young. There are no critical habitats within the project limits.

Special Status Bats

Bats are highly mobile and could travel through the project limits at times for foraging. Bats will also utilize crevices of bridges for roosting. There was no evidence of roosting within the project site, although the field survey was not performed during the maternal roosting period which is typically May to August. It is possible for a variety of bats to use the trees, bridges, and other

structures in the region for maternal or non-material roosting, although there was no evidence of such activities observed.

Trees, rock outcrops, bridges, and other structures in the regions provide habitat for a variety of bat species. Bats commonly utilize crevices of these areas for roosting (day roosts, night roosts, maternal roosts, and hibernation roosts). The maternal roosting period typically begins as the temperatures increase (May to August). It is possible for a variety of bats to use the area for maternal or non-maternal roosting from year to year. Bats are also highly mobile and could travel through the project site at times for foraging. There was no evidence of guano under the bridges or around trees located within the project site. Avoidance and minimization measures ensure that impacts to bats are ***less than significant***.

Mitigation Measure(s)

Mitigation Measure BIO-1*: To minimize the risk of introducing additional non-native species into the area, weed-free erosion control applications shall be used. No dry-farmed straw shall be used and certified weed-free straw shall be required where erosion control straw is to be used. In addition, hydro-seed mulch or any other erosion control application must also be certified weed-free. If a revegetation seed mix is to be used, the mix shall also be certified weed-free and contain native species appropriate for the project area.*

All off-road equipment to be cleaned of potential noxious weed sources (mud, vegetation) before entry onto the project site, to help ensure noxious weeds are not introduced into the project area. The contractor shall employ whatever cleaning methods (typically with the use of a high-pressure water hose) are necessary to ensure that equipment is free of noxious weeds. Equipment shall be considered free of soil, seeds, and other such debris when a visual inspection does not disclose such material. Disassembly of equipment components or specialized inspection tools is not required.

Mitigation Measure BIO-2*: In order to avoid affects to nesting raptors and migratory birds, project activities will occur, where possible, outside the nesting season. The nesting season is generally February 15-September 1. This requirement shall be noted on the project improvement plans, subject to review and approval by the County of Madera.*

Mitigation Measure BIO-3*: If project activities must occur during the nesting season (February 15-September 1), a qualified biologist will conduct pre-construction surveys within the project site for active raptor and migratory bird nests within 30 days of the onset of these activities. If no active nests are found within the project site, no further mitigation is required. This requirement shall be noted on the project improvement plans, subject to review and approval by the County of Madera.*

Mitigation Measure BIO-4*: Should any active nests be discovered within the project site, the biologist will determine the appropriate construction setback distances based on applicable CDFW guidelines and/or the biology of the affected species. Construction-free buffers will be identified on the ground with flagging, fencing, or by other easily visible means, and will be maintained until the biologist has determined that the young have fledged. This requirement shall be noted on the project improvement plans, subject to review and approval by the County of Madera.*

Mitigation Measure BIO-5*: To avoid effects to bats, a qualified biologist will conduct pre-construction surveys for bats within 30 days of the onset of construction activities. If no evidence of bats is found, no further mitigation is required. If it is determined that bats are roosting within the PIA, it should be determined by the biologist whether the use is for maternal roosting (generally May – August). If it is not a maternal roost site, a buffer should be established to ensure that there are no incidental impacts to the bats at the roost. If a buffer cannot be established, exclusionary*

devices will be installed at least seven days before work can commence. By waiting the seven days, the bats can exit the roost and relocate to another location in the vicinity. Once these devices have been installed, they must be maintained and kept in good working order. These requirements shall be noted on the project improvement plans, subject to review and approval by the County of Madera.

Responses b, c): There are not any designated critical habitats within or immediately adjacent to the project site. Willow Creek is a sensitive natural community given that it contains a relatively natural riparian edge and aquatic habitat. The woodland habitat contains a mosaic of trees that provide habitat for many animals in the region.

The project does not involve any instream construction, and all drainages are avoided. Additionally, construction activities would not occur in any of the upland areas adjacent to the Willow Creek. The extent of the project is the installation of a pipe mostly in existing roadway. Near Willow Creek, all pipe will be installed in the existing roadway, as well as hanging a pipe on the existing bridge that crosses Willow Creek. All construction equipment will be prevented from entering the riparian area associated with Willow Creek. Implementation of the Avoidance and Minimization Measures, along with implementation of best management practices (BMPs) while working in and around waterways will ensure that the proposed project will not disturb the Willow Creek habitat. Additionally, this project will avoid removal of existing trees and encroachments into natural and undisturbed areas. The areas outside the project impact area will be avoided.

The project is designed to avoid all waterways. There are no anticipated fill activities that would necessitate the need for a 404 permit, 401 certification, or 1600 Streambed Alteration Agreement. Implementation of the following mitigation measures would ensure that the proposed project would have a ***less than significant*** impact on riparian habitats, natural communities, and state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.).

Mitigation Measure(s)

Mitigation Measure BIO-6*: Within fourteen days prior to commencing construction, send a notice to the CDFW indicating the date that construction will commence. Within fourteen days of completing construction, send a notice to the CDFW indicating the date that construction was completed. The notices shall include photographs of the before and after conditions of the construction zone. These requirements shall be noted on the project improvement plans, subject to review and approval by the County of Madera.*

Mitigation Measure BIO-7*: Prior to the commencement of construction, all workers shall be educated by a qualified biologist regarding the special status species and sensitive habitats located proximate to the construction zone. This requirement shall be noted on the project improvement plans, subject to review and approval by the County of Madera.*

Mitigation Measure BIO-8*: The first construction task shall be the installation of construction fencing at the boundary of the Project Impact Area (PIA) to ensure that all construction activities are prevented from encroaching into areas not intended for disturbance. This requirement shall be noted on the project improvement plans, subject to review and approval by the County of Madera.*

Response d): The CNDDB record search did not reveal any documented wildlife corridors or wildlife nursery sites on or adjacent to the project site. The closest major natural movement corridor for native wildlife or fish species that are documented in the region is Willow Creek. As noted above, the proposed project would not have any direct disturbance to Willow Creek and.

therefore, would not have any direct disturbance to the movement corridor or habitat. Implementation of the required measures above would ensure that this potential impact is reduced to a ***less than significant*** level.

Response e): The Agricultural and Natural Resources Element of the General Plan establishes numerous policies related to biological resources as listed below:

5.C.2. The County shall minimize sedimentation and erosion through control of grading, cutting of trees, removal of vegetation, placement of roads and bridges, and use of off-road vehicles. The County shall discourage grading activities during the rainy season, unless adequately mitigated, to avoid sedimentation of creeks and damage to riparian habitat.

- ***Consistent****: This Initial Study includes mitigation measures in order to reduce impacts to Willow Creek and the associated riparian habitat. Additionally, Mitigation Measure GEO-2 would require the preparation of a SWPPP to ensure that the proposed project prepares and implements a SWPPP throughout the construction phase of the project. In order to ensure that grading activities near Willow Creek are discouraged during the rainy season, this Initial Study also includes Mitigation Measure BIO-9. With implementation of the mitigation measures in this Initial Study, the project would be consistent with this policy.*

5.C.3. The County shall require new development of facilities near rivers, creeks, reservoirs, or substantial groundwater recharge areas to mitigate any potential impacts of release of pollutants in flood waters, flowing river, stream, creek, or reservoir waters.

- ***Consistent****: The project is designed to avoid all waterways. There are no anticipated fill activities that would necessitate the need for a 404 permit, 401 certification, or 1600 Streambed Alteration Agreement. This Initial Study includes Mitigation Measures BIO-6, BIO-7, and BIO-8 in order to reduce impacts to Willow Creek and the associated riparian habitat.*

5.C.4. The County shall require the use of feasible and practical best management practices (BMPs) to protect streams from the adverse effects of construction activities, and shall encourage that storm drainage systems use BMPs.

- ***Consistent****: Mitigation Measure GEO-2 would require the preparation of a SWPPP to ensure that the proposed project prepares and implements a SWPPP throughout the construction phase of the project. The SWPPP would include BMPs to protect streams from the adverse effects of construction activities.*

5.D.1. The County shall comply with the wetlands policies of the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the California Department of Fish and Wildlife. Coordination with these agencies at all levels of project review shall continue to ensure that appropriate mitigation measures and the concerns of these agencies are adequately addressed.

- ***Consistent****: The project is designed to avoid all waterways. There are no anticipated fill activities that would necessitate the need for a 404 permit, 401 certification, or 1600 Streambed Alteration Agreement.*

5.E.2. The County shall require development in areas known to have particular value for wildlife to be carefully planned and, where possible, located so that the reasonable value of the habitat for wildlife is maintained.

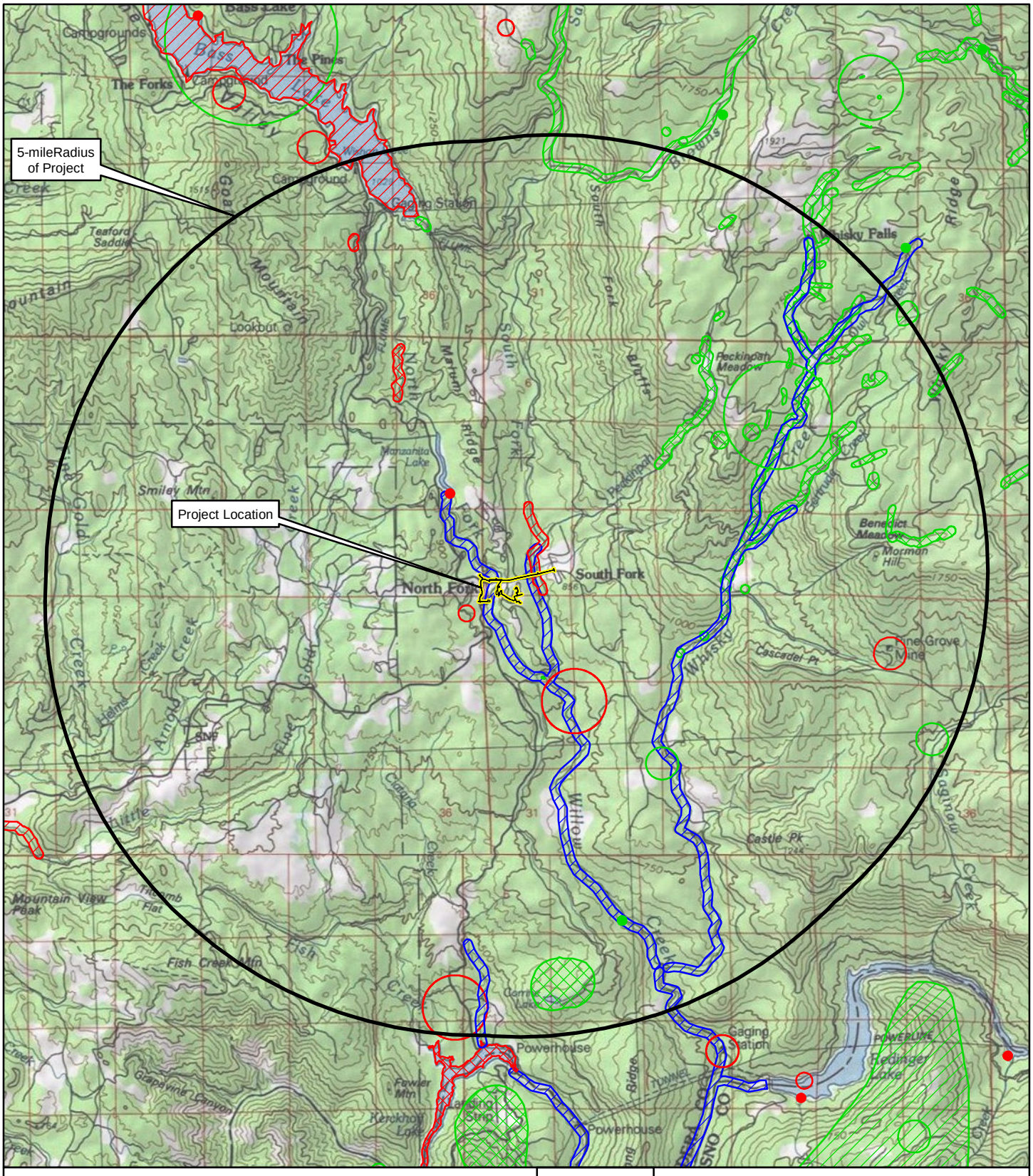
- ***Consistent****: The project site does not include areas known to have particular value for wildlife.*

With implementation of Mitigation Measure BIO-9, the proposed project would have a ***less than significant*** impact relative to this topic.

Mitigation Measure(s)

Mitigation Measure BIO-9*: Grading activities that occur within the vicinity of Willow Creek during the rainy season shall be avoided to the extent feasible. This requirement shall be noted on the project improvement plans, subject to review and approval by the County of Madera.*

Response f): Madera County does not have an applicable habitat conservation plan or natural community conservation plan. Therefore, the proposed project would have ***no impact*** relative to this topic.



Special Status Species Occurrences

- Plant (80m)
- Plant (circular)
- Animal (non-specific)
- Plant (specific)
- Animal (80m)
- Animal (circular)
- Plant (non-specific)
- Animal (specific)
- Aquatic Comm (non-specific)

CNDDB version 01/2019. Please Note: the occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not been surveyed and/or mapped. Lack of information in the CNDDB about a species or an area can never be used as proof that no special status species occur in an area. Basemap: ArcGIS Online Topographic Map Service. Map date: January 30, 2019.

0 ½ 1
Miles

MAINTENANCE DISTRICT NO. 8A
NORTH FORK WATER SYSTEM IMPROVEMENTS

Figure 6 California Natural Diversity Database

5-Mile Radius Search

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

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V. CULTURAL RESOURCES

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

Responses to Checklist Questions

Responses a), b): As part of the Historic Properties Identification Report completed for the project site (Peak & Associates, Inc., 2019), a records search was completed on March 4, 2019 through the Southern San Joaquin Valley Information Center of the California Historical Resources Information System for the APE and a 0.25-mile radius. There are no prehistoric or historic sites recorded within the APE. Within the extended record search radius, there is one recorded prehistoric period site, a bedrock mortar station. Two historic period resources have been recorded within the search radius: North Fork Supervisor's Headquarters of the Sierra National Forest, and the Crane Valley Hydroelectric System District. The APE has been partially covered by previous surveys, and there are numerous surveys within the record search area. Only one survey of the APE occurred within the last ten years for a short stretch of roadway (Baloian 2017). Peak & Associates determined that a new survey would be required for all portions of the APE.

Other research occurred through a check of the older topographic maps for historic period features within the APE: Millerton 1:62,500-scale 1942; North Fork 1:24,000-scale 1965; and North Fork 1:24,000-scale 1965, photorevised 1981). The 1914 Madera County map was also reviewed for locations of historic features. The General Land Office plat yielded further information of concern. Very close to the APE is indicated the words "Indian Rancheria." The precise location is not indicted; the corresponding modern location cannot be specifically ascertained. The record search did not indicate a recorded site in the search area that would include the site of this hamlet.

The Native American Heritage Commission (NAHC) was contacted on February 22, 2019 for a check of the Sacred Lands file and a list of individuals for consultation for the general area of the project. Their reply indicated that no properties in the vicinity of the project had been recorded as cultural resources. The NAHC identified several organizations as suitable contacts for information and opinion on the project. All of organizations were contacted by Peak & Associates. Replies received included requests for monitoring during construction.

A field inspection was completed for the project area. No evidence of either historic or prehistoric cultural resources were found in the APE.

There is some possibility that a buried site may exist in the area and be obscured by vegetation, fill, or other historic activities, leaving no surface evidence. Should artifacts or unusual amounts of stone, bone, or shell be uncovered during construction activities, an archeologist would be consulted for an evaluation. Implementation of the following mitigation measure would require investigations and avoidance methods in the event that a previously undiscovered cultural

resource is encountered during construction activities. With implementation of the following mitigation measure, development of the proposed project would have a ***less than significant*** impact on historical and archaeological resources.

Mitigation Measure(s)

Mitigation Measure CUL-1: *If cultural resources (i.e., prehistoric sites, historic sites, isolated artifacts/features, and paleontological sites) are discovered, work shall be halted immediately within 50 meters (165 feet) of the discovery, the County of Madera shall be notified, and a qualified archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology (or a qualified paleontologist in the event paleontological resources are found) shall be retained to determine the significance of the discovery. The County of Madera shall consider recommendations presented by the professional for any unanticipated discoveries and shall carry out the measures deemed feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. Specific measures are developed based on the significance of the find.*

Response c): Indications are that humans have occupied the Central Valley and foothills for at least 10,000 years and it is not always possible to predict where human remains may occur outside of formal burials. Therefore, excavation and construction activities, regardless of depth, may yield human remains that may not be interred in marked, formal burials. Under CEQA, human remains are protected under the definition of archaeological materials as being "any evidence of human activity." Additionally, Public Resources Code Section 5097 has specific stop-work and notification procedures to follow in the event that human remains are inadvertently discovered during construction. Implementation of the following mitigation measure would reduce this potential impact to a ***less than significant*** level.

Mitigation Measure(s)

Mitigation Measure CUL-2: *If any human remains are found during grading and construction activities, all work shall be halted immediately within 50 meters (165 feet) of the discovery and the County Coroner must be notified, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed. Additionally, if the Native American resources are identified, a Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, may also be required and, if required, shall be retained at the applicant's expense.*

VI. ENERGY

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

Responses to Checklist Questions

Response a-b): As noted in the project description, a storage and booster pumping facility will have electrical utility service and a diesel generator for emergency purposes only. This diesel-fired emergency generator would be provided in conjunction with the proposed storage and booster pumping facility. The emergency generator would be for emergency operations in the event of a power outage, and would otherwise only be run for maintenance and air quality permit testing requirements.

In North Fork, the SJVAPCD regulates the use of diesel-fired emergency generators. As defined by the SJVAPCD, an emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. The emergency generator would not be used to produce power for the electrical distribution system (SJVPACD District Rule 4702 and 17 CCR 93115). In addition, the SJVAPCD limits the operation of the emergency generators for maintenance, testing, and required regulatory purposes to a maximum of 50 hours per calendar year (SJVAPCD District Rules 2201, 4102 and 4702, and 17 CCR 93115). Since the use of the emergency generator would only occur during emergency scenarios, and otherwise only be run very briefly for maintenance and air quality testing requirements, the amount of diesel fuel used by this generator over the course of the lifetime of the proposed project would be minimal.

The exact amount of diesel fuel used by this generator would depend on the temporal extent of electrical power outages experienced during the lifetime of the proposed project, on the number of hours the generators are used for maintenance, testing, and the required regulatory purposes (i.e., up to 50 hours per calendar year). A typical 1502 brake-horsepower (BHP) Caterpillar Model C32 diesel-fired emergency engine (Tier 2 certified) would consume a maximum of approximately 71.9 gallons of diesel fuel per hour. This is based on an assumption of 100% load (Caterpillar, 2014).

Furthermore, the County of Madera is required by the SJVAPCD to maintain monthly records of emergency and non-emergency operation. These records are required to include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring (SJVAPCD District Rule 4702 and 17 CCR 93115). For units with automated testing systems, the operator of the diesel generator(s) has the option to, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule (SJVAPCD District Rule 4702 and 17 CCR 93115).

These requirements, as provided by the SJVAPCD, are described under the conditions contained within the Authority to Construct permit that the proposed project would be required to obtain

prior to operation of the emergency generator. Based on these requirements, and the minimal amount of diesel fuel used by the emergency generator proposed by the proposed project, the proposed project would neither result in a wasteful, inefficient, or unnecessary consumption of energy resources, nor conflict with or obstruct any plan for renewable energy or energy efficiency. Implementation of the proposed project would result in a ***less than significant*** impact relative to this topic.

VII. GEOLOGY AND SOILS

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

Responses to Checklist Questions

Responses a.i), a.ii), a.iv): The site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone, and known surface expression of active faults does not exist within the site. However, the site is located within a seismically active region. The U.S. Geological Survey identifies potential seismic sources within 35 miles of the project site. Two of the closest known faults classified as active by the U.S. Geological Survey are an unnamed fault east of North Fork, located approximately 35 miles to the northeast, and the Hilton Creek fault, located approximately 37 miles to the northeast.

Geologic Hazards

Potential seismic hazards resulting from a nearby moderate to major earthquake could generally be classified as primary and secondary. The primary seismic hazard is ground rupture, also called surface faulting. The common secondary seismic hazards include ground shaking and ground lurching.

Ground Rupture

Because the property does not have known active faults crossing the site, and the site is not located within an Earthquake Fault Special Study Zone, ground rupture is unlikely at the subject property.

Ground Shaking

According to the California Geological Survey's Probabilistic Seismic Hazard Assessment Program, North Fork is considered to be within an area that is predicted to have a 10 percent probability that a seismic event would produce horizontal ground shaking of 10 to 20 percent within a 50-year period. This level of ground shaking correlates to a Modified Mercalli intensity of V to VII, light to strong. There will always be a potential for groundshaking caused by seismic activity anywhere in California, including the project site.

In order to minimize potential damage to the buildings and site improvements, all construction in California is required to be designed in accordance with the latest seismic design standards of the California Building Code. The California Building Code, Title 24, Part 2, Chapter 16 addresses structural design and Chapter 18 addresses soils and foundations. Collectively, these state requirements, which have been adopted by the County of Madera, include design standards and requirements that are intended to minimize impacts to structures in seismically active areas of California. Section 1613 specifically provides structural design standards for earthquake loads. Section 1803.5.11 and 1803.5.12 provide requirements for geotechnical investigations for structures assigned varying Seismic Design Categories in accordance with Section 1613. Design in accordance with these standards and policies would reduce any potential impact to a less than significant level.

Landslides

The proposed project site is not located within a landslide zone, according to the California Department of Conservation. This is a less than significant impact.

Conclusion

In order to minimize potential damage to the buildings and site improvements, all construction in California is required to be designed in accordance with the latest seismic design standards of the California Building Code. The California Building Code, Title 24, Part 2, Chapter 16 addresses structural design and Chapter 18 addresses soils and foundations. Collectively, these state requirements, which have been adopted by the County of Madera, include design standards and requirements that are intended to minimize impacts to structures in seismically active areas of California. Section 1613 specifically provides structural design standards for earthquake loads. Section 1803.5.11 and 1803.5.12 provide requirements for geotechnical investigations for structures assigned varying Seismic Design Categories in accordance with Section 1613. Additionally, the County of Madera has adopted construction standards and incorporated numerous policies relative to seismicity to ensure the health and safety of all people. Design in

accordance with these standards and policies would reduce any potential impact to a less than significant level. Because all development in the project site must be designed in conformance with these state and local standards and policies, any potential impact would be considered ***less than significant***.

Responses a.iii), c), d): Liquefaction normally occurs when sites underlain by saturated, loose to medium dense, granular soils are subjected to relatively high ground shaking. During an earthquake, ground shaking may cause certain types of soil deposits to lose shear strength, resulting in ground settlement, oscillation, loss of bearing capacity, landsliding, and the buoyant rise of buried structures. The majority of liquefaction hazards are associated with sandy soils, silty soils of low plasticity, and some gravelly soils. Cohesive soils are generally not considered to be susceptible to liquefaction. In general, liquefaction hazards are most severe within the upper 50 feet of the surface, except where slope faces or deep foundations are present.

The proposed project site is not located within a liquefaction zone, according to the California Department of Conservation. As noted above, North Fork is considered to be within an area that is predicted to have a 10 percent probability that a seismic event would produce horizontal ground shaking of 10 to 20 percent within a 50-year period. Significant liquefaction induced settlement is not generally anticipated at the site. However, based on the anticipated site conditions, some seismic settlement is generally anticipated.

Expansive soils are those that undergo volume changes as moisture content fluctuates; swelling substantially when wet or shrinking when dry. Soil expansion can damage structures by cracking foundations, causing settlement and distorting structural elements. Expansion is a typical characteristic of clay-type soils. Expansive soils shrink and swell in volume during changes in moisture content, such as a result of seasonal rain events, and can cause damage to foundations, concrete slabs, roadway improvements, and pavement sections.

Soil expansion is dependent on many factors. The more clayey, critically expansive surface soil and fill materials will be subjected to volume changes during seasonal fluctuations in moisture content. According to the Natural Resources Conservation Service Web Soil Survey, the soils in the project area have a low shrink-swell potential. The potential for soil expansion to occur at the project site is generally considered low.

As noted previously, the project does not propose any housing or other structures or buildings that would result in direct population growth. Therefore, risks to life or property would low.

Nevertheless, the California Building Code Title 24, Part 2, Chapter 18, Section 1803.1.1.2 requires specific geotechnical evaluation when a preliminary geotechnical evaluation determines that expansive or other special soil conditions are present, which, if not corrected, would lead to structural defects. Mitigation Measure GEO-1 provides the requirement for a final geotechnical evaluation in accordance with the standards and requirements outlined in the California Building Code, Title 24, Part 2, Chapter 16, Chapter 17, and Chapter 18, which addresses structural design, tests and inspections, and soils and foundation standards. The final geotechnical evaluation would include design recommendations to ensure that soil conditions do not pose a threat to the health and safety of people (including maintenance workers) or structures (which would house the generators). The grading and improvement plans are required to be designed in accordance with the recommendations provided in the final geotechnical evaluation. With the implementation of Mitigation Measure GEO-1 (requiring a final Geotechnical Evaluation, and site recommendations) the proposed project would have a ***less than significant*** impact relative to this topic.

Mitigation Measure(s)

Mitigation Measure GEO-1*: Prior to earthmoving activities for each phase of the project, a certified geotechnical engineer, or equivalent, shall be retained to perform a final geotechnical evaluation of the soils at a design-level as required by the requirements of the California Building Code Title 24, Part 2, Chapter 18, Section 1803.1.1.2 related to expansive soils and other soil conditions. The evaluation shall be prepared in accordance with the standards and requirements outlined in California Building Code, Title 24, Part 2, Chapter 16, Chapter 17, and Chapter 18, which addresses structural design, tests and inspections, and soils and foundation standards. The final geotechnical evaluation shall include design recommendations to ensure that soil conditions do not pose a threat to the health and safety of people or structures, including threats from liquefaction or lateral spreading. The grading and improvement plans for each phase of the project shall be designed in accordance with the recommendations provided in the final geotechnical evaluation.*

Response b): The project site includes areas that are currently vacant and undeveloped, areas that contain existing right-of-way, and areas that are currently developed. Development of the proposed project would result in the creation of a small amount of new impervious surface area at the proposed pumping facility. The development of the project site would also cause ground disturbance of top soil. The ground disturbance would be limited to the areas proposed for grading and excavation, including the water infrastructure improvements. After grading and excavation, the potential exists for wind and water erosion to occur, which could adversely affect downstream storm drainage facilities.

Without implementation of appropriate Best Management Practices (BMPs) related to prevention of soil erosion during construction, development of the project would result in a potentially significant impact with respect to soil erosion. Implementation of the following mitigation measures would ensure the impact is ***less than significant***.

Mitigation Measure(s)

Mitigation Measure GEO-2*: The project applicant shall submit a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) to the RWQCB in accordance with the NPDES General Construction Permit requirements. The SWPPP shall be designed to control pollutant discharges utilizing Best Management Practices (BMPs) and technology to reduce erosion and sediments. BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater runoff from the project site. Measures shall include temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) that will be employed to control erosion from disturbed areas. Final selection of BMPs will be subject to approval by the County of Madera and the RWQCB. The SWPPP will be kept on site during construction activity and will be made available upon request to representatives of the RWQCB.*

Response e): The project would not require wastewater treatment. The project does not propose any housing that would result in direct population growth which would generate wastewater. Septic systems will not be used for the project. Therefore, ***no impact*** would occur related to soils incapable of adequately supporting the use of septic tanks.

Response f): Known paleontological resources or sites are not located on the project site. Additionally, unique geologic features are not located on the site. The project site includes areas that are currently vacant and undeveloped, areas that contain existing right-of-way, and areas that are currently developed. As discussed in Section V, Cultural Resources, should artifacts or unusual amounts of stone, bone, or shell be uncovered during construction activities, an archeologist should be consulted for an evaluation. Implementation of Mitigation Measure CUL-

1 would require investigations and avoidance methods in the event that a previously undiscovered cultural resource is encountered during construction activities. With implementation of Mitigation Measure CUL-1, impacts to paleontological resources or unique geologic features are not expected. This is a ***less than significant*** impact.

VIII. GREENHOUSE GAS EMISSIONS

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

Responses to Checklist Questions

Responses a), b): Implementation of the proposed project would not result in intensification of land uses, or the addition of structures or uses that would differ from the current General Plan. The project will enhance and expand the water system improvements within MD-8A in order to achieve compliance with the arsenic MCL. The project would not result in significant generation of construction or operational GHG emissions. Construction related GHG emissions would be temporary and would cease upon project completion. During operation, the project is not anticipated to generate substantial amounts of GHGs either directly or indirectly, as project infrastructure does not rely on sources of GHG emitting inputs for their operation. Emissions associated with project construction and operation would not be great enough to approach established significance thresholds, nor would it conflict with any plan policy or regulation regarding GHG reduction measures. Therefore, GHG impacts would be considered ***less than significant***.

IX. HAZARDS AND HAZARDOUS MATERIALS

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

Responses to Checklist Questions

Responses a), b): Construction equipment and materials would likely require the use of petroleum-based products (oil, gasoline, diesel fuel). The use of these materials at a construction site will pose a reasonable risk of release into the environment if not properly handled, and transported. A release into the environment could pose significant impacts to the health and welfare of people and/or wildlife, and could result in contamination of water, habitat, and agricultural resources. Some hazardous materials may be used during construction. This includes fuels and petroleum products, which are anticipated to be in such small quantities that it would pose no significant hazard or risk to the public or the environment through normal use.

Operational impacts from the proposed project would not result in increased routine transport, use or disposal of hazardous materials. The use, clean up, and disposal of potentially hazardous construction materials is managed according to standard procedures to protect air quality, water quality, and the environment.

Operation of the proposed project would not result in a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Some hazardous materials may be used during construction. This includes fuels and petroleum products, which are anticipated to be in such small quantities that it would pose no significant hazard or risk to the public or the environment. The use, clean up, and disposal of any potentially hazardous construction materials will be managed according to standard procedures to protect air quality, water quality, and the environment as per state laws and is not expected to result in a reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Onsite reconnaissance and historical records indicate that there are no known underground storage tanks or pipelines located on the project site that contain hazardous materials. Therefore, the disturbance of such items during construction activities is unlikely. Construction equipment and materials would likely require the use of petroleum-based products (oil, gasoline, diesel fuel), and a variety of common chemicals including paints, cleaners, and solvents. Transportation, storage, use, and disposal of hazardous materials during construction activities would be required to comply with applicable federal, state, and local statutes and regulations. Compliance would ensure that human health and the environment are not exposed to hazardous materials. Therefore, the proposed project would have a ***less than significant*** impact relative to this issue.

Response c): The project site is located within ¼ mile of an existing school. The closest school is North Fork Elementary School which is located apron-site. Although the site is within the ¼-mile radius of a school, the operations of the proposed water system improvement project would not emit hazardous emissions or result in the storage or handling of hazardous or acutely hazardous materials, substances or waste above the level of existing conditions. Implementation of the proposed project would result in a ***less than significant*** impact relative to this topic.

Response d): According the California Department of Toxic Substances Control (DTSC) there are no Federal Superfund Sites, State Response Sites, or Voluntary Cleanup Sites on, or in the near vicinity of the project site. The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5. Three leaking underground storage tank (LUST) cleanup sites are located in the project area. The three LUST sites include:

- Minarets Exxon/Georges Exxon (site T0603900076): The potential contaminant of concern for this site is gasoline. This site has a cleanup status of Open – Verification Monitoring (as of May 15, 2019).

- Quick Shell Service (Former) (site T0603900146): The potential contaminant of concern for this site is gasoline. This site has a cleanup status of Open – Verification Monitoring (as of January 11, 2005).

- Minarets Ranger Station (site T0603900155): The potential contaminant of concern for this site is diesel. This site has a cleanup status of Open – Verification Monitoring (as of October 28, 2010).

Implementation of the proposed project would result in a ***less than significant*** impact relative to this environmental topic.

Response e): The Federal Aviation Administration (FAA) establishes distances of ground clearance for take-off and landing safety based on such items as the type of aircraft using the airport. The project site is not located within the vicinity of a private airstrip or public airport.

The closest airport or airstrip is the Grupe Ranch Airport, located approximately 20.7 miles northwest of the project site. Implementation of the proposed project would have a ***less than significant*** impact with regards to this environmental issue.

Response f): The project site will be connecting to an existing network of County streets. The proposed water improvements would allow for greater emergency response relative to existing conditions by enhancing the water system infrastructure in North Fork. The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Implementation of the proposed project would have a ***less than significant*** impact with regards to this environmental issue.

Response g): The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents), and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point, while fuels such as trees have a lower surface area to mass ratio and require more heat to reach the ignition point.

The County has areas with an abundance of flashy fuels (i.e., grassland) in the outlying residential parcels and open lands that, when combined with warm and dry summers with temperatures often exceeding 100 degrees Fahrenheit, create a situation that results in higher risk of wildland fires. Most wildland fires are human caused, so areas with easy human access to land with the appropriate fire parameters generally result in an increased risk of fire.

The County of Madera contains areas with very high, high, and moderate fuel ranks. Although the project site is located in an area of the County with wildfire potential, the proposed project does not include any structures, residential units, or any other type of use, that would directly, or indirectly increase the population in the area. Therefore, the project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. This is a ***less than significant*** impact and no mitigation is required.

X. HYDROLOGY AND WATER QUALITY

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

Responses to Checklist Questions

Response a): Implementation of proposed project would not violate any water quality or waste discharge requirements. Construction activities including grading could temporarily increase soil erosion rates during and shortly after project construction. Construction-related erosion could result in the loss of soil and could adversely affect water quality in nearby surface waters. The RWQCB requires a project specific SWPPP to be prepared for each project that disturbs an area one acre or larger. The SWPPP is required to include project specific best management measures that are designed to control drainage and erosion. Mitigation Measure GEO-2 would require the preparation of a SWPPP to ensure that the proposed project prepares and implements a SWPPP throughout the construction phase of the project. Furthermore, the proposed project includes a preliminary grading and drainage plan that has a specific drainage plan designed to control storm water runoff and erosion, both during and after construction. The SWPPP (Mitigation Measure GEO-2) would reduce the potential for the proposed project to violate water quality standards during construction. Implementation of the proposed project would result in a ***less-than-significant*** impact relative to this topic.

Response b): The proposed project would not require ground water supplies, and would not interfere with groundwater recharge. The project area is not a groundwater recharge area. Therefore, project construction and operation would not substantially deplete or interfere with groundwater supply or quality. This impact would be ***less than significant***.

Responses c), e): When land is in a natural or undeveloped condition, precipitation will infiltrate/percolate the soils and mulch. Much of the rainwater that falls on natural or undeveloped land slowly infiltrates the soil and is stored either temporarily or permanently in underground layers of soil. When the soil becomes completely soaked or saturated with water or the rate of rainfall exceeds the infiltration capacity of the soil, the rainwater begins to flow on the surface of land to low lying areas, ditches, channels, streams, and rivers. Rainwater that flows off of a site is defined as storm water runoff. When a site is in a natural condition or is undeveloped, a larger percentage of rainwater infiltrates into the soil and a smaller percentage flows off the site as storm water runoff.

The infiltration and runoff process is altered when a site is developed with urban uses. Houses, buildings, roads, and parking lots introduce asphalt, concrete, and roofing materials to the landscape. These materials are relatively impervious, which means that they absorb less rainwater. As impervious surfaces are added to the ground conditions, the natural infiltration process is reduced. As a result, the volume and rate of storm water runoff increases. The increased volumes and rates of storm water runoff can result in flooding in some areas if adequate storm drainage facilities are not provided.

There are is one river, stream, or water course located on or immediately adjacent to the project site: Willow Creek. The project would not alter this creek. The majority of the proposed improvements would be developed in previously-disturbed areas, such as within roadway rights-of-way. Some of the proposed improvements would be located on undisturbed areas; however, these improvements would not occur near Willow Creek. The undergrounding of the utilities within the undeveloped areas will be restored to the existing undeveloped condition at the completion of the proposed project. The undergrounding of the utilities within the roadway rights-of-way will also be restored to the existing condition. The project does not include any drainage improvements. As such, there is no potential for the project to alter a water course, which could lead to on or offsite flooding.

Implementation of the proposed project would have a ***less-than-significant*** impact relative to this environmental topic.

Response d): The project site is located within Flood Zone D, which is not within the 100-year flood zone as shown on the Flood Insurance Rate Map (FIRM). The proposed project would not expose people or structures to a significant risk of loss, injury or death involving flooding as a result of the failure of a levee or dam.

The project site is not anticipated to be inundated by a tsunami because it is located at an elevation of 2,592 and 2,743 feet above sea level and is approximately 130 miles away from the Pacific Ocean which is the closest ocean waterbody.

The project site is not anticipated to be inundated by a seiche because it is not located in close proximity to a water body capable of creating a seiche.

Implementation of the proposed project would have a ***less than significant*** impact relative to flood hazards, seiches, and tsunamis.

XI. LAND USE AND PLANNING

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

Responses to Checklist Questions

Response a): The project site is located within the unincorporated portion of Madera County and is adjacent primarily to undeveloped land, rural residential land, and public land uses. The project site would result in extensions of water lines and development of pump stations and other related infrastructure. Development of the project would not result in any physical barriers, such as a wall, or other division, that would divide an existing community, but would serve as an orderly extension of existing utilities. The project would have ***no impact*** in regards to the physical division of an established community.

Response b): The key planning documents that are directly related to, or that establish a framework within which the proposed project must be consistent, include:

- County of Madera General Plan; and
- County of Madera Zoning Ordinance.

Due to the community-wide scope of the project area, there are numerous different land use and zoning designations in the project area. However, the proposed project would not require changes to any land use or zoning designations, and is supportive to the utility demands for each of these uses. Therefore, impacts to land use compatibility would be ***less than significant***.

XII. MINERAL RESOURCES

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

Responses to Checklist Questions

Response a): The project site does not contain a known mineral resource that would be of value to the region and the residents of the state. The proposed project would not result in loss of an important regional or state mineral resource. Implementation of the proposed project would have ***no impact*** relative to this issue.

Response b): The project site does not contain a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. The proposed project would not result in loss of a mineral resource. Implementation of the proposed project would have ***no impact*** relative to this issue.

XIII. NOISE

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

Responses to Checklist Questions

Response a): The County of Madera General Plan Noise Element contains one goals and several policies for assessing noise impacts within the County. The goal of the Noise Element of the General Plan is to protect County residents from the harmful and annoying effects of exposure to excessive noise.

Listed below are the noise policies that are applicable to the proposed project:

1. Noise created by new transportation noise sources, including roadway improvement projects, shall be mitigated so as not to exceed 60 dB Ldn within the outdoor activity areas of existing or planned noise-sensitive land uses and 45 dB Ldn in interior spaces of existing or planned noise-sensitive land uses.
2. Noise which will be created by new non-transportation noise sources, or existing non-transportation noise sources which undergo modifications that may increase noise levels, shall be mitigated so as not to exceed the noise level standards of Table 7.A.4 on lands designated for noise-sensitive uses. This policy does not apply to noise levels associated with agricultural operations.

Table 7.A.4: Maximum Allowable Noise Exposure for Non-Transportation Noise Sources[1]		
	Daytime (7 AM to 10 PM)	*Nighttime (10 PM to 7 AM)*
Hourly L_{EQ}, dB	50	45
Maximum Level, dB	70	65

[1]As determined at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers at the property line.

Note: Each of the noise levels specified above shall be lowered by 5 dB for pure tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

3. Noise which will be created by new non-transportation noise sources, or existing non-transportation noise sources which undergo modifications that may increase noise levels,

shall be mitigated so as not to exceed the noise level standards of Table 7.A.4 on lands designated for noise-sensitive uses. This policy does not apply to noise levels associated with agricultural operations.

4. Vibration perception threshold: The minimum ground or structure-borne vibrational motion necessary to cause a normal person to be aware of the vibration by such direction means as, but not limited to, sensation by touch or visual observation of moving objects. The perception threshold shall be presumed to be a motion velocity of one-tenth (0.1) inches per second over the range of one to one hundred Hz. (Resolution No. 2010-043).
5. Operation or permitting the operation of any device that creates a vibration which is above the vibration perception threshold of an individual at the location where the sensitivity exists such as the property line of a residential development or from the location of residence constructed on agricultural property. (Resolution No. 2010-043)

Additionally, the County of Madera Noise Regulations (Chapter 9.58 of the Municipal Code) outlines the purpose, definitions, applicability, general noise regulations, and violations. Pursuant to Section 9.58.020(G) of the County's Noise Regulations, "construction activities are limited to the hours of seven a.m. and seven p.m. Monday through Friday and nine a.m. and five p.m. on Saturdays. Construction activities will be prohibited on Sundays". Noise from construction activities are not exempt in the County's Noise Regulations.

The proposed project would not result in operational traffic noise because additional vehicle trips would not result. The proposed water system improvements would also not result in operational noise. The proposed project operation would not cause increased noise levels exceeding the County of Madera exterior noise level standard at existing noise-sensitive residential receptors.

Construction activities have the potential to create temporary, or periodic increases in ambient noise levels in the project vicinity above levels existing without the project. During the construction of the project, including water, sewer, and recycled water lines, and related infrastructure, noise from construction activities would add to the noise environment in the project vicinity. The site improvements and roadway construction would include the use of heavy equipment including grading and compacting that can generate noise. Noise would also be generated during the construction phase by increased truck traffic on area roadways. A significant project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from construction sites. This noise increase would be of short duration and would likely occur primarily during daytime hours.

Table 3 provides a list of the types of equipment which may be associated with construction activities and the associated noise levels. The nearest residential receptors would be located roughly 50 feet or further from construction activities, although most construction activities would be over 300 feet from a receptor.

Table 3: Construction Equipment Noise

Type of Equipment	*Predicted Noise Level (L_{max} Db)*				*Distances To Noise Contours (Feet)*	
	Noise Level At 50'	*Noise Level At 100'*	*Noise Level At 50'*	*Noise Level At 100'*	*Noise Level At 50'*	*Noise Level At 100'*
Backhoe	78	72	66	60	126	223
Compactor	83	77	71	65	223	397
Compressor (air)	78	72	66	60	126	223
Dozer	82	76	70	64	199	354
Dump Truck	76	70	64	58	100	177
Excavator	81	75	69	63	177	315
Generator	81	75	69	63	177	315

SOURCE: ROADWAY CONSTRUCTION NOISE MODEL USER'S GUIDE. FEDERAL HIGHWAY ADMINISTRATION. FHWA-HEP-05-054. JANUARY 2006.

As shown in the table, noise levels would range from 83 dB L_{MAX} at a distance of 50-feet to 58 dB L_{MAX} at a distance of 100-feet. Such levels may substantially interfere with nearby noise-sensitive uses, particularly if construction were to occur during more sensitive periods of the day, such as the evening and nighttime periods, or were to occur over an inordinately long period of time, such as with a staging area. Because of the nature and duration of construction activities near sensitive receptors, noise impacts from construction activities would cease upon project completion. In order to ensure that construction noise is reduced to the extent feasible, Mitigation Measure NOI-1 requires construction to be limited to between 7 AM and 6 PM on weekdays and from 8 AM to 5 PM on Saturdays, if required. The measure also requires muffled and shielded intakes and exhaust for construction equipment, and that construction staging areas be located as far away as possible from noise-sensitive uses. With implementation of this mitigation, this impact would be considered ***less than significant*** relative to this topic.

Mitigation Measure(s)

Mitigation Measure NOI-1: *The project shall adhere to and implement the following requirements during project construction:*

- *Hours of construction shall be limited to between 7 AM and 6 PM on weekdays and from 8 AM to 5 PM on Saturdays.*
- *Construction equipment noise shall be minimized during project construction by muffling and shielding intakes and exhaust on construction equipment (per the manufacturers' specifications) and by shrouding or shielding impact tools.*
- *Construction staging areas shall be located as far as possible from noise-sensitive uses.*

These requirements shall be noted on the project improvement plans, subject to review and approval by the County of Madera.

Response b): Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

Human and structural response to different vibration levels is influenced by several factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Table 4 indicates that the threshold for damage to structures ranges from 0.2 to 0.6 peak particle velocity in inches per second (in/sec p.p.v). One-half this minimum threshold or 0.1 in/sec p.p.v. is considered a safe criterion that would protect against architectural or structural damage. The general threshold at which human annoyance could occur is noted as 0.1 in/sec p.p.v.

Table 4: Effects of Vibration on People and Buildings

Peak Particle Velocity		***Human Reaction***	***Effect on Buildings***
mm/sec.	***in./sec.***		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage.

SOURCE: CALTRANS. TRANSPORTATION RELATED EARTHBORN VIBRATIONS. TAV-02-01-R9601 FEBRUARY 20, 2002.

The vibration-generating activities typically happen during construction when activities such as grading, utilities placement, and road construction occur. Sensitive receptors which could be impacted by construction-related vibrations, especially vibratory compactors/rollers, are located approximately 100 feet or further from the activity. At this distance, construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours.

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural. Table 5 shows the typical vibration levels produced by construction equipment.

Table 5 data indicate that construction vibration levels anticipated for the proposed project are less than the 0.1 in/sec criteria at distances of 50 feet. Therefore, construction vibrations are not predicted to cause damage to existing buildings or cause annoyance to sensitive receptors.

Table 5: Vibration Levels for Varying Construction Equipment

Type of Equipment	*Peak Particle Velocity @ 25 feet (inches/second)*	*Peak Particle Velocity @ 100 feet (inches/second)*
Large Bulldozer	0.089	0.011
Loaded Trucks	0.076	0.010
Small Bulldozer	0.003	0.000
Auger/drill Rigs	0.089	0.011
Jackhammer	0.035	0.004
Vibratory Hammer	0.070	0.009
Vibratory Compactor/roller	0.210	0.026

SOURCE: FEDERAL TRANSIT ADMINISTRATION, TRANSIT NOISE AND VIBRATION IMPACT ASSESSMENT GUIDELINES, MAY 2006.

The primary vibration-generating activities associated with the proposed project would occur during construction when activities such as grading, utilities placement, and roadway construction occur. Sensitive receptors could be impacted by construction related vibrations. The nearest residential receptors would be located roughly 50 feet or further from construction activities, although most construction activities would be over 300 feet from a receptor. At these distances, construction vibrations are not predicted to exceed acceptable levels. The use of construction equipment near existing receptors will not exceed the 0.1 in/sec threshold of annoyance criteria and threshold for structure damage of 0.2 in/sec. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours. Therefore, this impact would be considered ***less than significant***.

Response c): The project site is not located within the vicinity of 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. The Grupe Ranch Airport is located approximately 20.7 miles northwest of the project area. The proposed project would, therefore, not expose people residing or working in the project area to excessive noise levels associated with such airport facilities. The project site is not located within the vicinity of a private airstrip. The proposed project would, therefore, not expose people residing or working in the project area to excessive noise levels associated with such private airport facilities. Implementation of the proposed project would have ***no impact*** relative to this topic.

XIV. POPULATION AND HOUSING

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

Responses to Checklist Questions

Response a): The project does not propose any housing that would result in direct population growth. However, projects that do not directly induce population growth still have the potential to result in indirect population growth through the creation of jobs or the extension of infrastructure into areas that were not previously served. The proposed project will not result in intensification of land uses, or the addition of structures or uses that would differ from the current General Plan. The project will expand the water system. However, improvements to water system created by the project represent a planned effort to coordinate improvements to accommodate the future buildout under the General Plan. Any individual future projects would have to be consistent with the General Plan and are subject to environmental review under CEQA. No substantial population increases would result from implementation of the proposed project. Therefore, implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

Response b): The project site is located within unincorporated Madera County and contains developed roadways, undeveloped land, rural residential land, and land used for public uses. The proposed project would not displace housing or people. Implementation of the proposed project would have ***no impact*** relative to this topic.

XV. PUBLIC SERVICES

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:				
Fire protection?				X
Police protection?				X
Schools?				X
Parks?				X
Other public facilities?				X

Responses to Checklist Questions

Response a):

Fire Protection

The project site is currently under the jurisdiction of the Madera County Fire Department. The proposed project would not include additional residential units, or people to the County of Madera. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. No additional demand for fire protection will be created by the project. Implementation of the proposed project wouldn't require additional demands for fire protection services from the Madera County Fire Department. Therefore, implementation of the proposed project will have ***no impact*** Lathrop-Manteca to this topic.

Police Protection

The project site is currently under the jurisdiction of the Madera County Sheriff Department. The proposed project would not include additional residential units, or people to the County of Madera. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. No additional demand for police protection will be created by the project. Implementation of the proposed project wouldn't require additional demands for police protection services from the Madera County Sheriff Department. Therefore, implementation of the proposed project will have ***no impact*** relative to this topic.

Schools

Most schools within the County are part of the Chawanakee Unified School District (CUSD). The CUSD provides school services for grades kindergarten through 12 (K-12) to the communities of North Fork, O'Neals, Bass Lake, and Coarsegold. The District maintains the North Fork School (K-8), Spring Valley School (K-8), Minarets High School and Charter High School, Mountain Oaks High School/Manzanita Country Day School, Chawanakee Academy Charter School, Manzanita Community Day School, Hillside Elementary, and Adult School. The proposed project does not include any residential units, or any other type of use that would directly, or indirectly increase the student population in the area. The proposed project will not result in intensification of land

use, or the addition of structures or uses that would differ from the current General Plan. Therefore, the proposed project would not result in the need for new school facilities, thus it is anticipated to have ***no impact*** relative to this topic.

Parks

The proposed project does not include any residential units or any other type of use that would directly, or indirectly increase the population, or park demand in the area, or include any other type of use that would directly increase the park needs. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. Therefore, the proposed project would not have the potential to require construction of additional park and recreational facilities which may cause substantial adverse physical environmental impacts. This, it is anticipated to have ***no impact*** relative to this topic.

Other Public Facilities

The proposed project would not result in a need for other public facilities that are not addressed in the Utilities and Service Section. The proposed project does not trigger the need for new facilities associated with other public services. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. Consequently, new facilities or other public services are not proposed at this time. This, it is anticipated to have ***no impact*** relative to this topic.

XVI. RECREATION

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

Responses to Checklist Questions

Responses a-b): The proposed project does not include any residential units or any other type of use that would increase the population, or park and recreation facility demand in the area, or include any other type of use that would directly increase the use of park and recreation facilities. The proposed project will not result in intensification of land uses, or the addition of structures or uses that would differ from the current General Plan. Therefore, the proposed project would not significantly increase the use of existing facilities. Furthermore, it is not anticipated that any substantial physical deterioration of existing facilities would occur, or be accelerated. Implementation of the proposed project would have a ***no impact*** relative to this topic.

XVII. TRANSPORTATION

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

Responses to Checklist Questions

Responses a-b): No new structures, uses, or visitor serving areas are included in the project. Therefore, the project is not expected to result in an overall increase in vehicle trips within the area. The project is not anticipated to increase vehicle trips or congestion, or decrease LOS. Therefore, impacts are considered ***less than significant*** relative to this topic.

Response c): No site circulation or access issues have been identified that would cause a traffic safety problem/hazard or any unusual traffic congestion or delay that could impede emergency vehicles or emergency access. The project does not include any design features or incompatible uses that pose a significant safety risk. The project would create no adverse impacts to emergency vehicle access or circulation. Therefore, project implementation would have a ***less than significant*** impact relative to this topic.

Response d): No site circulation or access issues have been identified that would cause a traffic safety problem/hazard or any unusual traffic congestion or delay that could impede emergency vehicles or emergency access. The project does not include any design features or incompatible uses that pose a significant safety risk. The project would create no adverse impacts to emergency vehicle access or circulation. Therefore, project implementation would have a ***less than significant*** impact relative to this topic.

XVIII. TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 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)?		X		
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code 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 resources to a California Native American tribe.		X		

Responses to Checklist Questions

Responses a), b): A records search was completed on March 4, 2019 through the Southern San Joaquin Valley Information Center of the California Historical Resources Information System for the APE and a 0.25-mile radius. There are no prehistoric or historic sites recorded within the APE. Within the extended record search radius, there is one recorded prehistoric period site, a bedrock mortar station. Two historic period resources have been recorded within the search radius: North Fork Supervisor's Headquarters of the Sierra National Forest, and the Crane Valley Hydroelectric System District. The APE has been partially covered by previous surveys, and there are numerous surveys within the record search area. Only one survey of the APE occurred within the last ten years for a short stretch of roadway (Baloian 2017).

Additionally, as noted previously, the NAHC was contacted on February 22, 2019 for a check of the Sacred Lands file and a list of individuals for consultation for the general area of the project. Their reply indicated that no properties in the vicinity of the project had been recorded as cultural resources. The NAHC identified several organizations as suitable contacts for information and opinion on the project. All of organizations were contacted by Peak & Associates. Replies received included requests for monitoring during construction.

Based on the above information (records search, site survey, lack of surface evidence), the project site has a low to moderate potential for the discovery of prehistoric, ethnohistoric, or historic archaeological sites that may meet the definition of tribal cultural resources (TCRs). Although no TCRs have been documented in the project site, the project is located in a region where significant cultural resources have been recorded and there remains a potential that undocumented archaeological resources that may meet the TCR definition could be unearthed or otherwise discovered during ground-disturbing and construction activities. Examples of significant archaeological discoveries that may meet the TCR definition would include villages and cemeteries. Due to the possible presence of undocumented TCRs within the project site, construction-related impacts on tribal cultural resources would be potentially significant. With

implementation of the following mitigation measures, the proposed project would have a ***less than significant*** impact related to tribal cultural resources.

Mitigation Measure(s)

Implement ***Mitigation Measure CUL-1*** *and* ***Mitigation Measure CUL-2***

XIX. UTILITIES AND SERVICE SYSTEMS

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

Responses to Checklist Questions

Responses a)-c): The project will extend the water system. The project will enhance and expand the water system improvements within MD-8A in order to achieve compliance with the arsenic MCL. The impacts of the development of the proposed water facilities are discussed throughout this Initial Study.

The project does not propose any housing that would generate wastewater. The proposed project will not result in intensification of land uses, or the addition of structures or uses that would differ from the current General Plan. No substantial population increases would result from implementation of the proposed project. As such, operation of the project would not generate wastewater which would require or result in the relocation or construction of new or expanded wastewater facilities. Construction of the project would also not generate substantial amounts of wastewater. Construction workers would likely use port-o-potties which would be temporarily available on-site for some of the proposed improvements. The amount of waste generated by the construction workers would be negligible.

No additional demand for water, wastewater, storm water drainage, electric power, natural gas, or telecommunication services will be created by the project. Implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

Responses d), e): As previously stated, the proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. No additional demand for landfill, or other waste facilities will be created by the project operation.

The project will extend the water system. However, limited amounts of solid waste could be generated during the construction phase of the project, but this would be temporary, and would not be in substantial amounts, and would not interfere with a waste facility's permitted capacity.

No additional demand for landfill, or other waste facilities will be created by the project operation. Limited amounts of solid waste could be generated during the construction phase of the project, but this would be temporary, and would not be in substantial amounts. The project would not interfere with regulations related to solid waste.

The project would not interfere with regulations related to solid waste, or generate waste in excess of the capacity of local infrastructure. Implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

XX. WILDFIRE

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

Responses to Checklist Questions

Responses a, c) The project includes development of water infrastructure. The proposed infrastructure improvements would allow for decreased fire risk relative to existing conditions given that it will provide water infrastructure that assists fire suppression activities. The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The proposed infrastructure improvements would require maintenance; however, the infrastructure improvements would not exacerbate fire risk. Therefore, impacts from project implementation would be considered ***less than significant*** relative to this topic.

Response b) The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point. The County has areas with an abundance of flashy fuels (i.e. grassland) in the foothill areas of the County.

The proposed water improvements would allow for greater control of potential wildfires relative to existing conditions by enhancing the water system infrastructure in North Fork. The proposed project would not result in project occupants; therefore, the project would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, impacts from project implementation would be considered ***less than significant*** relative to this topic.

Response d) The project does not propose any housing that would result in direct population growth. However, projects that do not directly induce population growth still have the potential to result in indirect population growth through the creation of jobs or the extension of infrastructure into areas that were not previously served. The proposed project will not result in intensification of land uses, or the addition of structures or uses that would differ from the

current General Plan. The project will expand the water system. As such, exposure to people or structures to any significant risk would not result. Therefore, impacts from project implementation would be considered ***less than significant*** relative to this topic.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***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?			X	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Responses to Checklist Questions

Response a): This Initial Study includes an analysis of the project impacts associated with aesthetics, agricultural and forest resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, and utilities and service systems. The analysis covers a broad spectrum of topics relative to the potential for the proposed project to have environmental impacts. This includes the potential for the proposed project 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, 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. It was found that the proposed project would have either no impact, a less than significant impact, or a less than significant impact with the implementation of mitigation measures. For the reasons presented throughout this Initial Study, the proposed project would not 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, 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. With the implementation of mitigation measures presented in this Initial Study, the proposed project would be ***less than significant*** relative to this topic.

Response b): This Initial Study includes an analysis of the project impacts associated with aesthetics, agricultural and forest resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public

services, recreation, transportation/traffic, and utilities and service systems. The analysis covers a broad spectrum of topics relative to the potential for the proposed project to have environmental impacts. It was found that the proposed project would have either no impact, a less than significant impact, or a less than significant impact with the implementation of mitigation measures. These mitigation measures would also function to reduce the project's contribution to cumulative impacts.

The project would not increase the population or the use of public services and systems, and would not conflict with any applicable plans for the area. There are no significant cumulative or cumulatively considerable effects that are identified associated with the proposed project after the implementation of all mitigation measures presented in this Initial Study. With the implementation of all mitigation measures presented in this Initial Study, the proposed project would have a ***less than significant*** impact relative to this topic.

Response c): The construction phase could affect surrounding neighbors through increases in air emissions and noise; however, the construction effects are temporary and are not substantial. The operational phase air emissions, and noise would be similar to the existing conditions around the project site. Therefore, the operational phase of the proposed project would not cause substantial adverse effects on human beings. Implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

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