# ATTACHMENT 1

Fulton Road Widening Improvement Project

Capital Improvement Project ID# 1178

## Response to Comments and Final Mitigated Negative Declaration

September 2017

# Response to Comments and Final Mitigated Negative Declaration

# Fulton Road Widening Improvement Project
# Capital Improvement Project ID# 1178

**Prepared for:**

City of Santa Rosa
Transportation and Public Works Department
69 Stony Circle
Santa Rosa, California 95401

**Prepared by:**

GHD
2235 Mercury Way, Suite 150
Santa Rosa, California 95407

September 2017

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# Table of Contents



# Appendices

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# 1. Project Information

| | |
|---|---|
| **Project Title** | Fulton Road Widening Improvement Project<br>Capital Improvement Project ID# 1178 |
| **Lead Agency Name & Address** | City of Santa Rosa<br>Transportation and Public Works Department<br>69 Stony Circle<br>Santa Rosa, California 95401 |
| **Contact Person** | Christopher Catbagan, Associate Engineer<br>Telephone: (707) 543-4521<br>Email: CCatbagan@srcity.org |

## 1.1 Introduction

The Fulton Road Widening Improvement Project (project) is subject to the requirements of the California Environmental Quality Act (CEQA). The City of Santa Rosa (City) is the CEQA Lead Agency. An Initial Study/Proposed Mitigated Negative Declaration (IS/Proposed MND) was prepared for the project to satisfy the requirements of CEQA (Public Resources Code (PRC), Div. 13, Sec 21000-21177) and the CEQA Guidelines (California Code of Regulations, Title 14, Sec 15000-15387). A copy of the IS/Proposed MND is included in Appendix A.

The IS/Proposed MND was circulated for 30 days, from June 23, 2017 to July 24, 2017, to allow the public and agencies the opportunity to review and comment on the document. In accordance with the requirements of CEQA, the City provided a notice of intent to adopt a mitigated negative declaration to the public, responsible agencies, and the Sonoma County clerk. The City published a notice in the Press Democrat, a newspaper of general circulation in the area affected by the proposed project, and the notice was posted at the Sonoma County clerk's office for a period of at least 30 days.

The IS/Proposed MND was submitted to the State Clearinghouse for review by state agencies, and to responsible and trustee agencies with jurisdiction by law over resources affected by the project. The IS/Proposed MND was made available for public review online at http://srcity.org/759/Fulton-Road-Improvements, and at the following locations:

- Santa Rosa City Hall, 100 Santa Rosa Avenue, City Planning and Economic Development Office (Room 3) and City Manager's Office (Room 10)
- Transportation and Public Works Department, 69 Stony Circle
- Northwest Santa Rosa Library, 150 Coddingtown Center

## 1.2 Project Location and Description

The proposed Capital Improvement Project funded by Measure M would reconstruct and rehabilitate Fulton Road between Guerneville Road and Piner Road to a four-lane Regional/Arterial Street as envisioned in the Santa Rosa General Plan. The Project would include roadway widening,

new vehicle travel lanes, bicycle lanes, sidewalks, bioretention areas, bus stops, landscaping, utility relocations, storm water facilities, and property acquisitions and easements. The Project would be located along Fulton Road between Guerneville Road and Piner Road in the City Santa Rosa, County of Sonoma. Several properties adjacent to Fulton Road in the project area are located in unincorporated portions of the County of Sonoma.

## 1.3 Finding of No Significant Effect on the Environment

On the basis of the evaluation in the proposed mitigated negative declaration together with comments received during the public review process, it is determined that although the proposed project could have a significant effect on the environment, there would not be a significant effect in this case because revisions in the project have been made by or agreed to by the City. With the recommended mitigation measures and environmental protection actions that the City has imposed to mitigate or avoid significant environmental effects, no significant adverse effects to the environment are expected from the project. This project would not have a detrimental effect upon either short-term or long-term environmental goals. This project would not have impacts which are individually limited but cumulatively considerable. This project would not have environmental impacts which will cause substantial adverse effects upon human beings, either directly or indirectly.

## 1.4 Staff-initiated Changes

The title of Mitigation Measure NOI-1 on page 3-50 of the IS/Proposed MND is revised as follows:

> Mitigation Measure NOI-1: Reduce Vibration Levels ~~Manage Construction and Restore Disturbed Areas~~

The title of Mitigation Measure NOI-2 on page 3-54 of the IS/Proposed MND is revised as follows:

> Mitigation Measure NOI-2: Reduce Construction Noise Levels ~~Manage Construction and Restore Disturbed Areas~~

## 1.5 Response to Comments on the Initial Study

Comments were received from two agencies during the 30-day comment period:

1. California State Clearinghouse; and
2. California Department of Fish and Wildlife

A second letter from the California State Clearinghouse and a letter from the Sonoma County Department of Transportation and Public Works were received after the close of the 30-day comment period.

The City must consider the comments received during the comment period prior to adopting a mitigated negative declaration. While CEQA does not require Lead Agencies to respond to comments received after the comment period has ended, the City has elected to respond to all comments received. Responses to the comments received are included in Section 2, Response to Agency Comments.

The comments resulted in minor modifications to the text of the IS/Proposed MND to clarify project details and impacts. The comments did not result in a substantial revision of the mitigated negative declaration. No circumstances were identified that would require the recirculation of the mitigated negative declaration.

## 1.6 Location of Documents

Copies of this document and supporting references are available at the City of Santa Rosa Transportation and Public Works Department, located at 69 Stony Circle, Santa Rosa, CA.

## 1.7 Mitigation Measures

A Mitigation Monitoring Program has been prepared for the project and is provided in Appendix B. The mitigation measures and environmental protection actions have been agreed to by the City and have been found to avoid or mitigate environmental effects such that no significant impacts would occur.

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# 2. Response to Comments

Comments were received from the California State Clearinghouse and the California Department of Fish and Wildlife during the 30-day comment period. A second letter from the California State Clearinghouse and a letter from the Sonoma County Department of Transportation and Public Works were also received after the close of the 30-day comment period.

The comment letters are provided in the following pages. Responses to the comments follow each of the comment letters.

Where revisions to the text of the Initial Study/Proposed MND are called for, the page and paragraph are set forth, followed by the appropriate revision. Added text is indicated with underlined text. Deletions to text in the IS/Proposed MND are shown with ~~strikethrough~~ text.

A copy of the IS/Proposed MND that was circulated for public review is included in Appendix A.

STATE OF CALIFORNIA

# GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

July 24, 2017

Christopher Catbagan
City of Santa Rosa
69 Stony Circle
Santa Rosa, CA 95401

Subject: Fulton Road Widening Improvement Project
SCH#: 2017062057

Dear Christopher Catbagan:

1-1

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. The review period closed on July 21, 2017, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

# Document Details Report
# State Clearinghouse Data Base

1-1 cont.

**SCH#** 2017062057
**Project Title** Fulton Road Widening Improvement Project
**Lead Agency** Santa Rosa, City of

**Type** MND Mitigated Negative Declaration

**Description** Reconstruct and rehabilitate Fulton Road between Guerneville Road and Piner Road to a four-lane Regional/Arterial Street. Project improvements would include roadway widening, new vehicle travel lanes, bicycle lanes, sidewalks, bioretention areas, bus stops, landscaping, utility relocations, storm water facilities, and property acquisitions and easements.

## Lead Agency Contact

**Name** Christopher Catbagan
**Agency** City of Santa Rosa
**Phone** (707) 543-4521 **Fax**
**email**
**Address** 69 Stony Circle
**City** Santa Rosa **State** CA **Zip** 95401

## Project Location

**County** Sonoma
**City** Santa Rosa
**Region**
**Lat / Long** 38° 27' 37.2" N / 122° 46' 10.8" W
**Cross Streets** Fulton Rd/Guerneville Rd to Fulton Rd/Piner Rd
**Parcel No.** mult
**Township** 7N **Range** 8W **Section** 24 **Base**

## Proximity to:

**Highways** 12
**Airports**
**Railways** SMART
**Waterways** Forestview Cr; Peterson Cr; Piner Cr; Santa Rosa Cr
**Schools** Piner High, Others
**Land Use** LU: Roadway and adjoining uses; Z: Varies; GP: Varies

**Project Issues** Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Growth Inducing; Landuse; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian

**Reviewing Agencies** Resources Agency; Department of Fish and Wildlife, Region 3; Cal Fire; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 4; Native American Heritage Commission; Public Utilities Commission; Regional Water Quality Control Board, Region 1; State Water Resources Control Board, Division of Drinking Water; Air Resources Board, Transportation Projects

**Date Received** 06/22/2017 **Start of Review** 06/22/2017 **End of Review** 07/21/2017

Note: Blanks in data fields result from insufficient information provided by lead agency.

## 2.1 Responses to Comment Letter 1: California State Clearinghouse and Planning Unit

***Response to Comment 1-1***

The letter acknowledges the City's compliance with the State Clearinghouse review requirements for environmental documents, pursuant to the California Environmental Quality Act. The City appreciates the assistance of the State Clearinghouse in providing the environmental document to selected State agencies for review and comment.

STATE OF CALIFORNIA
GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

July 25, 2017

Christopher Catbagan
City of Santa Rosa
69 Stony Circle
Santa Rosa, CA 95401

Subject: Fulton Road Widening Improvement Project
SCH#: 2017062057

Dear Christopher Catbagan:

The enclosed comment (s) on your Mitigated Negative Declaration was (were) received by the State Clearinghouse after the end of the state review period, which closed on July 21, 2017. We are forwarding these comments to you because they provide information or raise issues that should be addressed in your final environmental document.

2-1

The California Environmental Quality Act does not require Lead Agencies to respond to late comments. However, we encourage you to incorporate these additional comments into your final environmental document and to consider them prior to taking final action on the proposed project.

Please contact the State Clearinghouse at (916) 445-0613 if you have any questions concerning the environmental review process. If you have a question regarding the above-named project, please refer to the ten-digit State Clearinghouse number (2017062057) when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

## 2.2 Responses to Comment Letter 2: California State Clearinghouse and Planning Unit

***Response to Comment 2-1***

The letter encloses comments from the California Department of Fish and Wildlife. The comment letter from the California Department of Fish and Wildlife is responded to in Section 2.3 below. The City appreciates the assistance of the State Clearinghouse in providing the environmental document to selected State agencies for review and comment.

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
*Director*
Bay Delta Region
7329 Silverado Trail
Napa, CA 94558
www.wildlife.ca.gov

***EDMUND G. BROWN JR., Governor***
***CHARLTON H. BONHAM,***

July 24, 2017

Mr. Christopher Catbagan
Associate Engineer
City of Santa Rosa
69 Stony Circle
Santa Rosa, CA 95401

Dear Mr. Catbagan:

Subject: Fulton Road Widening Improvement Project, Capital Improvement Project ID# 1178, SCH# 2017062057, City of Santa Rosa

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to adopt a mitigated negative declaration (MND) from the City of Santa Rosa for Fulton Road Widening Improvement Project, Capital Improvement Project ID# 1178 (Project) pursuant the California Environmental Quality Act (CEQA).

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

3-1

**CDFW ROLE**

CDFW is California's **Trustee Agency** for fish and wildlife resources, and holds those resources in trust by statute for all the people of the State. (Fish and Game Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish and Game Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish and Game Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

**PROJECT DESCRIPTION SUMMARY**

**Proponent:** City of Santa Rosa

**Objective:** Reconstruct Fulton Road between Guerneville Road and Piner Road to a four-lane regional/arterial street pursuant to the Santa Rosa General Plan. Primary activities include road widening; adding vehicle travel and bicycle lanes, sidewalks, bioretention areas, bus stops, landscaping, and storm water facilities; utility relocations; and executing property acquisitions and easements.

**Location:** City of Santa Rosa, Sonoma County, Fulton Road and Guerneville Road, GPS coordinates 38.452592, -122.769703

3-1 Cont'd

**Timeframe:** Fall 2018 to fall/winter 2020

**COMMENTS AND RECOMMENDATIONS**

CDFW offers the below comments and recommendations to assist the City of Santa Rosa in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions are also included to improve the document. Based on the Project's avoidance of significant impacts on biological resources, CDFW concludes that an MND is appropriate for the Project.

**Mitigation Measures**

*Would the Project have a substantial adverse effect on any riparian habitat or sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or the U.S. Fish and Wildlife Service (USFWS)?*

**Comment 1: Section 3.4, Page 3-21**

*Issue*: The MND mitigation ratio of 2:1 for impacts to valley oak (*Quercus lobata*) woodland is inadequate.

*Specific impact*: Valley oak woodland populations may further decline. Removing trees could reduce the survivorship and nesting success of resident and migratory birds.

3-2

*Why impact would occur*: The Project would replace removed valley oak woodland at a ratio of 2:1 based on the number of trees removed (12 valley oaks and 22 coast live oaks (*Quercus agrifolia*)).

*Evidence impact would be significant*: Valley oak woodland is an endemic, CDFW-designated rare natural community (CDFG 2010; Standiford et al. 1996; CIWTG). Rare natural communities have limited distribution and are often vulnerable to project impacts (CDFW 2009). Only

remnant patches of valley oak woodland remain, of which a fraction consists of the valley oak / coast live oak alliance (CIWTG).

When oak woodlands are removed, it is not only the trees that are missing; all of the associated functions and habitat are lost as well (Dagit et al. 2015). The MND mitigation ratio of 2:1 for impacts to valley oak woodland may not achieve the value of existing valley oak woodland for an extended time (many years).

Based on the foregoing, the Project could substantially adversely effect a sensitive natural community identified by CDFW; therefore, impacts would be potentially significant.

**Mitigation Measure 1:**

3-2 Cont'd

*To reduce impacts to less than significant, CDFW recommends the following mitigation measure*: The City of Santa Rosa shall mitigate impacts to valley oak woodland using a ratio of 3:1 based on acreage impacted. This shall be in addition to the mitigation proposed in the MND (e.g., revegetation plan development).

**Mitigation Measure 2:**

*To reduce overall impacts to less than significant, CDFW recommends the following mitigation measure*: The City of Santa Rosa shall mitigate impacts from loss of non-native trees at a ratio of 1:1 and all non-oak native trees at 3:1 using locally native tree species. Trees shall be planted in or near the project area and the monitoring requirements in the MND for other tree replacements shall apply.

*Does the Project have the potential to substantially reduce the number or restrict range of a rare or endangered plant or animal? (Mandatory Findings of Significance)*

**Comment 2: Section 3.4, Page 3-17**

*Issue*: The MND does not describe how impacts to habitat for the California tiger salamander (*Ambystoma californiense*; CTS) Sonoma County distinct population segment (DPS) would be determined for calculating mitigation lands.

*Specific impact*: Impacts to CTS habitat may not be mitigated.

3-3

*Why impact would occur*: It would be unclear which areas include CTS habitat.

It is unclear if the City of Santa Rosa would seek USFWS or CDFW authorizations for Project impacts to CTS, endangered plants, and their habitats. Therefore, the authorizations cannot be relied upon to mitigate impacts pursuant to CEQA (e.g., MND page 3-18 states that USFWS and CDFW coordination would occur only if CTS are found). CEQA requires an analysis of appropriate mitigation irrespective of other agencies' permits or authorizations.

CDFW recommends that the City of Santa Rosa obtain an incidental take permit pursuant CESA for anticipated take of CTS, Sonoma sunshine (*Blennosperma bakeri*), Burke's goldfields (*Lasthenia burkei*), and Sebastopol meadowfoam *(Limnanthes vinculans*).

*Evidence impact would be significant*: CTS is considered an endangered and threatened species under CEQA (Cal. Code Regs., tit. 14, §15380) and is listed as threatened under CESA. The CTS Sonoma County DPS occurs in a narrow geographic area.

3-3 Cont'd

Unmitigated habitat impacts could substantially reduce the number and range of CTS; therefore, impacts would be potentially significant.

**Mitigation Measure 2:**

*To reduce impacts to less than significant, CDFW recommends the following mitigation measure*: Prior to project construction, a qualified biologist shall quantify and map the acreage of CTS habitat that the Project would impact. The City of Santa Rosa shall mitigate impacts mitigation for any impacts to potential breeding and/or upland habitat, to conclude that the impacts have been mitigated to less-than-significant levels. This may be met by either purchasing mitigation credits or conserving land in accordance with the USFWS Santa Rosa Plain Conservation Strategy.

**Editorial Comments or Suggestions**

3-4

**Plant surveys:** The MND refers to "focused" surveys for Sonoma sunshine, Burke's goldfields, and Sebastopol meadowfoam in accordance with USFWS survey protocols for the Santa Rosa Plain. Please clarify if the surveys would be floristic in nature pursuant to those protocols and CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. Floristic surveys identify every plant taxon that occurs on site to the taxonomic level necessary to determine rarity and listing status.

3-5

**Wetlands:** The MND identifies and provides mitigation for wetlands as defined by Section 404 of the Clean Water Act. It is unclear if other wetlands may be impacted. Please clarify the potential for other wetlands to occur and if impacted, similarly provide for mitigation to ensure a no net loss. CDFW and USFWS consider wetlands as areas exhibiting either wetland hydrology, vegetation, or soils. The Clean Water Act requires all three of these wetland indicators to be present, whereas CDFW and USFWS require only one.

**FILING FEES**

3-6

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs., tit. 14, § 753.5; Fish and Game Code, § 711.4; Pub. Resources Code, § 21089.)

**CONCLUSION**

CDFW appreciates the opportunity to comment on the MND to assist the City of Santa Rosa in identifying and mitigating Project impacts on biological resources. 3-7

Questions regarding this letter or further coordination should be directed to Ms. Melanie Day, Senior Environmental Scientist (Specialist) at (707) 944-5536 or Ms. Karen Weiss, Senior Environmental Scientist (Supervisory), at (707) 944-5525.

Sincerely,

Scott Wilson
Regional Manager
Bay Delta Region

## 2.3 Responses to Comment Letter 3: California Department of Fish and Wildlife

### *Response to Comment 3-1*

The City appreciates the Department of Fish and Wildlife's (CDFW) comments on the IS/Proposed MND as a Responsible and Trustee Agency. Responses to specific CDFW comments are provided below.

### *Response to Comment 3-2*

Mitigation Measure BIO-6 (Compensate for Loss of Riparian and Oak Woodland Vegetation) on page 3-21 of the IS/Proposed MND is revised as follows:

> **Mitigation Measure BIO-6: Compensate for Loss of Riparian and Oak Woodland Vegetation**
>
> The City shall retain a licensed landscape architect or qualified biologist to develop a riparian and oak woodland revegetation plan for the project. The revegetation plan shall include replanting locally native tree species, riparian vegetation and oak trees (either on-site or off-site but in the local watershed and woodland areas) at a minimum of ~~2:1~~ 1:1 ratio for loss of non-native trees and at a ratio of 3:1 for oak and non-oak native trees, or as required by CDFW during permitting.
>
> This may include removing non-native invasive species from riparian corridors and adjacent areas and revegetating riparian corridors with native species to enhance aquatic and terrestrial habitat. Native, locally available and genetically appropriate riparian plant materials shall be selected for planting. Oak regeneration shall be prioritized to occur within existing oak woodland areas near the project site, with valley oak woodland restored at a 3:1 ratio based on acreage impacted, or as required by CDFW during permitting. ~~oak trees replaced at a minimum of 2:1 ratio.~~
>
> The goal of such a plan shall be to ensure no net loss of functional value of riparian and oak woodland habitat. The plan shall include planting requirements, monitoring requirements, and an adaptive management strategy, and the City shall implement the plan's provisions. Riparian restoration plantings and oak plantings shall be monitored annually for a minimum of 5 years after project completion to ensure that the replacement plantings have developed and survive.

### *Response to Comment 3-3*

Impacts to habitat for the California tiger salamander (CTS) are described and calculated on page 3-15 of the IS/Proposed MND. Mitigation Measure BIO-2 (Protect California Tiger Salamander) on page 3-17 and 3-18 of the IS/Proposed MND is provided to reduce the impact of the project on CTS, including measures to avoid take of the species as well as a minimum level of compensation for loss of habitat. The City intends to submit an application for an incidental take permit pursuant to the California Endangered Species Act for CTS prior to construction. Mitigation Measure BIO-2 (Protect California Tiger Salamander) on page 3-17 and 3-18 of the IS/Proposed MND is revised as follows:

**Mitigation Measure BIO-2: Protect California Tiger Salamander**

Mitigation for impacts to California Tiger Salamander habitat shall be as stipulated in the Santa Rosa Plain Conservation Strategy (USFWS 2005) or any subsequent guidance adopted by USFWS. To prevent loss of CTS habitat within the Santa Rosa Plain, the USFWS and CDFW require that mitigation lands be purchased for the acreage that is being ~~disturbed~~ impacted, or that land be conserved in accordance with the USFWS Santa Rosa Plain Conservation Strategy.

Prior to project construction, a qualified biologist shall quantify and map the acreage of CTS habitat that the project would impact. Because the project is located more than 2,200 feet but within 1.3 miles of a known breeding site, the City shall compensate for loss of CTS habitat by purchasing mitigation credits at a ratio of 1:1 or as required by USFWS and CDFW. The mitigation shall be purchased from a mitigation bank that is within the Critical Habitat for the species. Alternatively, the City may conserve land in accordance with the USFWS Santa Rosa Plain Conservation Strategy.

Initial ground disturbing construction activities in habitat shall be limited to the dry season (June through October) when salamanders are not moving between terrestrial habitat and aquatic breeding habitat.

Minimization measures contained in Section 5.2 (Minimization Measures) of the Santa Rosa Plain Conservation Strategy (USFWS 2005) or any subsequent guidance adopted by the USFWS shall be implemented during work within areas where California tiger salamanders may occur. These include:

- A USFWS-approved biological monitor will be on site each day during initial site grading.
- The biological monitor will conduct a training session for all construction workers before work begins on the project.
- Before the start of work each morning, the biological monitor will check for CTS under any equipment such as vehicles and stored pipes. The biological monitor will check all excavated steep-walled holes or trenches greater than one foot deep for any CTS. Any CTS found will be removed by the biological monitor and translocated under approval by the USFWS.
- An erosion and sediment control plan will be implemented to prevent impacts of wetland restoration and construction on habitat outside the work areas.
- Access routes and number and size of staging and work areas will be limited to the minimum necessary to achieve the project goals. Routes and boundaries of the roadwork will be clearly marked prior to initiating construction/grading.
- All foods and food-related trash items will be enclosed in sealed trash containers at the end of each day, and removed completely from the site once every three days.
- No pets will be allowed anywhere in the project site during construction.
- A speed limit of 15 mph on dirt roads will be maintained, if applicable.
- All equipment will be maintained such that there will be no leaks of automotive fluids such as gasoline, oils, or solvents.

- Hazardous materials such as fuels, oils, solvents, etc., will be stored in sealable containers in a designated location that is at least 200 feet from aquatic habitats. All fueling and maintenance of vehicles and other equipment and staging areas will occur at least 200 feet from any aquatic habitat.
- Grading and clearing will typically be conducted between April 15 and October 15, of any given year, depending on the level of rainfall and/or site conditions.
- Project areas temporarily disturbed by construction activities will be revegetated.
- If CTS are found, the City shall coordinate with the USFWS and CDFW to prevent take of individuals and mitigate for loss of habitat.

### *Response to Comment 3-4*

In accordance with applicable protocols, the required botanical surveys performed to date have been and will continue to be floristic in nature.

### *Response to Comment 3-5*

Wetlands have been identified under both State and Federal definitions. No isolated wetlands have been identified at this time. Mitigation Measure BIO-7 (Compensate for Loss of Wetlands and Waters) on page 3-22 of the IS/Proposed MND is provided to reduce the impact of the project on any wetlands and other waters to a less-than-significant level by ensuring that no net loss occurs.

### *Response to Comment 3-6*

The City Council will consider a staff recommendation to adopt the MND at an upcoming public meeting. If the MND is adopted, City staff will recommend filing a Notice of Determination with the County Clerk and providing payment of applicable Fish and Game Code Filing Fees pursuant to CEQA.

### *Response to Comment 3-7*

The City appreciates CDFW's comments on the IS/Proposed MND and will continue to coordinate with CDFW on required permits as the project design progresses.

Integrated Waste
Road & Bridge Operations
Sonoma County Airport
Sonoma County Transit

Susan R. Klassen, Director
Deputy Director, Road & Bridge Operations: John McCarthy
Deputy Director, Integrated Waste, Airport, Transit: Johannes J. Hoevertsz

July 28, 2017

Christopher Catbagan, P.E., Associate Engineer
City of Santa Rosa, Transportation and Public Works Department
69 Stony Circle
Santa Rosa, California 95401

**RE: CIP ID #1178 – Fulton Road Widening Improvement Project**
**Notice of Intent to Adopt a Mitigated Negative Declaration**

Dear Mr. Catbagan:

4-1 Thank you for including Sonoma County Department of Transportation and Public Works (TPW) on CIP ID #1178 – Fulton Road Widening Improvement Project. We have reviewed the notice of intent to adopt the Mitigated Negative Declaration (MND) and the Transportation section of the MND document. TPW has the following comments on the transportation section.

4-2 1. The anticipated working hours for this project is stated in Section 1.3.1 to be from 7:00am to 7:00pm Monday through Friday. The number of daily truck/haul peak hour trips related to construction activity should be stated in order to establish an existing + construction interim condition for analyzing Level of Service (LOS) impacts during the AM and PM peak hours. Establishing an existing baseline traffic condition should be done when school is in session.

4-3 2. The anticipated duration of construction is approximately 26 months. Potential impacts to traffic operations on a daily basis would extend for a significant period of time. LOS should be analyzed for the existing + construction interim condition at the intersections of Fulton Road/Piner Road, Fulton Road/Guerneville Road, and Fulton Road/Piner High School Entrance, accounting for only one lane open in each direction of travel on Fulton Road as stated in the proposed TR-1 mitigation measure and any truck/haul peak hour trips. An appropriate passenger-car equivalent (PCE) value should be assigned to each truck/haul trip in the analysis. Additional and/or revised mitigation measures may be needed to offset construction related impacts if minimum City of Santa Rosa LOS standards are not met.

4-4 3. Construction work along the entire project extents should be scheduled to occur outside the school peak hours for pick-up and drop-offs to minimize impacts.

4-5 Additionally, it appears there is approximately 0.04 miles (200 feet) of Fulton Road as shown on Book 329 of Maps at Page 49 Sonoma County Records that is within the unincorporated area. We are happy to work with City staff to facilitate the transfer of this short segment of Fulton Road to the City.

Integrated Waste
Road & Bridge Operations
Sonoma County Airport
Sonoma County Transit

Susan R. Klassen, Director

Deputy Director, Road & Bridge Operations: John McCarthy
Deputy Director, Integrated Waste, Airport, Transit: Johannes J. Hoevertsz

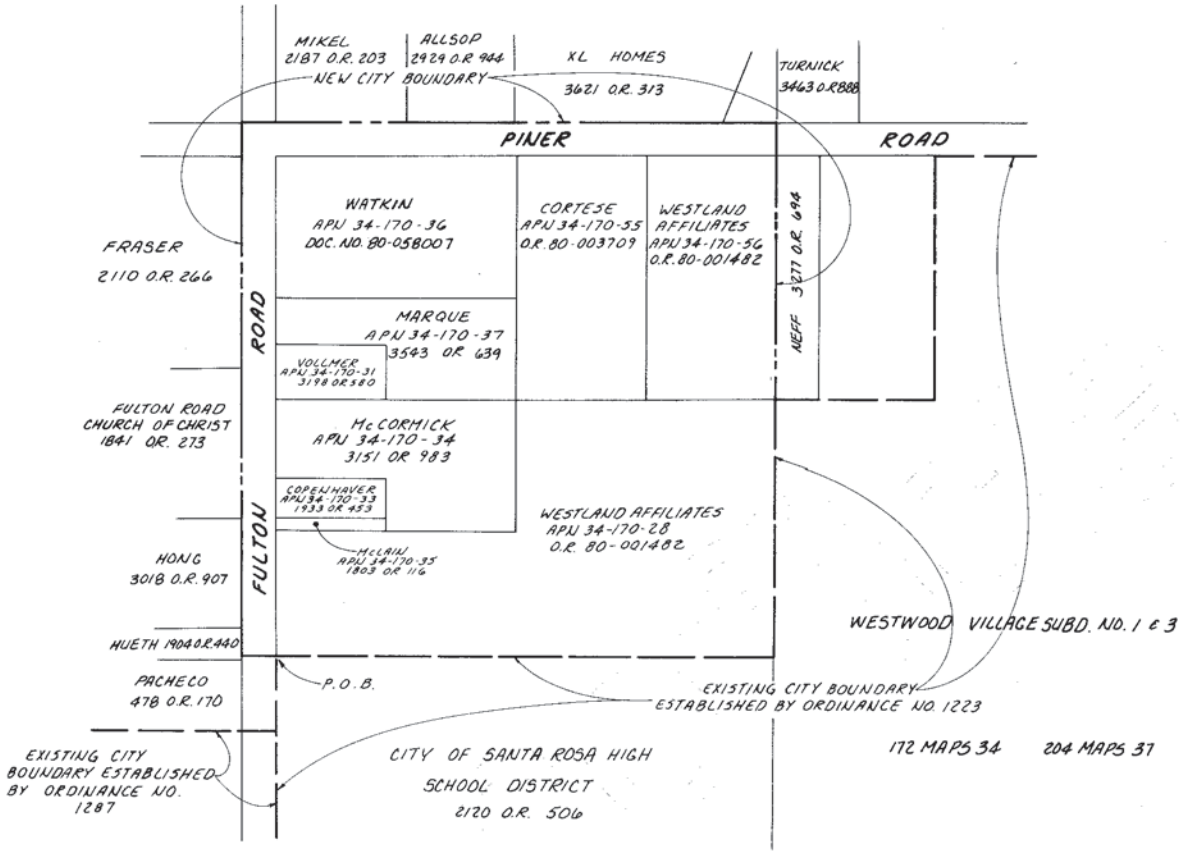
4-6 Thank you again for providing Sonoma County TPW the opportunity to review this Design Review Permit application. Please don't hesitate to contact us with any questions.

Very truly yours,

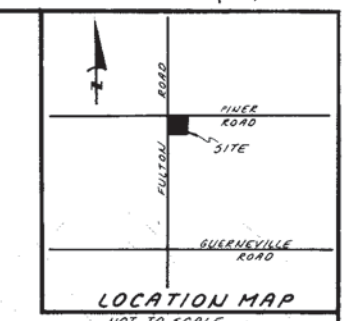
Andrew Manalastas, Assistant Engineer
Traffic Engineering & Land Development
County of Sonoma, Department of Transportation & Public Works
2300 County Center Drive, Suite B100
Santa Rosa, CA 95403

Cc: Susan Klassen, P.E., Director
County of Sonoma, Department of Transportation & Public Works

Attachments: Book 329 of Maps at Page 49 SCR








LOCATION MAP
NOT TO SCALE

I, BROYDON J. RIHA, CITY ENGINEER OF THE CITY OF SANTA ROSA, HEREBY CERTIFY THAT THE MAP HEREON SHOWN CONFORMS TO THE REQUIREMENTS OF TITLE 4, DIVISION 1, CHAPTER 1, ARTICLE 3 OF THE GOVERNMENT CODE OF THE STATE OF CALIFORNIA AND TO THE DESCRIPTION OF THE ANNEXATION AS ADOPTED BY THE CITY COUNCIL ON THE 8th DAY OF DECEMBER 1981 BY RESOLUTION NO. 15445

BY: Broydon J. Riha
BROYDON J. RIHA
CITY ENGINEER

APPROVED BY SONOMA LOCAL AGENCY FORMATION COMMISSION
RESOLUTION NO. 727
DATE: August 6, 1981

SIGNED: Executive Officer
EXECUTIVE OFFICER

RECORDED AT THE REQUEST OF THE EXECUTIVE OFFICER OF SONOMA LOCAL AGENCY FORMATION COMMISSION AT 10a M. THIS 24 DAY OF February, 1982, IN BOOK 329 OF MAPS AT PAGE 49 SONOMA COUNTY RECORDS 82-9555

Bernice A. Peterson BY: P. J. Laughlin
COUNTY RECORDER DEPUTY

No Fee

# CITY OF SANTA ROSA
# COUNTY OF SONOMA
## NORTHWEST SANTA ROSA ANNEXATION NO. 18-80

INVOLVING ANNEXATION TO THE CITY OF SANTA ROSA

MAP OF NORTHWESTERLY CITY BOUNDARY AS ESTABLISHED BY RESOLUTION NO. 15445

AREA: 42.3 ACRES ±

**MacKay & Somps**
CIVIL ENGINEERS
SANTA ROSA CALIFORNIA

APN 34-170-28, 31, 33, 34, 35, 36, 37, 55, 56

SHEET 1 OF 1

5338

## 2.4 Responses to Comment Letter 4: Sonoma County Department of Transportation and Public Works

### *Response to Comment 4-1*

The City appreciates the Sonoma County Department of Transportation and Public Works (Sonoma County TPW) comments on the IS/Proposed MND. Responses to specific Sonoma County TPW comments are provided below.

### *Response to Comment 4-2*

The number of daily haul trucks anticipated to occur on a peak day is summarized on page 1-8 of the IS/Proposed MND. On the busiest days of construction, it is anticipated that up to approximately 48 vehicle round trips (including haul trucks, supply trucks, and worker vehicles) could occur over the course of a workday. Construction work is anticipated to begin at 7 AM, and construction workers would therefore typically arrive prior to the start of the morning peak hour (i.e., before 7 AM). The last trucks out would typically occur at about 3:30 PM since construction work would typically end prior to 4 PM to avoid commute traffic. There is a limited speed at which haul trucks can be filled or emptied, and project construction is anticipated to typically generate up to 3-4 trucks an hour.

### *Response to Comment 4-3*

The City's threshold for requiring a level of service analysis is 50 peak hour trips. As described in Response to Comment 4-2, project construction will generate far fewer than 50 trips during either the morning or evening peak hours. With project construction anticipated to typically generate 3 to 4 haul trucks an hour; after applying a passenger car equivalent (PCE) of 3 PCE/truck this translates to 9 to 12 trips hourly. Workers' vehicles would typically arrive prior to the start of the morning peak hour, and even with the addition of occasional worker vehicles that may occur during a peak hour, the volume of trips would still be well below the City's threshold for a level of service analysis. No such analysis was therefore performed, nor is one warranted.

It is further noted that Fulton Road is currently limited to one lane in each direction through the areas that will have the longest-duration impact due to the project. The impact is minimal in terms of lost capacity since it is already negatively impacted by the lack of the second lane through these areas and resulting need for drivers to merge from two lanes to one.

The City has the ability to ensure that peak construction traffic does not overlap with peak commute hours, if needed. Mitigation Measure TR-1 (Traffic Controls) is included to reduce the temporary impact of construction activities on roadway functionality. Mitigation Measure TR-1 includes development and implementation of a temporary Traffic Control Plan, which would include limiting of construction work within the public right-of-way during peak hours. Mitigation Measure TR-1 also requires that work performed on the segment adjacent to Piner High School be scheduled to occur during the summer months when school is in recess to minimize impacts to school operations, or outside of normal drop-off and pick-up hours.

### *Response to Comment 4-4*

Mitigation Measure TR-1 (Traffic Controls) requires that work performed on the segment adjacent to Piner High School be scheduled to occur during the summer months when school is in recess to minimize impacts to school operations, or outside of normal drop-off and pick-up hours. The City's

Design and Construction Standards also authorize the City Traffic Engineer to limit construction work within the public right-of-way during peak hours. Therefore, the City has the ability to ensure that construction traffic does not overlap with or adversely affect peak commute hours and peak hours for school pick-up and drop-offs, which can be applied over the entire project extents, if needed.

### *Response to Comment 4-5*

The City appreciates the County's cooperation on facilitating a transfer of the road segment. At this time, the City anticipates pursuing either an easement or acquisition of the road segment mentioned. Obtaining an easement or acquisition would not result in a new significant effect on the environment.

The list of required permits and approvals in Section 1.6 on page 1-23 of the IS/Proposed MND is revised as follows:

- County of Sonoma – Grading Permit; Roiling Permit (Ordinance No. 3836R)~~;~~ Easement and/or Property Acquisition

### *Response to Comment 4-6*

The City appreciates the Sonoma County TPW comments on the IS/Proposed MND and will continue to coordinate with the County on required permit applications as design progresses.

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# 3. Preparers

## 3.1 City of Santa Rosa

Christopher Catbagan, Santa Rosa Transportation and Public Works Department

## 3.2 GHD

Pat Collins, Senior Environmental Planner

Brian Bacciarini, Senior Environmental Scientist

Nick Colley, Planner

## 3.3 Subconsultants

Dalene Whitlock, Principal, W-Trans

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# Appendices

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# Appendix A Initial Study/Proposed Mitigated Negative Declaration

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City of Santa Rosa

# Fulton Road Widening Improvement Project
# Capital Improvement Project ID# 1178
# **Initial Study/Proposed Mitigated Negative Declaration**

June 21, 2017

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Initial Study/Proposed Mitigated Negative Declaration

# Fulton Road Widening Improvement Project
# Capital Improvement Project ID# 1178

**Prepared for:**

City of Santa Rosa
Transportation and Public Works Department
69 Stony Circle
Santa Rosa, California 95401

**Prepared by:**

GHD
2235 Mercury Way, Suite 150
Santa Rosa, California 95407

June 21, 2017

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# Table of Contents

# Table index



# List of figures



# Appendices

# Acronyms and Abbreviations

| | |
|---|---|
| AB | Assembly Bill |
| ADA | Americans With Disabilities Act |
| Air Basin | San Francisco Bay Area Air Basin |
| BAAQMD | Bay Area Air Quality Management District |
| CalEPA | California Environmental Protection Agency |
| CAL FIRE | California Department of Forestry and Fire Protection |
| Cal-OSHA | California Division of Occupational Safety and Health |
| CAP | Climate Action Plan |
| Caltrans | California Department of Transportation |
| CARB | California Air Resources Board |
| CCR | California Code of Regulations |
| CDC | California Department of Conservation |
| CDFW | California Department of Fish and Wildlife |
| CEQA | California Environmental Quality Act |
| CGS | California Geologic Survey |
| CHP | California Highway Patrol |
| CHRIS | California Historical Resources Information System |
| CNDDB | California Natural Diversity Database |
| CNG | Compressed Natural Gas |
| CNPS | California Native Plant Society |
| Corps | U.S. Army Corps of Engineers |
| CTS | California Tiger Salamander |
| DMG | California Department of Conservation Division of Mines and Geology |
| DNL | Day/Night Sound Level |
| ELAP | Environmental Laboratory Accreditation Program |
| FHWA | Federal Highway Administration |
| GHG | Greenhouse Gases |
| HAWK | Pedestrian Hybrid Beacon |
| HAZWOPER | Hazardous Waste Operations and Emergency Response |
| IPaC | Information on Planning and Conservation |
| IS | Initial Study |
| K | Kelvin |

| | |
|---|---|
| LED | Light Emitting Diode |
| LNG | Liquefied Natural Gas |
| LOS | Level of Service |
| MBTA | Migratory Bird Treaty Act |
| MLD | Most Likely Descendant |
| MND | Mitigated Negative Declaration |
| MRZ | Mineral Resource Zone |
| NAHC | Native American Heritage Commission |
| NCRWQCB | North Coast Regional Water Quality Control Board |
| NMFS | National Marine Fisheries Service |
| NPDES | National Pollutant Discharge Elimination System |
| NWIC | Northwest Information Center |
| PG&E | Pacific Gas and Electric Company |
| PM10 | Particle matter less than 10 micrometers in diameter |
| PM2.5 | Particle matter less than 2.5 micrometers in diameter |
| PPV | Peak Particle Velocity |
| PRC | Public Resources Code |
| SCTA | Sonoma County Transportation Authority |
| SHPO | State Historic Preservation Officer |
| SRPCS | Santa Rosa Plain Conservation Strategy |
| SWPPP | Storm Water Pollution Prevention Plan |
| SWRCB | State Water Resources Control Board |
| TNM | Traffic Noise Model |
| UCMP | University of California Museum of Paleontology |
| USEPA | United States Environmental Protection Agency |
| USFWS | U.S. Fish and Wildlife Service |
| USGS | United States Geological Survey |
| VMT | Vehicle Miles Travelled |

# 1. Project Information

| | |
|---|---|
| Project Title | Fulton Road Widening Improvement Project |
| Lead Agency Name & Address | City of Santa Rosa<br>Transportation and Public Works Department<br>69 Stony Circle<br>Santa Rosa, California 95401 |
| Contact Person | Christopher Catbagan, Associate Engineer<br>Telephone: (707) 543-4521<br>Email: CCatbagan@srcity.org |
| Project Location | The project would be located along an approximately one-mile stretch of Fulton Road between Guerneville Road and Piner Road in the City Santa Rosa, County of Sonoma. |
| General Plan Land Use Designation | City of Santa Rosa General Plan<br>Fulton Road has no specific General Plan designation. Land use designations for properties adjacent to Fulton Road include Low and Very Low Density Residential, Public/Institutional (Piner High School), Parks and Recreation (Youth Community Park), Agriculture, Retail and Business Services, and Office.<br><br>County of Sonoma General Plan<br>Several properties adjacent to Fulton Road in the project area are under the County of Sonoma's jurisdiction. Land use designations for adjoining properties include Diverse Agriculture and Rural Residential. |
| Zoning | City of Santa Rosa Zoning<br>The center line of Fulton Road provides a boundary for several of the City's zoning districts. Fulton Road does not have a zoning designation. Zoning designations for properties adjacent to Fulton Road include Planned Development, Single Family Residential, Rural Residential, and General Commercial. A Planned Development zoning located near the intersection of Fulton Road and Piner Road includes a Gateway combining district designation.<br><br>County of Sonoma Zoning<br>Zoning designations for properties located within the County of Sonoma's jurisdiction adjacent to Fulton Road include Rural Residential and Diverse Agriculture. |
| Description of Project | See Section 1.3 for a description of the project. |

| | |
|---|---|
| Surrounding Land Uses and Setting | Land uses surrounding Fulton Road between Guerneville Road and Piner Road include existing and planned residential developments, Piner High School, Youth Community Park, a community shopping center, a church, and agricultural land. A portion of the project corridor is located within the Santa Rosa Plain. Fulton Road crosses Peterson Creek and is adjacent to Forestview Creek within the project limits. |
| Other Public Agencies Whose Approval is Required: | See Section 1.6 for a summary of required permits and approvals. |
| Public Resources Code Section 21080.3.1 Consultations | The City has completed consultation with California Native American tribes pursuant to Public Resources Code Section 21080.3.1. See Section 3.17, Tribal Cultural Resources, for additional information. |

## 1.1 Introduction

The proposed project is identified as City of Santa Rosa Capital Improvement Project ID# 1178. The project is funded by Measure M[1], and is intended to improve circulation in the project area by reconstructing and widening Fulton Road between Guerneville Road and Piner Road.

The project is subject to the requirements of the California Environmental Quality Act (CEQA). The CEQA Lead Agency is the City of Santa Rosa. The purpose of this Initial Study (IS) is:

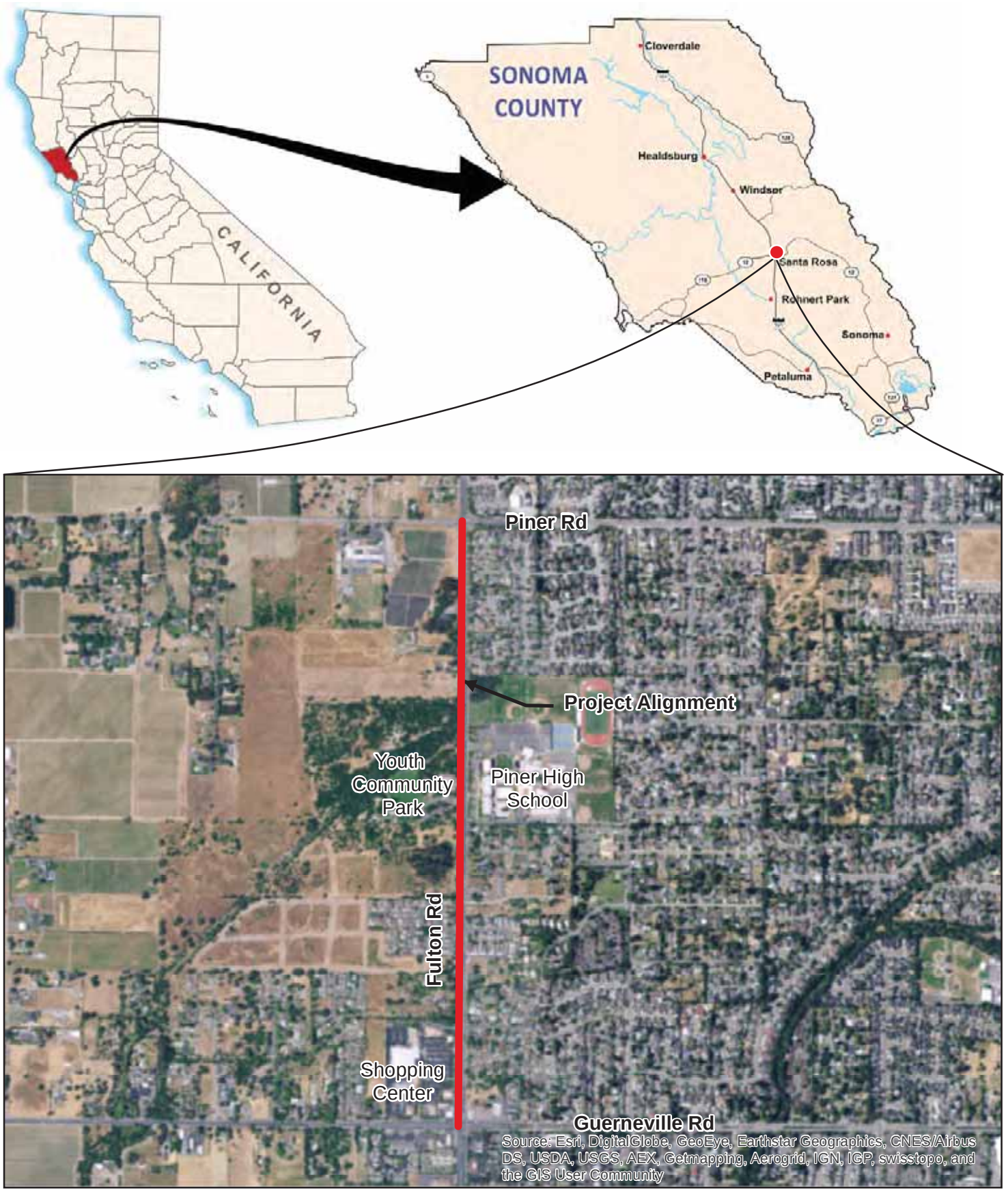
- To provide a basis for deciding whether to prepare an Environmental Impact Report, a Mitigated Negative Declaration or a Negative Declaration;
- To disclose potential project environmental impacts; and
- To inform the CEQA Lead Agency, responsible agencies, trustee agencies, and the public regarding the potential environmental impacts of the project.

This Initial Study has been prepared to satisfy the requirements of CEQA (Public Resources Code (PRC), Div. 13, Sec 21000-21177) and the CEQA Guidelines (California Code of Regulations, Title 14, Sec 15000-15387).

## 1.2 Project Location

The proposed project would be located within the City of Santa Rosa, Sonoma County, approximately 45 miles north of San Francisco. Specifically, the project would be located along an approximately one-mile stretch of Fulton Road in northwest Santa Rosa between Guerneville Road to the south and Piner Road to the north (See Figure 1, Vicinity Map). The project corridor is located approximately 1.75 miles north of Highway 12 and approximately 2.25 miles west of Highway 101.

[1] Measure M was passed by Sonoma County voters in 2004, establishing a local sales tax to fund transportation projects throughout the County.

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Grid: NAD 1983 StatePlane California II FIPS 0402 Feet

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GHD

Fulton Road Widening Improvement Project

Job Number 11110674
Revision
Date 06 Jun 2017

Vicinity Map

Figure 1

2235 Mercury Way Suite 150 Santa Rosa CA 95407 USA T 707 523 1010 F 707 527 8679 E santarosa@ghd.com W www.ghd.com

\\ghdnet\ghd\US\Santa Rosa\Projects\111\11110674 SR Fulton Road Widening\08-GIS\Maps\Deliverables\Vicinity Map.mxd



Data source: GHD, State and County Mapping, 2016, ESRI Basemaps Sept. 2016 Created by:rmremillard

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## 1.3 Project Description

The project would reconstruct and rehabilitate Fulton Road between Guerneville Road and Piner Road to a four-lane Regional/Arterial Street, as envisioned in the Santa Rosa General Plan.

Fulton Road currently includes one northbound lane and two southbound lanes between Guerneville Road and Appletree Drive; one northbound lane and one southbound lane with a center turn lane between Appletree Drive and Jenes Lane; and two northbound lanes and one southbound lane with a center turn lane between Jenes Lane and Piner Road. Class II bicycle lanes are currently present along most of the roadway corridor, and intermittent sidewalks are present, primarily on the east side of the roadway. The existing right-of-way along Fulton Road in the project area varies between 87 and 102 feet in width.

Following construction, the right-of-way along Fulton Road in the project area would vary between approximately 87 and 102 feet in width. The reconstructed roadway segment would include the following general configuration (See Figures 2 through 5):

- Two northbound and two southbound vehicle travel lanes (11 to 12 feet wide per lane);
- Center median (planted), left turn, or two-way turn lane (varying widths);
- Northbound and southbound Class II bicycle lanes (6 feet wide per lane);
- Northbound and southbound sidewalks (6 feet wide minimum); and
- Roadside bioretention low impact development areas (approximately 8.5 feet wide).

Existing bus turnouts and stops at Guerneville Road, Appletree Drive, Piner High School, Quail Hollow Drive, and Piner Road would be reconstructed to be Americans with Disabilities Act (ADA) accessible. Bus shelters would be constructed at several of the bus stops. New bus turnouts and stops would also be installed at Jenes Lane, and along southbound Fulton Road near Youth Community Park, Quail Hollow Drive, and Piner Road. Additionally, a Pedestrian Hybrid Beacon (HAWK) signal and crosswalk would be provided near Piner High School and Youth Community Park, as counts collected in October 2016 indicated the need for a means to cross Fulton Road at this location.

Trees consistent with the Santa Rosa Major Existing Streets Tree Program street tree list for Fulton Road would be planted in some medians and along the sidewalk. Bioretention areas would have trees adaptive to such conditions. Irrigation systems would be installed for the proposed median street trees. Parkway strips within bioretention areas would be temporarily irrigated until plant establishment has successfully occurred. Additional roadway improvements would include installation of new and reconstructed LED street lights, reconstruction of access driveways to adjoining properties, enhanced signal operations, signs, and curb ramps.

Portions of an existing walkway adjacent to Forestview Creek and a walkway within Youth Community Park would also be reconstructed including the provision of supporting retaining walls (see Figures 2 and 3).

### *Utility Relocations*

On February 14, 2017, the Santa Rosa City Council held a public hearing and approved Resolution No. RES-2017-026, establishing an Underground Utility District along the project corridor. On April 4, 2017, the Sonoma County Board of Supervisors held a public hearing and approved a Resolution of Establishment for the unincorporated County of Sonoma portion of the proposed Underground Utility District.

Formation of the Underground Utility District, consistent with the California Public Utilities Commission, allows the local utility provider, Pacific Gas and Electric Company (PG&E), to utilize Rule 20A funds to underground the overhead utilities within the district boundaries. The existing overhead utilities located along the project corridor would be relocated underground consistent with City Code Chapter 13-12 and in coordination with PG&E following the California Public Utilities Commission Rule 20A guidelines. This would include:

- Removal of existing utility poles (except poles solely supporting streetlights or traffic signals);
- Removal of overhead wires and associated overhead structures; and
- Installation of underground wires and facilities for supplying electric power, communication, or similar associated services within the area.

New transformers may be located above ground on concrete pads. In addition to the utility undergrounding, approximately 800 feet of existing sewer main may need to be abandoned within the existing public right-of-way between Quail Hollow Drive and Piner Road. A new sewer connection at Piner Road would allow for the abandonment. Installation of new water line valves and fire hydrants would occur along the corridor. It is possible that additional utility relocations may be needed within the road right-of-way to accommodate the project, which would be determined as the project design progresses.

Underground utility mains would be identified and labeled in the field prior to construction. Potholing would be implemented along portions of the alignment to further confirm utility locations, which will include the digging of test holes to uncover utilities and ascertain horizontal and vertical locations.

### *Storm Water Facilities*

Roadside bioretention areas would be designed and constructed in compliance with City standards and the Storm Water Low Impact Development Technical Design Manual (Santa Rosa 2017). Bioretention areas would be located along the majority of both sides of Fulton Road between the sidewalk and curb. Bioretention areas would function as a soil and plant-based infiltration feature to treat storm water from the roadway and other impervious surfaces.

Existing storm drain pipes that discharge to Forestview Creek would be reconstructed (see Figure 6, Storm Drain Replacement at Forestview Creek). The project would replace two existing 41-inch by 72-inch corrugated metal oval storm drain pipes with equivalently sized reinforced concrete pipes, as well as replacement of an existing 42-inch diameter storm drain pipe and a 30-inch storm drain pipe with equivalently sized pipes. Rock slope protection would be placed within the channel to approximately 10 feet beyond the end of pipes.

The project would extend two existing 60-inch diameter storm water culverts in Peterson Creek by approximately five to ten feet, and would replace an existing roadside ditch draining to Peterson Creek with a new 36-inch storm drain pipe (see Figure 7, Storm Drain Improvements at Peterson Creek). Rock slope protection would be placed within the Peterson Creek channel to approximately 15 feet beyond the end of pipes.

Storm water improvements would also include the installation of additional short segments of storm drain pipe along certain sections of the corridor, and new and reconstructed storm drain catch basins, drop inlets, and manholes.

### *Property Acquisition and Easements*

It is anticipated that fee-title acquisition of right-of-way would be required at two locations along portions of the project corridor. Utility easements, sidewalk easements, and temporary construction

easements would also be required at approximately 39 locations along the project corridor. A listing of parcels affected by property acquisition and easements is provided in Appendix A. The permanent right-of-way that would be acquired as part of the project (i.e., fee-title acquisition, utility easements, and sidewalk easements) amounts to approximately 3.04 acres.

### 1.3.1 Project Construction

Construction of the project would involve demolition, clearing, excavation, grading, trenching, paving, and roadway construction. The construction area for the project would be approximately 12.5 acres in size. The majority of the widening would occur along the west side of Fulton Road.

#### *Construction Duration and Hours*

Construction of the project is anticipated to begin in fall 2018 and be completed within approximately 26 months. The initial phase of construction would consist of the conversion of overhead utilities to underground along the project corridor, which would then be followed by the roadway improvements.

Anticipated daytime work hours would be 7:00 a.m. to 7:00 p.m. Monday through Friday, and 9:00 a.m. to 5:00 p.m. on Saturdays. Nighttime construction activities may be required for a portion of the work to be completed within the intersections of Fulton Road/Guerneville Road and Fulton Road/Piner Road. Anticipated nighttime work hours are assumed to be 7:00 p.m. to 7:00 a.m. Based on the type and extent of work to be performed, nighttime construction within the Fulton/Guerneville and Fulton/Piner intersections could extend up to approximately ten nights within each intersection.

#### *Construction Staging and Equipment*

Prior to construction, the contractor would mobilize resources to staging areas. This would include transport of construction vehicles and equipment, as well as delivery and storage of construction materials. The contractor may also secure a job site trailer and portable sanitary facilities at certain areas.

Several staging areas may be used to store construction materials and equipment during construction. Construction staging within and adjacent to City of Santa Rosa rights-of-way would likely occur along various portions of the alignment in areas where work was occurring. This type of staging would generally include short-term staging of construction equipment and materials. Staging may also potentially occur on private property located to the northwest of the intersection of Fulton Road and Piner Road and on private property located to the northeast of the intersection of Fulton Road and Guerneville Road (see Figure 2 and Figure 3). Notifications to adjacent residences would be provided in advance of construction and staging, and the contractor would be required to enter into an agreement with property owners for use of private property.

#### *Construction Equipment, Grading and Hauling*

A variety of construction equipment would be used to build the project. This would include, but not necessarily be limited to, excavators, backhoes, front end loaders, scrapers, graders, concrete saws, small cranes, jackhammers, chainsaws, rough terrain fork lifts, rollers, asphalt road pavers, compactors, air compressors, generator sets, and pneumatic tools. A variety of trucks including cement mixers, haul trucks, and water trucks would also be required. Portable lighting units would be needed during nighttime work. Site preparation, including demolition, clearing and grading of the project site as necessary would include the removal and off-haul of materials. This would include, but not necessarily be limited to, vegetation, concrete, asphalt and fill, and certain existing

utilities that would be removed and replaced. In areas to be widened, vegetation and debris would be cleared, and any unstable soils would be excavated and replaced with properly compacted fill to raise levels to finished grade. Where required, new sidewalks would also be underlain by engineered fill. Ground disturbance is estimated to be approximately three feet deep within the widened portions of Fulton Road and approximately 10 to 13 feet deep near creek crossings and in some utility locations.

Vegetation removed from the project site would be off-hauled for recycling or composting. Construction debris would be recycled where feasible. Materials found unsuitable for reuse or recycling would be disposed of at a regional landfill, such as the Central Disposal site in Petaluma, the Redwood Sanitary Landfill in the City of Novato, Potrero Hills Landfill in Suisun City, Vasco Road Landfill in the City of Livermore, and/or the Keller Canyon Landfill in the City of Pittsburg.

Importation of construction materials would include, but not necessarily be limited to, concrete, fill, material for bioretention areas, asphalt concrete, utility pipes, catch basins, and lighting and landscaping materials. Table 1.3-1, Estimated Haul Volumes and Truck Trips, estimates the quantities of the primary construction materials and related haul truck trips. Additional truck trips would occur during utility undergrounding.

### Table 1.3-1 Estimated Haul Volumes and Truck Trips

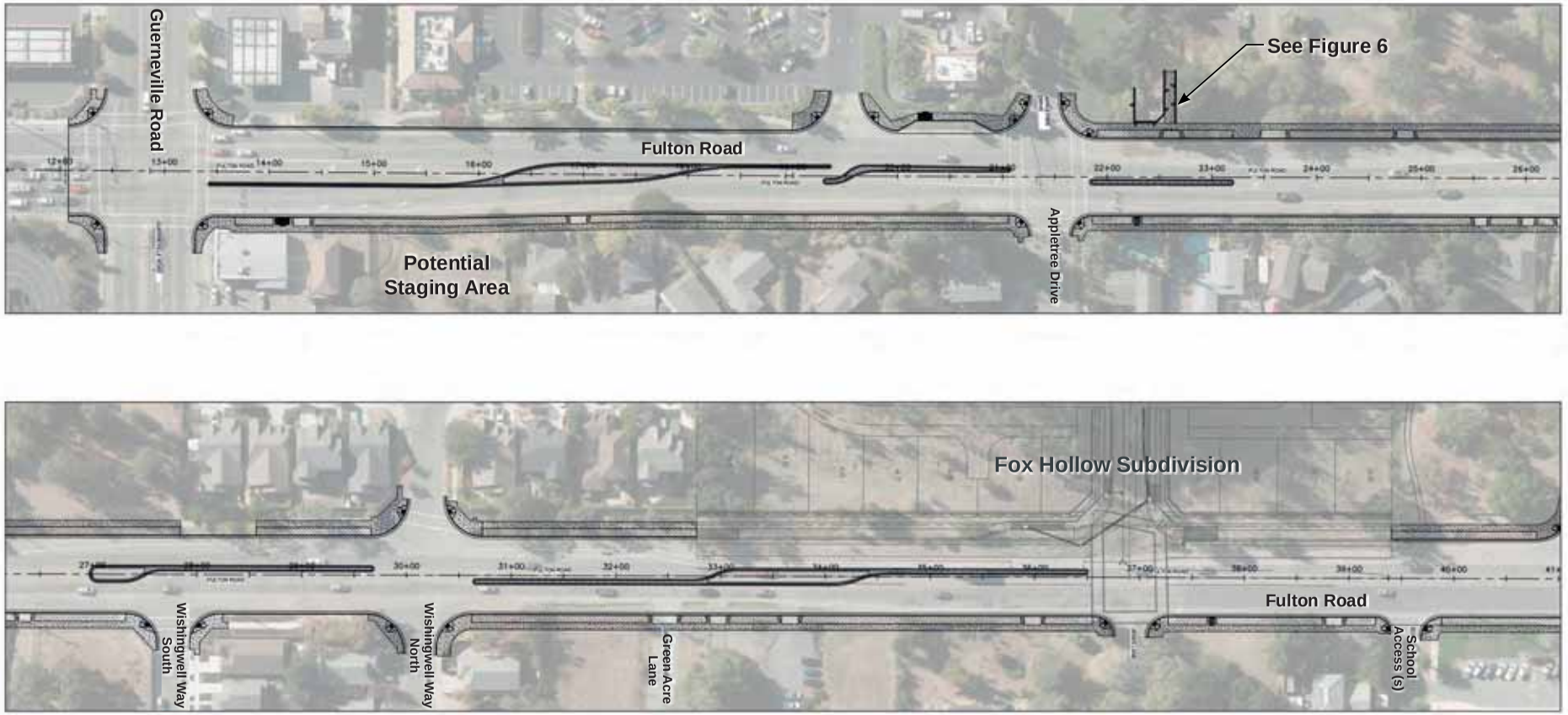
| Material | Quantity (approximate) | Approximate Haul Truck Trips (round trip) |
|---|---|---|
| **Project Off-haul** | | |
| Concrete | 750 CY | 80 |
| Aggregate Base (fill) | 9,260 CY | 780 |
| Asphalt Concrete | 6,020 CY | 510 |
| **Project In-haul** | | |
| Concrete | 2,000 CY | 200 |
| Aggregate Base (fill) | 17,710 CY | 1,480 |
| Bioretention fill | 2,640 CY | 220 |
| Asphalt Concrete | 15,830 Tons | 1,320 |

Note: Quantities are based on unit measurements listed in 35% cost estimate.

The number of construction-related vehicles traveling to and from the project site would vary on a daily basis. For the purposes of evaluation, it is anticipated up to 24 haul truck round trips could occur on a peak day. In addition to haul trucks, it is anticipated that construction crew trips could require up to 24 round trips per day. Therefore, on the busiest days of construction, up to approximately 48 vehicle round trips could occur.

#### *Tree Removals*

Approximately 80 trees would be removed along the project corridor to accommodate construction of the project. Table 1.3-2 (Anticipated Tree Removals) summarizes the tree types that would be removed as part of the construction process. In addition, approximately 50 black and green wattle trees (*Acacia decurrens*) of various sizes, which are non-native exotic species that are exempt for the City of Santa Rosa Tree Ordinance, may also be removed as part of the project.

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LEGEND

MEDIAN LANDSCAPE

LOW-IMPACT DEVELOPMENT AREA

MEDIAN HARDSCAPE

CONCRETE CURB, GUTTER SIDEWALK, AND DRIVEWAY

Fulton Road Widening Improvement Project

Job Number 11110674
Revision
Date Jun 2017

Guerneville Road to
Piner High School

Figure 2

2235 Mercury Way Suite 150 Santa Rosa California 95407 USA **T** 1 707 523 1010 **F** 1 707 527 8679 **W** www.ghd.com

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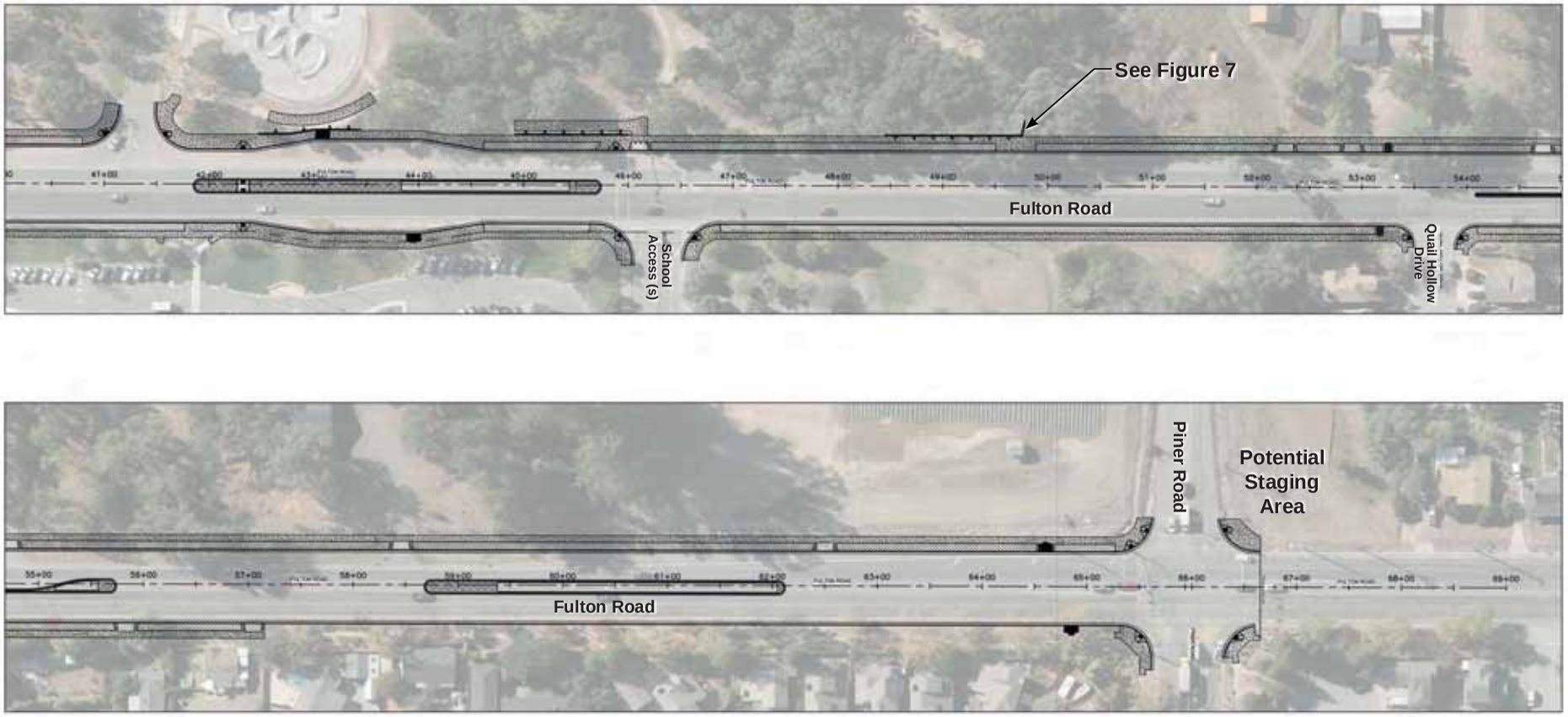


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LEGEND

MEDIAN LANDSCAPE

LOW-IMPACT DEVELOPMENT AREA

MEDIAN HARDSCAPE

CONCRETE CURB, GUTTER SIDEWALK, AND DRIVEWAY

Fulton Road Widening Improvement Project

Job Number 11110674
Revision
Date Jun 2017

Piner High School to Piner Road

Figure 3

2235 Mercury Way Suite 150 Santa Rosa California 95407 USA **T** 1 707 523 1010 **F** 1 707 527 8679 **W** www.ghd.com

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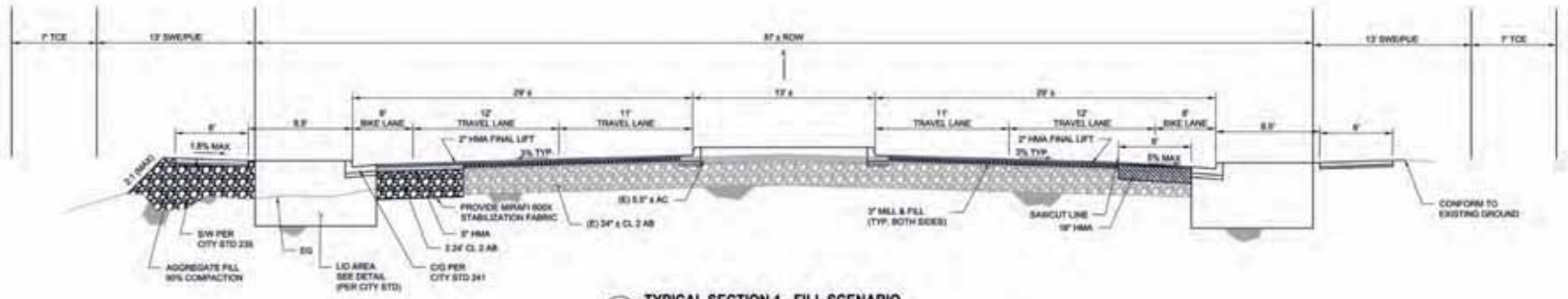
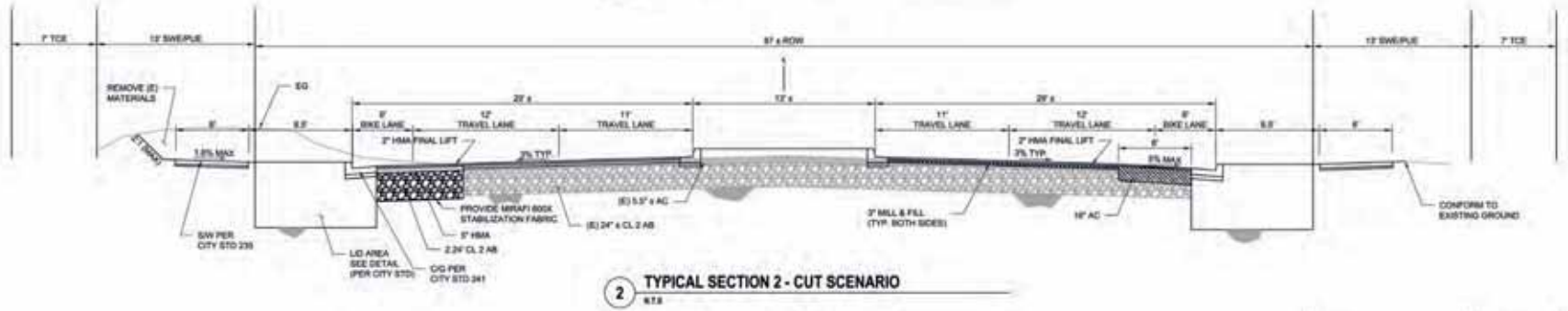
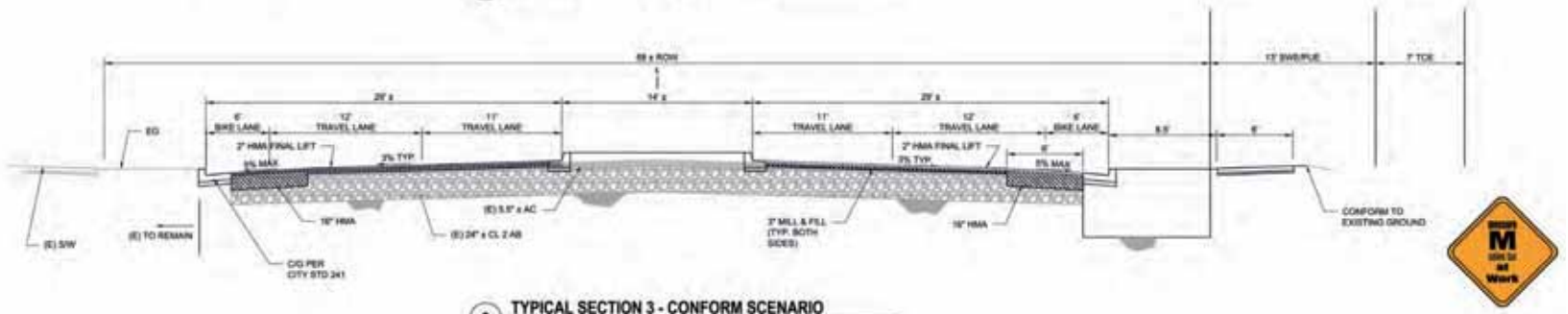



1 TYPICAL SECTION 1 - FILL SCENARIO




2 TYPICAL SECTION 2 - CUT SCENARIO




3 TYPICAL SECTION 3 - CONFORM SCENARIO

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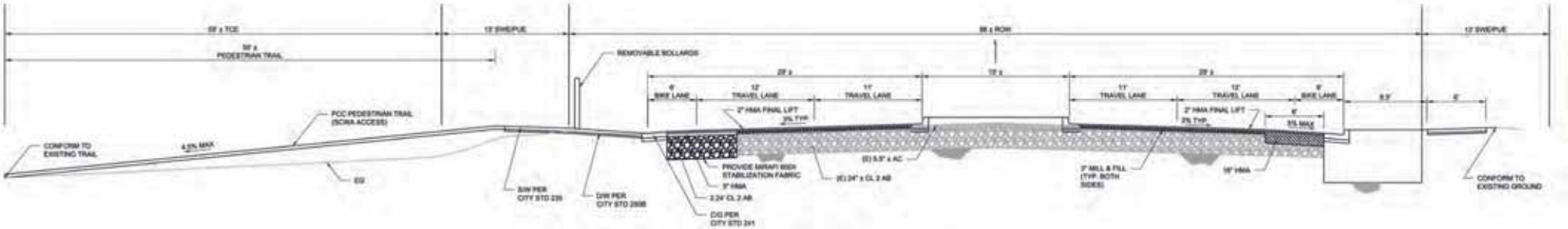


**4 TYPICAL SECTION 4 - TRAIL CONFORM**
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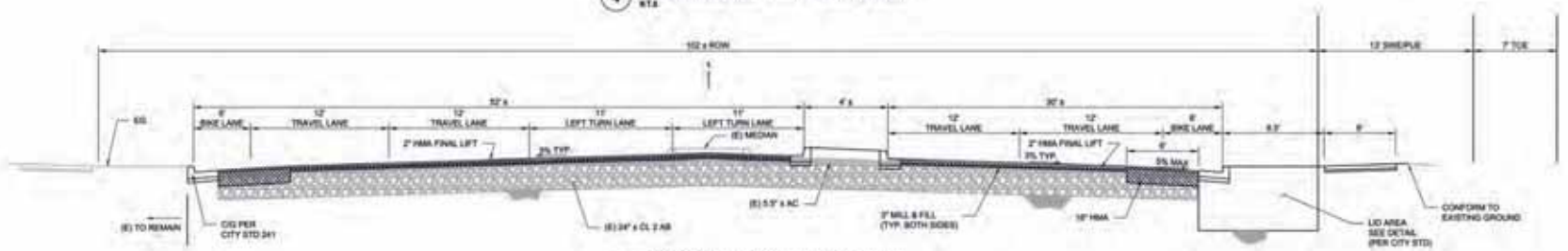


**5 TYPICAL SECTION 5 - WIDE SECTION**
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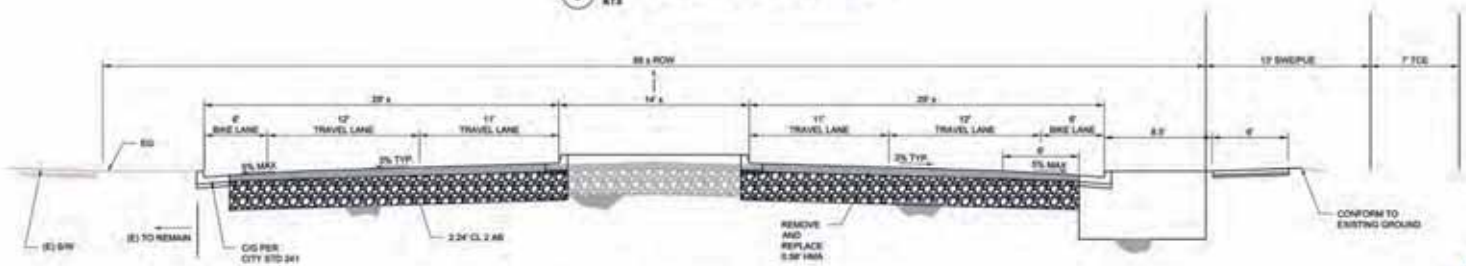


**6 TYPICAL SECTION 6 - FULL RECONSTRUCTION**
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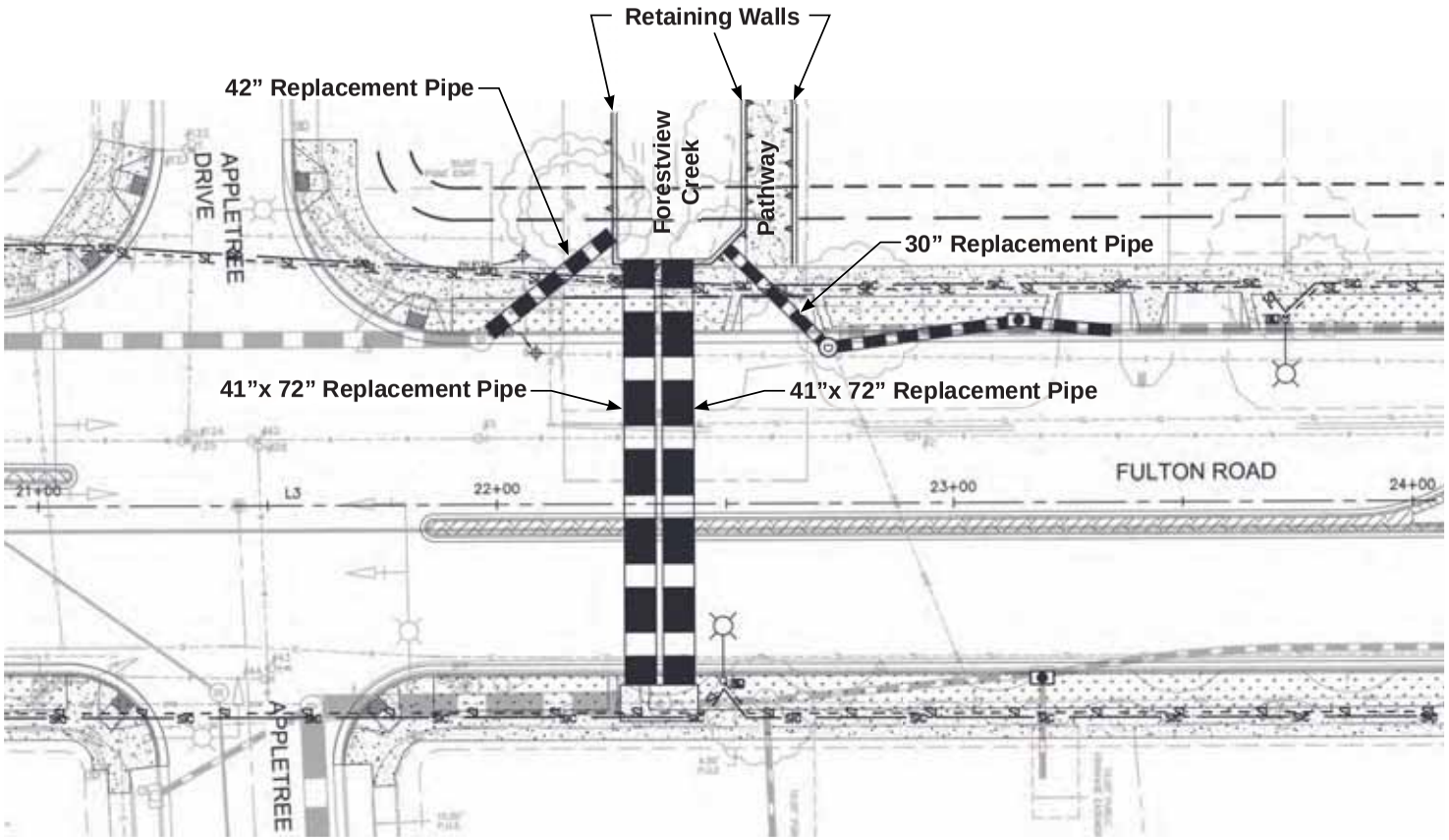


View of Forestview Creek looking east from pathway

Approximate Scale

N

GHD

Fulton Road Widening Improvement Project

Job Number 11110674
Revision
Date May 2017

Storm Drain Replacement at Forestview Creek

Figure 6

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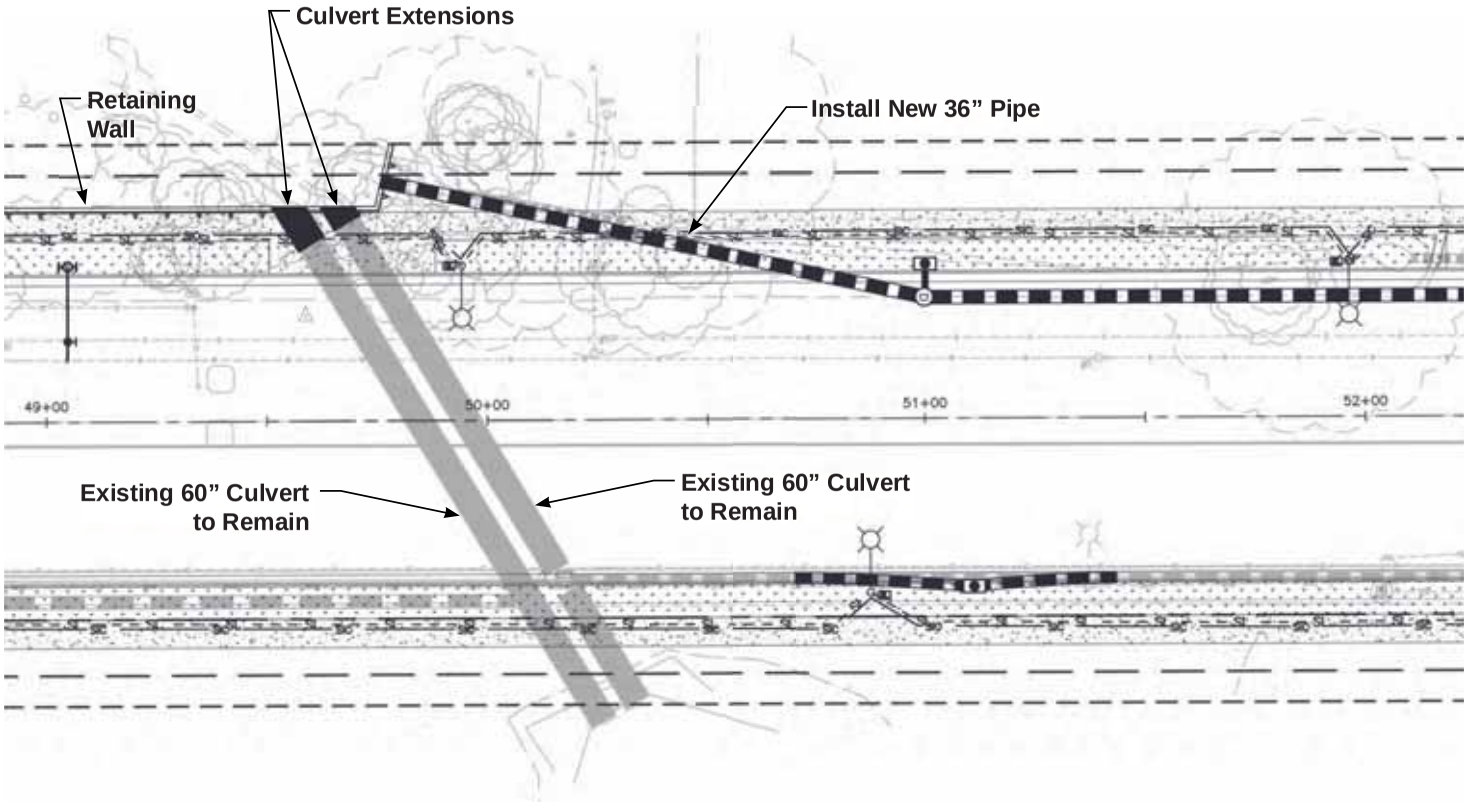


View of Peterson Creek culverts looking east

Approximate Scale

Fulton Road Widening Improvement Project

Job Number 11110674
Revision
Date May 2017

Storm Drain Improvements at Peterson Creek

Figure 7

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Table 1.3-2 Anticipated Tree Removals

| Tree Species | Approximate Number of Trees to be Removed |
|---|---|
| Blue gum (*Eucalyptus globulus*) | 3 |
| Coast live oak *(Quercus agrifolia)* | 22 |
| Coast redwood (*Sequoia sempervirens*) | 10 |
| Douglas fir *(Pseudotsuga menziesii)* | 1 |
| English walnut (*Juglans regia*) | 1 |
| Italian cypress (*Cuppressus sempervirens*) | 1 |
| London plane tree (*Platanus acerifolia*) | 8 |
| Red Maple *(Quercus rubra)* | 1 |
| Red iron bark *(Eucalyptus sideroxylon)* | 1 |
| Silk tree *(Grevillea robusta)* | 1 |
| Southern magnolia *(Magnolia grandifolia)* | 3 |
| Sweetgum *(Liquidambar styraciflua)* | 1 |
| Valley oak (*Quercus lobata*) | 12 |
| Apple (*Malus domestica*) * | 1 |
| Flowering pear *(Pyrus calleryana)* * | 6 |
| Purple leaf plum *(Prunus cerasifera)* * | 3 |
| Strawberry tree *(Arbutus unedo)* * | 1 |

Source: Horticultural Associates, 2017

Note: * Indicates a species of tree that is exempt from the City of Santa Rosa Tree Ordinance. The various sizes of green and black wattle trees that would be removed are also exempt and are not listed here.

## 1.4 Maintenance and Operation

Following construction, general operation and maintenance activities associated with the project would include periodic roadway, signal, and sidewalk repairs; maintenance of roadside bioretention areas; and landscape maintenance. Operation and maintenance of the project would generate less than one traffic trip per day on average.

Refer to Section 3.16, Transportation/Traffic, for a summary of traffic volumes projected along the roadway for the horizon year 2040 based on the traffic model maintained by the Sonoma County Transportation Authority.

## 1.5 Environmental Protection Actions Incorporated into the Project

The following actions are included as part of the project to reduce or avoid potential adverse effects that could result from construction or operation of the project. Additional mitigation measures are presented in the following analysis sections in Chapter 3, Environmental Analysis. Environmental protection actions and mitigation measures, together, will be included in a Mitigation Monitoring Program at the time that the project is considered for approval.

### 1.5.1 Environmental Protection Action 1 – Implement Geotechnical Design Recommendations

As part of the project design process, a California-registered Geotechnical Engineer was engaged to conduct a design-level geotechnical study for the project. The project will be designed and

constructed in compliance with the site-specific recommendations made in the project's geotechnical report. This will include design in accordance with recommendations for site preparation, grading, stripping, excavations, fill quality and placement, pavement sections, asphalt overlay, compactions, moisture barriers, and other factors. The geotechnical recommendations will be incorporated into the final plans and specifications for the project, and will be implemented during construction.

### 1.5.2 Environmental Protection Action 2 – Implement Air Quality Control Measures during Construction

To limit dust, criteria pollutants, and precursor emissions associated with the construction activity, the following Bay Area Air Quality Management District (BAAQMD) recommended Basic Construction Measures will be included in construction contract specifications and required during implementation of the project:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas and unpaved access roads) shall be watered two times per day;
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered or shall have at least two feet of freeboard;
- All visible mud or dirt tracked-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping shall be prohibited;
- All vehicle speeds on unpaved areas shall be limited to 15 miles per hour;
- All paving shall be completed as soon as possible after trenching work is finished;
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points;
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation;
- A publicly visible sign shall be posted with the telephone number and person to contact at the City regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

### 1.5.3 Environmental Protection Action 3 –Implement Climate Action Plan Measures

To ensure that the project is consistent with the Santa Rosa Climate Action Plan, the following measures shall be incorporated into the project design and/or be implemented during construction.

- Cool paving materials shall be used for new sidewalks and crosswalks associated with the project.
- Construction vehicle idling times shall be minimized by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes or less (as required by the California

airborne toxics control measure Title 13, Section 2485 of CCR). Clear signage shall be provided to remind contractors of idling restrictions.

- Construction equipment shall be maintained in accordance with manufacturer's specifications.
- The contractor shall be required to implement one of the following measures, as feasible and appropriate to the construction project:
  - Substitute electrified equipment for diesel- and gasoline-powered equipment where practical.
  - Use alternative fuels for construction equipment onsite, where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane, or biodiesel.
  - Avoid the use of on-site generators by connecting to grid electricity or utilizing solar-powered equipment.

## 1.6 Required Permits or Approvals

The following City of Santa Rosa entitlements would be required for the project:

- The project may require a Grading Permit for work conducted outside the public right- of-way.
- Tree removal and trimming would require compliance with Santa Rosa's Tree Ordinance, City Code Chapter 17-24, Ordinance 2858.
- The project may require a Surface Mining and Reclamation Act exemption from the Santa Rosa Planning Commission.
- Tree removal and trimming would require compliance with Sonoma County's Tree Ordinance, County Code Chapter 26D, Ordinance 3651.

The following permits or approvals may also be required for the project:

- U.S. Army Corps of Engineers (Corps) – Section 404 Nationwide Permit (anticipated to be NWP 14, Linear Transportation Projects)
- United States Fish and Wildlife Service (USFWS) - Section 7 Consultation
- State Historic Preservation Officer (SHPO) - Section 106 Consultation
- North Coast Regional Water Quality Control Board (NCRWQCB) - 401 Water Quality Certification and Low Threat Discharge to Surface Waters Permit
- State Water Resources Control Board (SWRCB) – General Storm Water Construction Permit
- California Department of Fish and Wildlife (CDFW) - Streambed Alteration Agreement and Section 2081 Incidental Take Permit for potential impacts on California Tiger Salamander
- Sonoma County Water Agency – Easement and Revocable License for improvements in Forestview Creek
- County of Sonoma – Grading Permit; Roiling Permit (Ordinance No. 3836R)

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# 2. Environmental Factors Potentially Affected

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

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

DETERMINATION

(To be completed by the Lead Agency) On the basis of this initial evaluation:

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

☒ I find that although the proposed project could have a significant effect on the environment, there would 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 would be prepared.

☐ I find that the proposed 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 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 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.

Chris Catbagan — City of Santa Rosa Signature

6/21/2017 — Date

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# 3. Environmental Analysis

## 3.1 Aesthetics

| | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a) Have a substantial adverse effect on a scenic vista? | | | | ✓ |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | | | | ✓ |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | | ✓ | | |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | | ✓ | | |

**a) Have a substantial adverse effect on a scenic vista? (No Impact)**

Scenic view corridors listed in the Santa Rosa General Plan include natural ridgelines, views of the Sonoma Mountain foothills, and natural landmarks, such as Taylor Mountain and Bennett Mountain. Views of natural ridgelines and the Sonoma Mountain foothills are provided from both the northbound and southbound lanes of Fulton Road, although views from the southbound lanes are intermittent due to intervening vegetation and development. The project is not located along a hillside or ridgeline and would not obstruct existing views of ridgelines and foothills. No impact would occur.

**b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (No Impact)**

Fulton Road is not a designated or eligible state scenic highway (Caltrans 2017). No impact would occur.

**c) Have a substantial adverse effect on visual character? (Less than Significant with Mitigation)**

Project improvements would extend approximately one mile from Guerneville Road to Piner Road. Fulton Road is not a City designated scenic roadway, and the project is not located within a designated open space area or a community separator (Santa Rosa 2009a).

The project corridor is essentially flat, and long range views of natural ridgelines and the Sonoma Mountain foothills are provided from both the northbound and southbound lanes of Fulton Road. Street trees associated with residential development, as well as native oaks in more open spaces, add to the visual variation of the corridor. The visual setting of the project corridor has been further broken down into the following individual segments for which visual characteristics are described.

**Guerneville Road to Appletree Drive**

This segment of Fulton Road is approximately 800 feet in length and retains a commercial appearance because of the Fulton Road marketplace that spans the west side of the roadway. The marketplace has provided a finished edge to the west side of Fulton Road, and street curbs and sidewalks have been installed along with turf and street trees. The intersection of Guerneville Road and Fulton Road is identified as a City entry in the Santa Rosa General Plan (Santa Rosa 2009a). The more undeveloped east side of the road lacks consistent curbing and sidewalk. A random assortment of shrubs and trees tends to loosely define the roadway corridor in this area, with a wall adjacent to a residential subdivision. Vertical elements include utility poles, street lights, and overhead utility lines on both sides of the roadway.

**Appletree Drive to Wishing Well Way South**

This segment of Fulton Road is approximately 650 feet in length and retains a more rural residential appearance due to larger lot sizes, particularly on the west side of Fulton Road. Finished curb and sidewalk are present along most of the east side of this roadway segment. The more undeveloped west side of the road lacks curbing and sidewalk. A random assortment of shrubs and trees tends to loosely define the roadway corridor in this area. The Forestview Creek channel passes under Fulton Road, but may go largely unnoticed to a motorist due to the higher rate of travel and lack of exposure to from surrounding landscaping. Vertical elements include utility poles, street lights, and overhead utility lines along the east side of the roadway.

**Wishing Well Way South to Piner High School Access Road**

This segment of Fulton Road is approximately 1,200 feet in length. Portions of both the west and east side of the roadway in this area have been reconstructed with curbs, sidewalk and landscaping associated with residential subdivision development. The Fox Hollow Subdivision project, which is currently under construction in the project area, would further develop the west portion of this segment. On the east side of Fulton Road, north of Wishing Well, the area retains a more rural residential appearance due to the larger lot sizes. Utility poles and overhead utility lines are located on the east side of roadway. Street lights are also present on both sides of the roadway adjacent to existing residential subdivisions.

**Piner High School Access Road to Quail Hollow Drive**

This segment of Fulton Road is approximately 1,400 feet in length and is visually diverse because of the mixture of open spaces in Youth Community Park to the west and developed areas of Piner High School to the east. Piner High School has provided a finished edge to the east side of Fulton Road in this segment, with street curbs and sidewalks, along with turf, street trees, and a school sign. Utility poles, street lights, and overhead utility lines are also located on the east side of roadway.

The more undeveloped east side of the road lacks consistent curbing and sidewalk. Oak trees bordering Youth Community Park add to the visual character of the area. A skate park and walkway are additional Youth Community Park amenities visible from the roadway. The Peterson Creek channel passes under Fulton Road in this segment but goes largely unnoticed due to the higher rate of travel and lack of exposure through surrounding trees. Vegetation communities along the east side of the roadway include coast live oak woodland and riparian.

**Quail Hollow Drive to Piner Road**

This segment of Fulton Road is approximately 1,200 feet in length. The east side of the roadway in this area has a finished edge, with street curbs, sidewalks, and street trees and shrubs. Utility poles, street lights, and overhead utility lines are also located on the east side of roadway. The west side of the road lacks curbing and sidewalk. The area is flat, and views an actively farmed property is available near Piner Road. Piner Road, approximately one-quarter mile west of Fulton Road, is also identified as a City entry in the Santa Rosa General Plan (Santa Rosa 2009a). A County Scenic Landscape Unit also abuts the west side of Fulton Road just south of Piner Road (Sonoma County 2008).

Construction activities along the project corridor and at off-site staging areas would result in temporary changes in the visual character of the project area for approximately 26 months. This would include the presence of construction equipment, trucks, staging and laydown areas, and associated fugitive dust in neighborhoods adjacent to the project site. Staging areas would also be disturbed during construction. Although temporary in nature, the potential impact on visual quality would be significant.

As described in the Project Description, approximately 80 trees would be removed along the project corridor to accommodate construction of the project, as well as additional non-native exotic black and green wattle trees of various sizes. This would include the potential removal of approximately 34 oaks, including coast live oak trees (*Quercus agrifolia*) and valley oaks (*Quercus lobate*) along the alignment. The oak trees potentially impacted range in size from approximately 4 to 46 inches in diameter at breast height and are located throughout the alignment. Although the project would not result in the removal of an entire oak woodland area, numerous individual native oak trees would be removed. Such trees add to the visual character of the project area, and are identified in both the City and County General Plans as trees that should be preserved and regenerated. Therefore, the impact on visual character is significant.

The project would not conflict with applicable Santa Rosa General Plan goals and policies related to urban design image and character, including utility undergrounding (UD-A-7), installation of planted medians (UD-C-7), provision of continuous sidewalks and bicycle lanes on both sides of the roadway (UD-D-4), and planting strips with trees between the road and sidewalk to buffer pedestrian from traffic and help define the street space (UD-D-5).

The project may have a beneficial effect on the overall visual quality of the roadway near City-designated City entry points and the County-designated scenic landscape unit near Piner Road. Project improvements to the Fulton/Guerneville and Fulton/Piner intersections would include an asphalt overlay and new sidewalks at each corner of the intersections. These improvements, along with the overall improvements along Fulton Road such as planted medians and street trees, utility undergrounding, and new sidewalks and bicycle lanes, may improve the overall visual quality of the roadway.

### *Mitigation*

Mitigation Measures AES-1, BIO-6, and BIO-8 would reduce the project impact on visual character to a less-than-significant level by minimizing and restoring areas disturbed during construction and by requiring oak planting and monitoring and consistency with City and County tree ordinances.

#### Mitigation Measure AES-1: Minimize Temporary Visual Impacts

The City shall avoid or substantially lessen impacts by reducing construction disturbance. Measures shall include:

- The size of construction zones and staging areas shall be the minimum operable size. The location of such zones shall be adjusted to minimize the visual impacts.
- To the extent feasible, alignments and locations of facilities shall be adjusted to avoid visually sensitive features and conditions that would result in major landform alteration or mature landscape removal.
- During construction, temporary fencing with green fabric screen or similar screening shall be placed around primary staging areas to limit the prominence of views of construction equipment and associated construction materials.
- The City shall restore or revegetate staging areas disturbed or scarred by construction activities, including restoring pre-project topographic features and reseeding with species comparable to those removed or disturbed during construction.

**Mitigation Measure BIO-6: Compensate for Loss of Riparian and Oak Woodland Vegetation**

See Section 3.4, Biological Resources

**Mitigation Measure BIO-8: Comply with City and County Tree Ordinance**

See Section 3.4, Biological Resources

**d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (Less than Significant with Mitigation)**

Nighttime construction activities may be required for a portion of the work to be completed within the intersections of Fulton Road/Guerneville Road and Fulton Road/Piner Road. Anticipated nighttime work hours are assumed to be 7:00 p.m. to 7:00 a.m. Based on the type and extent of work to be performed, nighttime construction within the Fulton/Guerneville and Fulton/Piner intersections could extend up to approximately ten nights within each intersection. Lighting would be needed for completion of nighttime work, which could result in a temporary source of light or glare capable of impacting surrounding residential land uses. The impact is significant.

Following construction, the alignment of the roadway would not substantially change, therefore, changes to glare from vehicle headlights, if any, would be very small. The impact would be less than significant.

However, the project would also install Light Emitting Diode (LED) street lights along both sides of the roadway, and in some locations, street lights would be placed where no existing street lighting occurs. High-intensity LED lighting can emit a large amount of blue light that appears white to the naked eye and can create a substantial increase in nighttime glare. The impact is significant.

### *Mitigation*

Mitigation Measures AES-2 and AES-3 would reduce the impact of potential nighttime lighting and glare to a less-than-significant level through implementation of nighttime lighting controls during construction, and through measures that would reduce glare from proposed LED street light installations.

#### Mitigation Measure AES-2: Avoid Glare and Light Trespass from Nighttime Construction Lighting

The City shall require the contractor to prepare and implement a Nighttime Construction Lighting Plan for any nighttime work so as to avoid glare that would be a hazard to vehicles and to avoid light trespass onto adjacent residential uses. The lighting plan shall be developed to guide the use of lighting during project construction in such a way as to effectively light the work area while limiting light spill onto adjoining property. The Plan shall adequately describe the work including, but not be limited to, the layout of lighting equipment necessary for all work to be completed at night and descriptions of hardware, including hoods, louvers, shields or other means to be used to control glare and light trespass onto adjoining property. Lighting systems with flood, spot, or stadium type luminaires shall be aimed downward at the work.

#### Mitigation Measure AES-3: Minimize Glare from LED Street Lights

The City shall minimize glare from LED street light designs along the roadway. This may include, but not necessarily be limited to, the following:

- Control blue-rich lighting by using the lowest emission of blue light possible to reduce glare, with a color temperature of no greater than 3000 Kelvin (K).
- Utilization of shielding to minimize glare;
- Utilization of LED lighting with the ability to be dimmed for off-peak time periods.

## 3.2 Agriculture and Forest Resources

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

**a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland)? (No Impact)**

The project would not be located on land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide importance (CDC 2014). No impact would occur.

**b) Conflict with Agricultural Zoning or Williamson Act Contract? (No Impact)**

The project would not be located on land enrolled in a Williamson Act contract (CDC 2013). No impact to such lands would occur.

Five properties located in unincorporated County of Sonoma adjacent to the west side of Fulton Road and south of Piner Road are zoned Diverse Agriculture (Sonoma County 2008). The County of Sonoma defines the Diverse Agricultural district as being intended to enhance and protect land areas where soil, climate and water conditions support farming but where small acreage intensive farming and part-time farming activities are predominant, and where farming may not be the principal occupation of the farmer. The zoning district permits a variety of land uses, including, but

not limited to: raising, feeding, maintaining and breeding of farm animals on parcels exceeding two acre; agricultural support services that involve incidental sales of products related to the support service use; specified residential dwelling types; and several non-agricultural land uses allowed with a use permit, including minor public service uses and facilities.

The Sonoma County General Plan (Sonoma County 2008) includes objectives and policies for agricultural lands and agriculture-related uses. This includes the establishing agricultural production and related processing, support services, and visitor serving uses as the primary uses of parcels within an agricultural land use category (Policy AR-4a).

Based on site visits and aerial photographs, the northernmost of the five properties zoned Diverse Agriculture is actively farmed. Actively farmed portions of this property begin approximately 100 feet west of a fence line along the property Fulton Road frontage. The four other properties zoned Diverse Agriculture include three that include residential dwellings, which may or may not include current agricultural uses, such as raising of farm animals, and a fourth property that is a church, which has no apparent agricultural use.

The project would not result in the acquisition of permanent right-of-way on any of the five properties zoned as Diverse Agriculture. The project would require acquisition of utility and sidewalk easements that would extend approximately 7 feet onto the properties. The extent of the easements required for the properties would not extend into areas that are actively farmed or used for other agricultural purposes, or where permanent structures exist. Additionally, the easements are not anticipated to explicitly disallow planting in a utility easement area. Therefore, the project would not conflict with the agricultural zoning for the property. No impact would occur.

**c,d) Conflict with Forest Land Zoning or Convert Forest Land? (No Impact)**

The project would not be located on land zoned for forest land, timberland, or timber production (Santa Rosa 2015, Sonoma County 2008). In addition, there are no forest lands in the project area. Therefore, the project would not result in the loss or conversion of forest land. No impact would occur.

**e) Convert Farmland or Forest? (No Impact)**

The project does not include new homes or businesses that would directly induce population growth in the project area. The project is consistent with the Santa Rosa General Plan which envisions Fulton Road as a four-lane regional/arterial street by 2035. Additionally, the project would not result in urban development outside of the City's Urban Growth Boundary. Therefore, the project would not involve changes in the existing environment which could result in conversion of farmland in the project area. No impact would occur.

## 3.3 Air Quality

| | Potentially Significant Impact | Less-Than-Significant With Mitigation Incorporation | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | | | | ✓ |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | | | ✓ | |
| c) Result in a cumulatively considerable net increase in any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | | | ✓ | |
| d) Expose sensitive receptors to substantial pollutant concentrations? | | | ✓ | |
| e) Create objectionable odors affecting a substantial number of people? | | | ✓ | |

In June 2010, the Bay Area Air Quality Management District (BAAQMD) developed thresholds of significance to assist in the review of projects under CEQA. The thresholds were designed to establish the level at which BAAQMD believed air pollution emissions would cause significant environmental impacts under CEQA and were posted on BAAQMD's website and included in the Air District's updated CEQA Guidelines (updated May 2011). On March 5, 2012, the Superior Court issued a ruling in California Building Industry Association v. Bay Area Air Quality Management District (Superior Court Case No. RG10548693).

While adoption of the thresholds has been set aside, the Court did not rule on or question the adequacy of the BAAQMD CEQA Air Quality Guidelines, including the impact assessment methodologies, or the evidentiary basis supporting the thresholds, which are included in the Guidelines. Accordingly, pursuant to its discretion under State CEQA Guidelines section 15064(b) ("lead agencies may exercise their discretion on what criteria to use"), the City has the discretion to apply, and has been applying, the BAAQMD CEQA Guidelines.

**a) Conflict with or obstruct implementation of the applicable air quality plan? (No Impact)**

The "Bay Area 2010 Clean Air Plan" (BAAQMD 2010) is the most recently adopted regional air quality plan that pertains to the project area. The primary goals of the 2010 Clean Air Plan are to protect air quality, public health, and the climate. The 2010 Clean Air Plan contains 55 control measures under the following categories: stationary-source measures, mobile-source measures, transportation control measures, land use and local impact measures, and energy and climate measures.

Transportation control measures in the 2010 Clean Air Plan, including D-1 (Improve Bicycle Access and Facilities), D-2 (Improve Pedestrian Access and Facilities), and D-3 (Support Local Land Use Strategies) are generally applicable to the project. Based on a review of the project plans, the project is anticipated to conform with the above-mentioned measures as the project would improve the adjacent non-vehicular network to facilitate walking and biking along Fulton Road and the surrounding area. Other control measures in the 2010 Clean Air Plan generally require action on the part of the BAAQMD, the California Air Resources Board (CARB), or local communities, or are related to community development related projects as opposed to individual infrastructure-related projects. Additionally, as shown in Impacts "b" through "d" below, the project would not create a localized violation of State or federal air quality standards, would not significantly contribute to cumulative nonattainment pollutant violations, and would not expose sensitive receptors to substantial pollutant concentrations. The project would not obstruct or conflict with implementation of the Bay Area 2010 Clean Air Plan. No impact would occur.

**b, c) Violate any air quality standard or result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment? (Less than Significant)**

The project is located within the San Francisco Bay Area Air Basin (Air Basin). Under California standards, the Air Basin is designated as a nonattainment area for suspended particulate matter ($PM_{2.5}$ and $PM_{10}$) and ozone (BAAQMD 2017). Under national standards, the Air Basin is designated as nonattainment for 8-hour ozone and for $PM_{2.5}$. The Air Basin is in attainment (or unclassified) for all other air pollutants (BAAQMD 2017).

By its nature, air pollution is largely a cumulative impact, in that individual projects are rarely sufficient in size to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions may contribute to cumulative adverse air quality impacts. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions (BAAQMD 2012).

Construction-related air pollutant emissions were estimated for the project using the Sacramento Metropolitan Air Quality Management District's Roadway Construction Emissions Model (version 8.1.0). For the model, construction activities were conservatively estimated to account for approximately 16 months of road reconstruction work and approximately 12 months of utility undergrounding activities. The results were then compared to the BAAQMD thresholds of significance for criteria pollutants. As shown in Table 3.3-1 (Construction Air Emissions Associated with Project), the estimated construction-related emissions are less than the construction thresholds of significance adopted by the BAAQMD. Therefore, the impact from construction

related emissions would be less than significant. In addition, as described in Section 1.5, "Environmental Protection Actions Incorporated into the Project," the project would incorporate the BAAQMD recommended basic construction mitigation measures, consistent with General Plan policy OSC-J1.

Table 3.3-1 Construction Air Emissions Associated with Project

| Parameter | ROG (lbs/day) | $NO_x$ (lbs/day) | $PM_{10}$ (lbs/day) | $PM_{2.5}$ (lbs/day) |
|---|---|---|---|---|
| Project Average Emissions | 3.67 | 37.69 | 1.92 | 1.78 |
| BAAQMD Thresholds | 54 | 54 | 82 | 54 |
| *Significant Impact?* | *No* | *No* | *No* | *No* |

Following construction, operation of the project would not include new stationary sources of air emissions. The project would not be a traditional trip-generating land use, but rather is a roadway improvement project designed to accommodate existing and future vehicle trips within the area. Very few vehicle trips would be associated with maintenance of the roadway and bioretention areas, on the order of less than one vehicle trip per day. Project-generated operational emissions would not violate or contribute substantially to an existing or projected air quality violation. The impact would be less than significant.

**d) Expose sensitive receptors to substantial pollutant concentrations? (Less than Significant)**

The BAAQMD defines sensitive receptors as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of such land uses and facilities located along the project alignment include Piner High School, Lytton Rancheria Education Center, Youth Community Park, and residential areas.

Construction equipment and associated heavy-duty truck traffic generate diesel exhaust, which is a known toxic air contaminant. As described in Section 1.5, "Environmental Protection Actions Incorporated into the project," Environmental Protection Action 2 would incorporate the BAAQMD recommended basic construction mitigation measures during construction. Such measures include minimizing idling times for trucks and equipment to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]), ensuring that construction equipment is maintained in accordance with manufacturer's specifications, watering exposed surfaces twice a day to minimize fugitive dust emissions, and other measures. Environmental Protection Action 3 would require provisions in contractor agreements requiring the use of electric equipment and/or equipment using alternative fuels as feasible and appropriate, which would further reduce diesel-powered equipment emissions. Given the linear nature of the project, construction activities would continually be shifting as utilities are undergrounded and then roadway re-construction begins. Because of the shifting of the construction activities, prolonged exposure of sensitive receptors to substantial pollutant concentrations would not occur, and with the implementation of Environmental Protection Actions 2 and 3, the project would not result in the exposure of sensitive receptors to substantial pollutant concentrations. Therefore, the construction-related impact would be less than significant.

Following construction, the project would not result in substantial long-term operational emissions of criteria air pollutants or substantial increases in localized vehicular emissions. The project would

not be a trip-generating land use, but rather a roadway improvement and utility relocation project. The operation-related impact would be less than significant.

**e) Create objectionable odors affecting a substantial number of people? (Less than Significant)**

During construction, odors from the use of equipment during construction activities would be intermittent and temporary. Such odors generally dissipate rapidly from the source with an increase in distance. The impact would be less than significant.

Facilities known to produce odors include landfills, coffee roasters, wastewater treatment facilities, etc.). The project does not include such a facility. No operational impact would occur.

## 3.4 Biological Resources

| | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | | ✓ | | |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? | | ✓ | | |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | | ✓ | | |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | | ✓ | | |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | ✓ | | |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | | | | ✓ |

Biological resources, wetlands, and waters of the U.S. are analyzed as part of ongoing special studies being completed for the project. These studies serve as the basis of findings for this section.

Information on special-status plant species was compiled through a review of the literature and database searches. Database searches for known occurrences of special-status species focused on the three United States Geological Survey (USGS) quadrangles encompassing and surrounding

the project area. The following sources were reviewed to determine which special-status plant and wildlife species have been documented in the vicinity of the project site:

- U.S. Fish and Wildlife Service (USFWS) Information on Planning and Conservation (IPaC) (USFWS 2017)
- California Natural Diversity Database records (CNDDB) (CNDDB 2017)
- California Department of Fish and Game's (CDFW) Special Animals List (CDFW 2017a),
- State and Federally Listed Endangered and Threatened Animals of California (CDFW 2017b)
- California Native Plant Society (CNPS) Electronic Inventory records (CNPS 2017)
- CDFG publication "California's Wildlife, Volumes I-III" (Zeiner, et al. 1990)

A reconnaissance-level site visit was also conducted on December 12, 2016 to evaluate on-site and adjacent habitat types. Aerial photograph analysis was conducted of ponds and water bodies that could provide potential breeding habitat for special-status species, and habitats were evaluated for their potential to provide connectivity between sites. Site visits were also conducted in March and April of 2017 as part of special-status plant surveys and wetland delineations.

Please refer to Appendix B for a complete summary of special-status plant and wildlife species that have been reported as occurring on the three surrounding topographic quadrangles. The species that have a potential for occurrence in the project area are discussed below. The species for which there is no habitat present on the project site, as indicated in Appendix B, are not discussed further.

**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? (Less than Significant with Mitigation)**

### *Special-status Plant Species*

**Endangered Plant Species on the Santa Rosa Plain**

The project area west of Fulton Road is located within the Santa Rosa Plain. Within the Santa Rosa Plain, the following three federal and state listed endangered plants are known to occur:

- Sonoma sunshine (*Blennosperma bakeri*), which inhabits vernal pools and valley and foothill grassland. This species blooms March to May, and known occurrences have been documented approximately 100 feet west of the project area near Piner Road.
- Burke's goldfields (*Lasthenia burkei*), which inhabits vernal pools, meadows and seeps. This species blooms April to June, and recorded occurrences have been documented to the north of the project area at the Alton Lane mitigation area, the Sonoma County Airport, Todd Road near Graton, and in the Town of Windsor.
- Sebastopol meadowfoam (*Limnanthes vinculans*), which inhabits meadows and seeps, vernal pools and valley and foothill grassland. This species blooms April to May, and mostly occurs within the portion of the Santa Rosa Plain south of Highway 12.

The potential for the three endangered plant species on the Santa Rosa Plain to occur within the project area is based on the presence of suitable habitat and the presence or absence of plants observed during spring protocol surveys. Potential habitat for these species in the project area includes seasonal wetlands and grassland habitats. Seasonal wetlands in the project area include a roadside ditch and a mowed and maintained curbside area, neither of which provide the type of

hydrology typical of vernal pool habitats or support plant species associated with vernal pools and the listed plants. The grassland habitats in the project area provide only marginal habitat for the listed plants.

Focused surveys for the three endangered plant species are currently being conducted at the project site in accordance with USFWS protocols developed for the Santa Rosa Plain. This includes focused spring plant surveys covering the flowering period for the three endangered plant species. No special status plants have been identified during surveys completed to date, which included a survey in March and April of 2017.

However, given that required protocol plant surveys are still underway, and because of the proximity of the project area to known populations of Sonoma sunshine, the impact of the project on these three special-status plants is considered potentially significant.

**Other Special-status Plant Species**

Marginal habitat is present in the project area for the following three additional special-status plant species:

- Congested-Headed Hayfield Tarplant (*Hemizonia congesta ssp. Congesta*), which is a CNPS Rank 1B[2] plant that occurs in valley and foothill grasslands. This species blooms April to June, and recorded occurrences have occurred to the north of the project area.
- Marsh Microseris (*Microseris paludosa*), which is a CNPS Rank 1B plant which occurs in valley and foothill grasslands and cismontane woodlands. This species generally blooms April to June, and recorded occurrences have been identified near Todd Road southeast of Sebastopol and a location in Windsor.
- Johnny Nip (*Castilleja ambigua ssp. Ambigua*), which is a CNPS Rank 4[3] plant that inhabits coastal bluff scrub, coastal prairie, coastal scrub, marshes, swamps, valley and foothill grasslands and the margins of vernal pools. The blooming period is from March to August, and there is potential habitat for this species in the project area in the form of valley and foothill grasslands. There are no CNDDB recorded occurrences for this species, as CNPS Rank 4 species are not often recorded.
- Harlequin lotus (*Hosakia gracilis*), which is a CNPS Rank 4 plant that inhabits valley and foothill grassland/wetlands, roadsides, meadows, seeps, and other habitats. The blooming period is from March to July, and there is potential habitat for this species in the project area in the form of grasslands. There are no CNDDB recorded occurrences for this species, as CNPS Rank 4 species are not often recorded.

The potential for the above-listed plant species to occur within the project area is considered low because: 1) habitat in the project is marginal for these species, and 2) the plants have not been identified during surveys completed in March, April, and May of 2017. The impact would be less than significant.

[2] CNPS Rank 1B species include plants that are rare and endangered in California and elsewhere.

[3] CNPS Rank 4 species include plants of limited distribution that are on a watch list. Some of the plants constituting Rank 4 meet the definitions of CESA and many are considered to be significant locally. CNPS strongly recommends that Rank 4 plants be evaluated for impact significance during preparation of CEQA documents.

### *Special-status Wildlife Species*

**California Tiger Salamander (*Ambystoma californiense*)**

California tiger salamander (CTS) is a federally endangered and State threatened amphibian species. CTS breeds in vernal pool and ponds and spends most of life terrestrially in small mammal burrows. More specifically, the primary constituent elements identified for CTS in Sonoma County are:

- Standing bodies of fresh water (including natural and manmade (e.g., stock) ponds, vernal pools and other ephemeral or permanent water bodies that typically support inundation during winter/early spring and hold water for a minimum of 12 consecutive weeks in a year of average rainfall).
- Upland habitats adjacent and accessible to and from breeding ponds that contain small mammal burrows or other underground refugia that California tiger salamanders depend upon for food, shelter, and protection from the elements and predation.
- Accessible upland dispersal habitat between occupied locations that allow for movement between such sites.

The project area west of Fulton Road is located within CTS Critical Habitat unit SON 1 (Sonoma County) (USFWS 2011). This unit contains features that are essential for the conservation of CTS and include aquatic habitat, upland non-breeding habitat with underground refugia, and dispersal habitat connecting occupied California tiger salamander locations. The project area west of Fulton Road is also located within the Alton Lane Management Area (USFWS 2015). The east side of the Fulton Road is not within CTS Critical Habitat.

The closest reported sighting of CTS is at Alton Lane, less than 0.8 miles north of the project area (CNDDB 2017). The known location of CTS approximately 0.8 miles northwest of the project site in the Alton Lane Mitigation Bank indicates that CTS are within the general area on the proposed project site. Excavation of soil on the west side of Fulton Road during construction may impact CTS individuals that may be located underground, within gopher burrows. Roadway widening on the west side of Fulton Road would also result in permanent hardscape improvement on approximately 1.05 acres of designated CTS Critical Habitat. The impact on CTS individuals and on CTS Critical Habitat is significant.

**Western Pond Turtle (*Emys marmorata*)**

Western pond turtle is a California species of special concern that prefers permanent, slow-moving creeks, streams, ponds, rivers, marshes and irrigation ditches with basking sites and a vegetated shoreline. Females travel from aquatic sites into open, grassy areas to lay eggs in a shallow nest.

Western pond turtle has been recorded within Peterson Creek, and may potentially use both Peterson Creek and Forestview Creek as movement corridors. Project construction activities could result in “take” of individual Western pond turtle that may move along Peterson Creek and Forestview Creek. The impact is significant.

**Passerines and Raptors**

Passerines (perching birds) and raptors (birds of prey) are each protected under the Federal Migratory Bird Treaty Act (MBTA) and Fish and Wildlife Code 3503. Several trees within the project area contain cavities that could be used as foraging and nesting habitat for passerines and raptors.

Passerines that could potentially nest in trees in the project area include oak titmouse (*Baeolophus inornatus*), olive-sided flycatcher (*Contopus borealis*), Nuttall’s woodpecker (*Picoides nuttallii*),

among others. Raptors that could potentially nest in trees in the project area include American kestrel (*Falco sparverius*). The project area also provides foraging habitat for raptors, such as the white-tailed kite (*Elanus leucurus*), red-shouldered hawk (*Buteo lineatus*), and Cooper's hawk (*Accipiter cooperi*). If nesting passerines or raptors were present in trees along the alignment, construction noise and/or tree removals would have the potential to impact the species. The impact is considered significant.

**Bats**

Bats that could potentially roost in trees in the project area include pallid bat (*Antrozous pallidus*), western red bat (*Lasiurus blossevillii*), hoary bat (*Lasiurus cinereus*), California myotis (*Myotis californicus*), and Yuma myotis (*Myotis yumanensis*). The pallid bat and the western red bat are each a California Species of Special Concern species.

Several oak trees in the project area contain suitable potential cavity, crevice and/or exfoliating bark roost features which are suitable for bat species, including pallid bats. Dense canopy on the western side of Fulton Road also provides suitable potential roost habitat for western red bat. If pallid bats or western red bats were present in trees along the alignment, construction noise and/or tree removals would have the potential to impact the species. The impact is considered significant.

In addition to the trees potentially supporting roosting bat habitat, three approximately 48-inch corrugated metal culverts occur at Forestview Creek, and two approximately 60-inch concrete culverts occur at Peterson Creek. Roosting bats may also potentially occur within the existing storm water culverts in Peterson Creek and Forestview Creek. At Forestview Creek, the likelihood of bat roosts within the existing culverts is considered low, based on the size of the culverts (approximately 48-inch diameter), positions deep in the creek channels, vegetative clutter at the openings, and apparent partial collapse of one of the corrugated metal culverts. At Peterson Creek, the larger 60-inch concrete culverts are open at one end, but obstructed by dense vegetation at the other end. There is a low likelihood that a small number of Yuma myotis (*Myotis yumanensis*), a common and widely-distributed bat species, could night roost in the first 5-10 feet of the culvert, but a lower likelihood they would roost further inside the culverts. Removal of culverts may cause direct mortality of roosting bats, if the culverts provide suitable roosting habitat and are removed during seasonal periods of inactivity (i.e., maternity season). The impact is considered significant.

**Other Special-status Wildlife Species**

No suitable habitat for other species has been identified in the project area, including for fish species, such as Coho salmon (*Onchorhynchus kisutch*) and steelhead (*Onchorhynchus mykiss*). Coho salmon is a federal and State listed endangered fish species. Steelhead is a federally-listed threatened species and a State species of special concern. Coho salmon and steelhead require beds of loose, silt-free, coarse gravel for spawning, as well as cover, cool water and sufficient dissolved oxygen.

Migratory and rearing habitat for steelhead is present in the lower reaches of Piner Creek and in Paulin Creek, however, the habitat within the urban areas, such Forestview and Peterson Creeks, is limited and not diverse enough to support migratory and rearing habitat for steelhead (Santa Rosa 2013a). The Forestview and Peterson stream corridors do not provide deep pools or well aerated and cool waters. The confluence of Peterson Creek with Santa Rosa Creek also contains a grouted riprap bottom and a drop in elevation that may present a barrier to migrating fish. The Santa Rosa Creek watershed, in which the streams are located, is not a watershed designated as critical habitat, and no Coho salmon or steelhead have been mapped in the CNDDB for the streams.

Please refer to Appendix B for a complete summary of special-status wildlife species, including those for which no suitable habitat was determined to be present on the project site.

### *Mitigation*

Mitigation Measures BIO-1 through BIO-5 would reduce the impact of the project on special-status plants and wildlife to less-than-significant levels by requiring pre-construction surveys by qualified biologists prior to work in applicable habitats, and measures to avoid take of species as well as a minimum level of compensation for loss of habitat for special-status plant and wildlife species.

#### Mitigation Measure BIO-1: Avoid Loss of Sensitive Plant Species

The City shall retain a qualified biologist to complete focused surveys for Sonoma sunshine, Burke's goldfields, and Sebastopol meadowfoam in accordance with USFWS protocols developed for the Santa Rosa Plain. This includes two years of focused spring plant surveys in March, April, and May.

In accordance with the established guidelines and procedures for mitigating impacts to the three listed vernal pool plants and their habitat, if no listed plants are found during plant surveys then the mitigation ratio shall be 1.5:1 for loss of potential habitat (i.e., seasonal wetland). If listed species are found within the project area and will be impacted, the mitigation ratio shall be 3:1. The City shall purchase credits in an approved mitigation bank within the Santa Rosa Plain.

#### Mitigation Measure BIO-2: Protect California Tiger Salamander

Mitigation for impacts to California Tiger Salamander habitat shall be as stipulated in the Santa Rosa Plain Conservation Strategy (USFWS 2005) or any subsequent guidance adopted by USFWS. To prevent loss of CTS habitat within the Santa Rosa Plain, the USFWS and CDFW require that mitigation lands be purchased for the acreage that is being disturbed. Because the project is located more than 2,200 feet but within 1.3 miles of a known breeding site, the City shall compensate for loss of CTS habitat by purchasing mitigation credits at a ratio of 1:1 or as required by USFWS and CDFW. The mitigation shall be purchased from a mitigation bank that is within the Critical Habitat for the species.

Initial ground disturbing construction activities in habitat shall be limited to the dry season (June through October) when salamanders are not moving between terrestrial habitat and aquatic breeding habitat.

Minimization measures contained in Section 5.2 (Minimization Measures) of the Santa Rosa Plain Conservation Strategy (USFWS 2005) or any subsequent guidance adopted by the USFWS shall be implemented during work within areas where California tiger salamanders may occur. These include:

- A USFWS-approved biological monitor will be on site each day during initial site grading.
- The biological monitor will conduct a training session for all construction workers before work begins on the project.
- Before the start of work each morning, the biological monitor will check for CTS under any equipment such as vehicles and stored pipes. The biological monitor will check all excavated steep-walled holes or trenches greater than one foot deep for any CTS.

Any CTS found will be removed by the biological monitor and translocated under approval by the USFWS.

- An erosion and sediment control plan will be implemented to prevent impacts of wetland restoration and construction on habitat outside the work areas.
- Access routes and number and size of staging and work areas will be limited to the minimum necessary to achieve the project goals. Routes and boundaries of the roadwork will be clearly marked prior to initiating construction/grading.
- All foods and food-related trash items will be enclosed in sealed trash containers at the end of each day, and removed completely from the site once every three days.
- No pets will be allowed anywhere in the project site during construction.
- A speed limit of 15 mph on dirt roads will be maintained, if applicable.
- All equipment will be maintained such that there will be no leaks of automotive fluids such as gasoline, oils, or solvents.
- Hazardous materials such as fuels, oils, solvents, etc., will be stored in sealable containers in a designated location that is at least 200 feet from aquatic habitats. All fueling and maintenance of vehicles and other equipment and staging areas will occur at least 200 feet from any aquatic habitat.
- Grading and clearing will typically be conducted between April 15 and October 15, of any given year, depending on the level of rainfall and/or site conditions.
- Project areas temporarily disturbed by construction activities will be revegetated.
- If CTS are found, the City shall coordinate with the USFWS and CDFW to prevent take of individuals and mitigate for loss of habitat.

### Mitigation Measure BIO-3: Protect Western Pond Turtle

Where work occurs within a creek, or where construction activities are located within 250 feet of a water body, the City shall ensure that preconstruction surveys for the western pond turtle are conducted by a qualified biologist. If western pond turtles are found during preconstruction surveys, CDFW shall be notified and individuals shall be captured by a qualified biologist and relocated to suitable areas. If preconstruction surveys identify active nests, a qualified biologist shall establish a no-disturbance buffer zone around the nest using temporary orange exclusion fencing. The radius of the buffer zone and the duration of the exclusion shall be determined in consultation with CDFW. The buffer zone and fencing shall remain in place until the young have left the nest, as determined by the biologist.

### Mitigation Measure BIO-4: Prevent Disturbance to Nesting Birds

The City shall implement the following measures to prevent impacts to nesting birds:

- Grading or removal of any vegetation shall be conducted outside the nesting season, which occurs between approximately February 1 and August 31. (No survey is required for work conducted outside this period).
- If grading or vegetation removal between August 31 and February 1 is infeasible and work must occur within the breeding season, a pre-construction nesting bird (both passerine and raptor) survey of the landscaped areas and trees shall be performed

by a qualified biologist within 7 days of ground breaking. If no nesting birds are observed, no further action is required and work shall occur within one week of the survey to prevent "take" of individual birds that could begin nesting after the survey.

- If bird nests (either passerine and/or raptor) are observed during the pre-construction survey, a disturbance-free buffer zone shall be established around the nest tree(s) until the young have fledged, as determined by a qualified biologist.
- The radius of the required buffer zone can vary depending on the species, (i.e., 75 to 100 feet for passerines and 200 to 300 feet for raptors), with the dimensions of any required buffer zones to be determined by a qualified biologist in consultation with California Department of Fish and Wildlife (CDFW).
- To delineate the buffer zone around a nesting tree, orange construction fencing shall be placed at the specified radius from the base of the tree within which no machinery or workers shall intrude.
- After the fencing is in place there will be no restrictions on grading or construction activities outside the prescribed buffer zones.

### Mitigation Measure BIO-5: Prevent Disturbance of Roosting Bats

Prior to construction, the City shall have a Bat Habitat Assessment conducted for the trees and culverts to be removed. The Habitat Assessment shall be completed by a qualified biologist (e.g., a biologist holding a California Department of Fish and Wildlife collection permit and a Memorandum of Understanding with the California Department of Fish and Wildlife allowing the biologist to handle and collect bats). The Habitat Assessment shall evaluate the trees for suitable entry points and roost features, and shall provide focused daytime surveys for day-roosting bats. If a special-status bat species is found, or if suspected day roosts for special-status bats are identified, then the Habitat Assessment shall identify suitable performance measures for avoiding impacts to roosts, which may include, but would not be limited to:

- Consultation with the California Department of Fish and Wildlife to determine appropriate measures for protecting bats with young if present, and for implementing measures to exclude non-breeding bat colonies during construction process.
- Phased removal of trees where selected limbs and branches not containing cavities are removed using chainsaws on the first day, with the remainder of the tree removed using chainsaws or other equipment on the second day.

Based on the daytime habitat assessment, and if culvert and site conditions warrant further surveys, additional surveys may be required, e.g. a night emergence survey, or radio-controlled remote vehicle with infrared camera system to determine presence of absence of bats further inside the culverts. If no bats are present during the day, the culverts may be partially blocked with appropriate mesh or netting to prevent subsequent occupation. If bats are present during the day, additional exclusion and eviction efforts would be required based on specific recommendations of a qualified bat biologist in consultation with the California Department of Fish and Wildlife.

**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? (Less than Significant with Mitigation)**

The Santa Rosa General Plan (Santa Rosa 2009a), Citywide Creek Master Plan (Santa Rosa 2013a), Santa Rosa Design Guidelines (Santa Rosa 2005) and Sonoma County General Plan (Sonoma County 2008) contain goals, policies and action items to protect riparian habitat, including ensuring that construction adjacent to creek channels is sensitive to the natural environment, that natural topography and vegetation is preserved along the creek, and that construction activities do not disrupt or pollute waterways.

Vegetation communities that occur in the project area include coast live oak woodland and riparian, non-native grassland, landscaped areas, valley oak savannah, eucalyptus groves, acacia groves, individual willows and seasonal wetlands.

Wetlands, waters, and vernal pools are sensitive natural communities that are evaluated below under Impact “c”.

Coast live oak riparian occurs along Peterson Creek and Forestview Creek. The dominant species is coast live oak (*Quercus agrifolia*), with some valley oak (*Quercus lobata*), and black oak (*Quercus kelloggii*). Understory vegetation is comprised of non-native grassland. Valley oak savannah occurs on the west side of Fulton Road north of Quail Hollow Drive. The dominant species is valley oak in an open canopy setting with a non-native grassland understory. Riparian habitat is not present on the lands located in project areas within unincorporated County of Sonoma.

The project would require vegetation and tree removal and/or trimming within riparian habitat during construction of storm drain improvements within Forestview Creek and Peterson Creek. Therefore, construction of the project would have a significant impact on riparian habitat.

Construction activities would also require the potential removal of approximately 34 coast live oak trees and valley oaks along the alignment. The oak trees potentially impacted range in size from approximately 4 to 46 inches in diameter at breast height and are located throughout the alignment. Although the project would not result in the removal of an entire oak woodland area, numerous individual native oak trees would be removed. Native oak trees are identified in both the City and County General Plans as trees that should be preserved and regenerated. Therefore, the impact on oak trees and oak woodlands is significant.

Following construction, operation of the Project would not require ground disturbance that would result in potential impacts to riparian habitat or other sensitive natural communities. Therefore, no operational impact would occur.

### *Mitigation*

Mitigation Measure BIO-6 would reduce the impact of construction activities on riparian habitat and native oak trees to a less-than-significant level by requiring riparian and oak planting and monitoring to ensure no loss of habitat.

**Mitigation Measure BIO-6: Compensate for Loss of Riparian and Oak Woodland Vegetation**

The City shall retain a licensed landscape architect or qualified biologist to develop a riparian and oak woodland revegetation plan for the project. The revegetation plan shall include replanting riparian vegetation and oak trees (either on-site or off-site but in the local watershed and woodland areas) at a minimum of 2:1 ratio.

This may include removing non-native invasive species from riparian corridors and adjacent areas and revegetating riparian corridors with native species to enhance aquatic and terrestrial habitat. Native, locally available and genetically appropriate riparian plant materials shall be selected for planting. Oak regeneration shall be prioritized to occur within existing oak woodland areas near the project site, with oak trees replaced at a minimum of 2:1 ratio.

The goal of such a plan shall be to ensure no net loss of functional value of riparian and oak woodland habitat. The plan shall include planting requirements, monitoring requirements, and an adaptive management strategy, and the City shall implement the plan's provisions. Riparian restoration plantings and oak plantings shall be monitored annually for a minimum of 5 years after project completion to ensure that the replacement plantings have developed and survive.

**c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (Less than Significant with Mitigation)**

A wetlands assessment is being performed to identify areas that could be considered potential jurisdictional wetlands and waters of the U.S. as defined by the U.S. Army Corps of Engineers. Waters of the U.S. fall into two categories: 1) wetlands and 2) other waters. Wetlands include marshes, meadows, seep areas, floodplains, basins, and other areas experiencing extended seasonal soil saturation. Seasonally or intermittently inundated features such as seasonal pools, ephemeral streams, and tidal marshes are categorized as wetlands if they have hydric soils and support wetland plant communities. Other waters include water bodies and watercourses such as rivers, streams, lakes, springs, ponds, coastal waters, and estuaries. Seasonally inundated water bodies or watercourses that do not exhibit wetland characteristics are classified as other waters.

The project would require temporary disturbance and permanent fill of approximately 0.146 acre of seasonal wetlands, consisting of approximately 0.054-acre of roadside wetland ditch and approximately 0.092-acre of seasonal wetland, both of which are located adjacent to the west side of Fulton Road north of Peterson Creek. The roadside wetland ditch is approximately 513 feet in length and conveys storm water from surrounding residential areas south towards Peterson Creek. The majority of the roadside ditch is approximately 4 feet wide, with one section approximately 8 feet wide. The other seasonal wetland is approximately 200 feet in length and approximately 20 feet in width.

The project would also require the fill of approximately 0.038-acre of non-wetland ditch (considered other jurisdictional waters) located adjacent to the west side of Fulton Road north of Peterson Creek. The non-wetland ditch is approximately 1,650 feet in length and approximately 4 feet in width, with one section approximately 5 feet wide.

The construction of new and replacement storm drain culverts and rock slope protection within Forestview Creek would result in approximately 600 square feet of temporary impacts and

approximately 400 square feet of permanent impact, the majority of which would be associated with the replacement of rock slope protection within the channel. The construction of new and replacement storm drain culverts and rock slope protection within Peterson Creek and adjacent other waters of the U.S. would result in approximately 750 square feet of temporary impacts and approximately 500 square feet of permanent impact, the majority of which would be associated with the replacement of rock slope protection. Impacts to the seasonal wetlands and other jurisdictional waters would be significant.

### *Mitigation*

Mitigation Measure BIO-7 would reduce the impact of the project on wetlands and other waters to a less-than-significant level by ensuring that no net loss in wetlands occurs, that disturbed areas are restored, and that riparian areas are re-established.

#### Mitigation Measure BIO-7: Compensate for Loss of Wetlands and Waters

The City shall avoid fill of seasonal wetlands and waters, to the extent feasible. If fill cannot be avoided, the City shall compensate for the loss of seasonal wetland habitat through the purchase of wetland credits in an approved mitigation bank within the Santa Rosa Plain so that there is no net loss in wetlands. The City shall also compensate for impacts to creeks and other waters, including:

- Removal of sediments and foreign materials deposited by construction activities from jurisdictional waters.
- Restoration of disturbed waters or stream gradients to original contour and hydrologic condition, to the extent feasible.
- Bank stabilization prior to the onset of winter using erosion and sediment control best management practices.
- Required permits from the U.S. Army Corp of Engineers, the North Coast Regional Water Quality Control Board, the California Department of Fish and Game, and the Sonoma County Water Agency shall be received prior to the start of any on-site construction activity. The City shall ensure any additional measures outlined in the permits are implemented.

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

Policy OSC-D-3 of the City General Plan directs the City to preserve and restore the elements of wildlife habitats and corridors.

Fulton Road is considered an existing barrier to CTS movement between areas west of the roadway in the Santa Rosa Plain and more urbanized areas east of the roadway. Refer to impact “a” for additional analysis of CTS.

Peterson Creek and Forestview Creek provide movement corridors for aquatic wildlife, such as western pond turtle. The riparian corridor adjacent to Peterson Creek and Forestview Creek is also likely used by terrestrial wildlife, such as raccoon, striped skunk and deer.

The daylighted section of Peterson Creek begins at Piner High School on the east side of Fulton Road. Urban design in the 1950’s culverted and fed the storm drains into Peterson Creek (Brady,

Personal Communication 2017). Migratory and rearing habitat for steelhead is present in the lower reaches of Piner Creek and in Paulin Creek, however, the habitat within the urban areas, such Forestview and Peterson Creeks, is limited and not diverse enough to support migratory and rearing habitat for steelhead (Santa Rosa 2013a). Although a suitable canopy cover occurs along the western portion of the creek that may provide habitat for fish, the confluence of Peterson Creek with Santa Rosa Creek contains a grouted riprap bottom and a drop in elevation that may present a barrier to migrating fish.

The headwaters for Forestview Creek begin at Peterson Lane Park, which is in a residential area located approximately 0.25 mile northeast of the project site. The creek is a channelized waterway that flows under Fulton Road. Aquatic habitat west of the project area includes pools within creek shelter limited to overhanging blackberry and a few boulders. A possible fish barrier is present at the confluence with Petersen Creek (Santa Rosa 2013a).

The project would require work in and adjacent to creek channels which could temporarily impede movement of native resident or migratory aquatic species. Therefore, construction could have a significant impact on wildlife movement.

Following construction, movement by wildlife would still occur similar to existing conditions, and no impediment to movement corridors would occur. Therefore, no operational impact would occur.

### *Mitigation*

Implementation of Mitigation Measures BIO-2, BIO-3, BIO-6, and BIO-7, would reduce impacts to native resident or migratory fish or other wildlife species through selection of work timeframes to avoid migration periods and by providing bypass and/or relocation of special-status aquatic species during construction activities. The impacts would be less than significant.

**Mitigation Measure BIO-2: Protect California Tiger Salamander**

**Mitigation Measure BIO-3: Protect Western Pond Turtle**

**Mitigation Measure BIO-6: Compensate for Loss of Riparian and Oak Woodland Vegetation**

**Mitigation Measure BIO-7: Compensate for Loss of Wetlands and Waters**

**e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (Less than Significant with Mitigation)**

The Santa Rosa General Plan (Santa Rosa 2009a), Citywide Creek Master Plan (Santa Rosa 2013a), Santa Rosa Design Guidelines (Santa Rosa 2005) and Sonoma County General Plan (Sonoma County 2008) contain numerous goals, policies and action items to protect biological resources. The policies require conservation of wetlands and waterways so that there is no net loss of wetlands, preservation of significant vegetation, trees, and biotic habitats, and ensuring construction within and adjacent to creek channels and riparian corridors is sensitive to the natural environment.

Because implementation of the project would potentially conflict with applicable City policies and ordinances protecting biological resources, as identified in the previous impact discussions regarding special-status species, riparian vegetation, and wetlands, the impact is considered significant.

In addition, the City's tree ordinance (Santa Rosa City Code Chapter 17-24, Ordinance 2858) and the County's tree ordinance (County Code Chapter 26D, Ordinance 3651) apply to street trees and other trees within the City and County. A tree is defined in the City's tree ordinance as any woody plant having a single trunk circumference of 12.5 inches or more, or a diameter of 4 inches or more or a combination of multiple trunks having a total circumference of 25¼ inches or more, or a total diameter of 8 inches or more. A tree is defined in the County's requirements as a large woody plant which ordinarily has a central trunk and at maturity exceeds a height of 14 feet. The City and County ordinances also identify and define other protected tree types, including heritage, landmark, and street trees. As described in the Project Description, approximately 80 trees would be removed along the project corridor to accommodate construction of the project, as well as additional non-native exotic black and green wattle trees of various sizes. The majority of trees potentially impacted would qualify as trees subject to the City and County tree ordinances. Exceptions would include approximately 11 fruit trees located along the corridor that may potentially be removed, as well as approximately 50 black and green wattle trees of various sizes. The impact on non-exempt trees is significant.

Following construction, operation of the project would not require ground disturbance or other activities that would conflict with policies or ordinances protecting biological resources. Therefore, no operational impact would occur.

### *Mitigation*

Mitigation Measures BIO-1 through BIO-8 would ensure that implementation of the project would not conflict with City and County policies and ordinances protecting biological resources, as explained above under Impacts "a" through "d".

**Mitigation Measure BIO-1: Avoid Loss of Sensitive Plant Species**

**Mitigation Measure BIO-2: Protect California Tiger Salamander**

**Mitigation Measure BIO-3: Protect Western Pond Turtle**

**Mitigation Measure BIO-4: Prevent Disturbance to Nesting Birds**

**Mitigation Measure BIO-5: Prevent Disturbance of Roosting Bats**

**Mitigation Measure BIO-6: Compensate for Loss of Riparian and Oak Woodland Vegetation**

**Mitigation Measure BIO-7: Compensate for Loss of Wetlands and Waters**

**Mitigation Measure BIO-8: Comply with City and County Tree Ordinance**

The City shall replace any heritage, landmark, or other protected trees in accordance with tree replanting requirements indicated in Santa Rosa Municipal Code Chapter 17-24 and Sonoma County Code Chapter 26D. Replacement trees shall be planted within the project area; however, if the project area is inadequate in size to accommodate the replacement trees, the trees shall be planted on public property with the approval of the Director of the City's Planning and Economic Development Department, the Sonoma County Planning Department, or through payment of in-lieu fees.

**f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (No Impact)**

No adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan exists for the project area. The project area west of Fulton Road is included within the Santa Rosa Plain Conservation Strategy (SRPCS) study area. Several local jurisdictions, including the City of Santa Rosa, have adopted the SRPCS Agreement that supports the conservation approach set forth in the Strategy and recognizes that a number of important implementation issues still need to be finalized before the Strategy can be put into full effect. An implementation plan has yet to be finalized for the Strategy. No impact would occur.

As summarized in Impact “a” above, with implementation of Mitigation Measures BIO-1 and BIO-2, which requires protection of endangered plants and California tiger salamander, the project would not be in conflict with the SRPCS Agreement. No impact would occur.

## 3.5 Cultural Resources

| | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? | | | | ✓ |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | | ✓ | | |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | ✓ | | |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | | ✓ | | |

The CEQA Guidelines define a historical resource as: (1) a resource listed in the California Register of Historical Resources; (2) a resource included in a local register of historical resources, as defined in the California Public Resources Code (PRC) Section 5020.1(k), or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (3) any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Built environment historical resources are evaluated in impact "a" below. Historic-period archaeological resources are evaluated in impact "b" below.

### 3.5 a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? (No Impact)

A Historical Resources Technical Report was prepared to evaluate the potential effects of the project on the built environment (Interactive Resources 2017). The report evaluated whether any existing historical resources as defined by CEQA are located within or immediately adjacent to the project, and assessed the potential impacts the project may have on such resources. Archival research and review of City of Santa Rosa and Sonoma County inventories of historical resources did not identify any known historical properties within the project area. Fourteen properties located adjacent to the project corridor were identified as including built environment resources that were constructed over fifty year ago. Each of the properties was assessed for potential historic eligibility for listing in the city, county and state inventories. None of the properties were found to possess sufficient historical significance and integrity for listing. Because no identified built environmental historical resources are located within the project area, no impact on such a resource would occur.

Prehistoric and historic-period archaeological resources are evaluated in "b" below.

### 3.5 b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? (Less than Significant with Mitigation)

Consistent with General Plan policy HP-A-1, an Archaeological Resources Study was prepared for the project (ASC 2017). The study assessed the potential for surficial and/or buried archaeological resources in the project area through completion of the following:

- records and literature search at the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS);
- further literature review of publications, files, and maps for ethnographic, historic-era, and prehistoric resources and background information;
- communication with the Native American Heritage Commission (NAHC) to request a review of the Sacred Lands File and contact information for the appropriate tribal communities,
- contact with appropriate local Native American tribes; and
- pedestrian archaeological survey of the project area.

Additionally, the City has consulted with local Native American tribes pursuant to AB52 and General Plan policy HP-A-4. Refer to Section 3.17, Tribal Cultural Resources.

The records and literature search found no previously recorded archaeological resources within the project-related area of potential effect. One prehistoric and one historic-era archaeological resource was found to have been recorded within a 0.25-mile search radius. The pedestrian archaeological survey identified no archaeological resources on the surface within the project area of potential effect.

Background research indicated a moderate sensitivity for prehistoric archaeological resources on the surface near Peterson Creek, and a moderate sensitivity for historic-era archaeological resources on the surface within the project area of potential effect. The area's sensitivity for buried prehistoric archaeological resources near Peterson Creek was also found to be moderate.

There is a moderate possibility that unrecognized surficial resources or subsurface archaeological deposits are present within the project area. Prehistoric and historic-era resources may be obscured by colluvium, alluvium, vegetation, modern built environment, or other factors. If as-of-yet unknown archaeological materials that qualify as a historical resource or unique archaeological resource as defined by CEQA are encountered during construction activities, a significant could occur.

#### *Mitigation*

Mitigation Measure CR-1 would reduce the impact to archaeological resources to a less-than-significant level because a procedure to address discovery of unanticipated resources and to preserve and/or record those resources consistent with appropriate laws and requirements would be implemented. Implementation of Mitigation Measure CR-1 would also ensure consistency with General Plan policies regarding protection of Native American heritage.

> **Mitigation Measure CR-1: Protect Archaeological Resources during Construction Activities**
>
> In the event that any subsurface archaeological features or deposits, including locally darkened midden soil, are discovered during construction-related earth-moving activities, all ground-disturbing activity in the vicinity of the resource shall be halted, a qualified professional archaeologist shall be retained to evaluate the find, and the appropriate

tribal representative(s) shall be notified. If the find qualifies as a historical resource or unique archaeological resource as defined by CEQA, the archaeologist shall develop appropriate measures to protect the integrity of the resource and ensure that no additional resources are affected.

**3.5 c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (Less than Significant with Mitigation)**

A paleontological records search was performed for the project (Finger 2016). The search included a review of the University of California Museum of Paleontology (UCMP) database and geologic mapping of the project area. Older alluvium has yielded vertebrates in Sonoma County and throughout California. Such older alluvium deposits may be located below the Holocene deposits in the project area. The possibility of encountering a paleontological resource during construction cannot be completely discounted, therefore, the impact related to the potential disturbance or damage of previously undiscovered paleontological resources, if present, is considered potentially significant.

***Mitigation***

Mitigation Measure CR-2 would reduce the impact of construction activities on potentially unknown paleontological resources to a less-than-significant level by addressing discovery of unanticipated buried resources and preserving and/or recording those resources consistent with appropriate laws and requirements.

**Mitigation Measure CR-2: Protect Paleontological Resources during Construction Activities**

In the event that fossils are encountered during construction (i.e., bones, teeth, or unusually abundant and well-preserved invertebrates or plants), construction activities shall be diverted away from the discovery within 50 feet of the find, and a professional paleontologist shall be notified to document the discovery as needed, to evaluate the potential resource, and to assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the material, if it is determined that the find cannot be avoided. The paleontologist shall make recommendations for any necessary treatment that is consistent with currently accepted scientific practices. Any fossils collected from the area shall then be deposited in an accredited and permanent scientific institution where they will be properly curated and preserved.

**3.5 d) Disturb any human remains, including those interred outside of formal cemeteries? (Less than Significant with Mitigation)**

While there is no indication of human remains within the project area, the possibility of encountering archaeological resources that contain human remains cannot be discounted (ASC 2017). Therefore, the impact related to the potential disturbance or damage of previously undiscovered human remains, if present, is considered potentially significant.

***Mitigation***

Mitigation Measure CR-3 would reduce the impact of construction activities on potentially unknown human remains to a less-than-significant level by addressing discovery of unanticipated remains, associated grave goods, or items of cultural patrimony consistent with appropriate laws and

requirements. Implementation of Mitigation Measure CR-3 would also ensure consistency with General Plan policies regarding protection of Native American heritage.

### Mitigation Measure CR-3: Protect Human Remains If Encountered during Construction

If human remains, associated grave goods, or items of cultural patrimony are encountered during construction, work shall halt in the vicinity of the find and the County Coroner shall be notified immediately. The following procedures shall be followed as required by Public Resources Code § 5097.9 and Health and Safety Code § 7050.5. If the human remains are determined to be of Native American origin, the Coroner shall notify the Native American Heritage Commission within 24 hours of the determination. The Native American Heritage Commission shall then notify the Most Likely Descendant (MLD), who has 48 hours to make recommendations to the landowner for the disposition of the remains. A qualified archaeologist, the City and the MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of any human remains and associated or unassociated funerary objects. The agreement would take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, and final disposition of the human remains and associated or unassociated funerary objects.

## 3.6 Geology and Soils

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

**a, i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. (Less than Significant)**

The project is not located within an active Alquist-Priolo fault mapped by the California Geological Survey (CGS 1983). Santa Rosa General Plan Figure 12-3 (Geologic and Seismic Hazards) identifies a potentially active fault crossing Fulton Road near Guerneville Road, and indicates displacement having occurred between 700,000 and 2 million years ago (Santa Rosa 2009a). While it is possible that this fault could rupture, it is considered unlikely over the life of the project.

Additionally, the project does not include structures designed for human occupancy. The impact would be less than significant.

**a, ii) Strong seismic ground shaking? (Less than Significant)**

Future strong seismic shaking is anticipated in the area over the life of the project. However, the project does not include structures designed for human occupancy, and reconstruction of the existing roadway would not increase the exposure of people or structures to the risks associated with strong seismic groundshaking. The impact would be less than significant.

**a.iii, a.iv, c, d) Liquefaction, landslides, or otherwise unstable soils? (Less than Significant)**

A draft Geotechnical Study Report was prepared for the project (RGH 2017). The study evaluated subsurface conditions in the project area through completion of geotechnical borings and laboratory analysis. The geotechnical report prepared for the project indicates that the portion of Fulton Road explored is generally underlain by about 5 to 5.5 inches of asphalt pavement over approximately 16 to 20 inches of aggregate base. The subgrade soils encountered were generally sandy clays of low to medium plasticity and moderate expansion potential, and to a lesser degree, clayey sands of low expansion potential. Borings completed outside of the roadway indicate that the portion of the proposed widened roadway is blanketed by 2 to 3 feet of weak, porous, compressible, clayey sands. Porous soils become weak and compressible as their moisture content increases towards saturation. These soils exhibited low expansion potential. (RGH 2017)

Mapping of liquefaction susceptibility in the San Francisco Bay Region indicates a moderate liquefaction potential near Fulton Road and Guerneville Road, and low liquefaction potential over the remainder of the project area (USGS 2006). Mapping of landslide distributions in the San Francisco Bay Region indicates that the project is located in an area of few landslides (USGS 1998).

As described in Section 1.5, “Environmental Protection Actions Incorporated into the Project,” as part of the project design process, a California-registered Geotechnical Engineer was engaged to conduct a design-level geotechnical study for the project. The project will be designed and constructed in compliance with the site-specific recommendations made in the project’s geotechnical report. This will include design in accordance with recommendations for site preparation, grading, stripping, excavations, fill quality and placement, pavement sections, asphalt overlay, compactions, moisture barriers, retaining walls, and other factors. The geotechnical recommendations will be incorporated into the final plans and specifications for the project, and will be implemented during construction. Therefore, geologic and soil impacts would be less than significant.

**b) Result in substantial soil erosion or the loss of topsoil? (Less than Significant with Mitigation)**

Construction activities would include clearing, grading, excavation, concrete and asphalt cutting and removal, trenching, dewatering and other activities within and adjacent to the existing roadway, including work within portions of Forestview Creek, Peterson Creek, and other jurisdictional waters. If not properly managed, construction activities could result in substantial soil erosion or loss of topsoil. The impact is considered significant.

Following construction, disturbed areas would be restored, rock slope protection would be in place at the storm water outfalls, and no additional ground disturbance would occur. Therefore, no operational impact would occur.

### *Mitigation*

As described in Section 3.9, Hydrology and Water Quality, Mitigation Measure HWQ-2 would mitigate potential soil erosion impacts from construction activities to a less-than-significant level by ensuring implementation of erosion control best management practices and compliance with applicable waste discharge requirements.

**Mitigation Measure HWQ-2: Storm Water Control Measures during Construction**

See Section 3.9, Hydrology and Water Quality.

**e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? (No Impact)**

The project would not involve the use of septic tanks or other alternative wastewater disposal systems. No impact would occur.

## 3.7 Greenhouse Gas Emissions

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

In June 2012, the City of Santa Rosa adopted a community Climate Action Plan (CAP) which examines community-wide sources of greenhouse gas (GHG) emissions, identifies reduction targets, and outlines strategies for reducing emissions (Santa Rosa 2012). The CAP applies to both private and public projects, including projects that are part of the City's capital improvement program. As provided in the BAAQMD's comment letter on the CAP's SEIR, the City's CAP meets the programmatic threshold for a Qualified GHG Reduction Strategy established by the BAAQMD guidelines. According to the *Bay Area Air Quality Management District CEQA Air Quality Guidelines*, a project that is consistent with an adopted qualified greenhouse gas reduction strategy can be presumed to have less-than-significant greenhouse gas emission impacts.

In August 2013, the city also adopted the *Municipal Operations Climate Action Plan* (Santa Rosa 2013b). The Municipal Operations CAP identifies strategies that the city can use to reduce municipal greenhouse gas emission and help meet the reduction targets established by the city for municipal operations.

**a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment (Less than Significant with Mitigation)**

The evaluation of whether the project would generate GHG emissions in a manner that would impact the environment is based on the project's consistency with applicable GHG reduction strategies identified in the Santa Rosa CAP. Based on a review of the Santa Rosa CAP, the measures that are applicable to the project include: Measure 1.4-Tree Planting and Urban Forestry; Measure 1.5-Cool Roofs and Pavements; Measure 3.6-Traffic Calming; Measure 4.1-Bicycle and Pedestrian Network; and Measure 4.2-Transit System Improvements. An evaluation of the project's compliance with the applicable measures and implementing actions is provided below.

**Measure 1.4-Tree Planting and Urban Forestry**

CAP Measure 1.4 includes planting and maintaining trees on private property, streets, and open space areas. Implementing Actions 1.4.2 and 1.4.3 require compliance with the City's tree preservation ordinance and the provision of street trees. Street trees would be planted consistent with the Santa Rosa Major Existing Tree Program street tree list for Fulton Road, as well as planting of other tree species on the City's master list that are adaptive to structural soils and bioretention areas. However, as described in the Project Description, numerous trees would need to be removed along the project corridor to accommodate construction of the project. The impact is considered significant.

**Measure 1.5-Cool Roofs and Pavements**

CAP Measure 1.5 includes the use of cool paving materials with a high solar reflectivity for new sidewalks, crosswalks, and parking lots. As described in Section 1.5, "Environmental Protection Actions Incorporated into the Project," Environmental Protection Action 3 requires the use of cool paving materials for new sidewalks and crosswalks associated with the project. Therefore, the project would be compliant with CAP Measure 1.5.

**Measure 3.6-Traffic Calming**

CAP Measure 3.6 includes providing traffic calming measures to encourage people to walk or bike instead of drive. Implementing Action 3.6.1 includes design features such as bulb-outs, median barriers, and striped crosswalks to improve pedestrian convenience and encourage pedestrian and bicycle travel. The project will include continuous sidewalks and bicycle lanes on both sides of the roadway, planted medians and planting strips with trees between the road and sidewalk to buffer pedestrian from traffic and help define the street space, as well as a new pedestrian crosswalk and signal between Piner High School and Youth Community Park. Such improvements are consistent with CAP Measure 3.6 and would encourage and facilitate safer bicycle and pedestrian circulation in the project area.

**Measure 4.1-Bicycle and Pedestrian Network**

CAP Measure 4.1 includes improving the bicycle and pedestrian network in Santa Rosa. Implementing Action 4.1.1 requires implementation of the City's Bicycle and Pedestrian Master Plan. The project would provide Class II bike lanes in both directions of travel, consistent with the City's Bicycle and Pedestrian Master Plan. Therefore, the project would be compliant with CAP Measure 4.1.

**Measure 4.2-Transit System**

CAP Measure 4.2 includes improving transit systems within Santa Rosa, while implementing Action 4.2.2 includes improving the quality and safety of bus stops. The project includes improvements to bus stops along Fulton Road, including the reconstruction of several existing bus stops to be ADA accessible and the inclusion of bus shelters, as well as several new bus stops along the roadway. The project would improve the quality of bus stops and the local pedestrian network. Therefore, the project would be compliant with CAP Measure 4.2.

**Measure 9.2-Construction Emissions**

CAP Measure 9.2 seeks to reduce emissions from construction equipment. Implementing Actions 9.2.1, 9.2.2, and 9.2.3 include reducing emissions from construction equipment by limiting idling, properly maintaining equipment, and utilizing cleaner fuels, equipment, and vehicles. As described in Section 1.5, "Environmental Protection Actions Incorporated into the Project," Environmental Protection Action 3 would require provisions in contractor agreements for minimizing idling time to 5 minutes or less during construction, requiring construction equipment to be maintained per specifications established by the manufacturer, and using electric equipment and/or equipment using alternative fuels as feasible and appropriate. Therefore, the project would be compliant with CAP Measure 9.2 and related implementing actions.

### *Mitigation*

As described in Section 3.4, Biological Resources, Mitigation Measure BIO-8 would require compliance with the City's tree preservation ordinance, including the planting of additional replacement trees on or off site or the payment of in lieu fees for trees that cannot be

accommodated as part of the project design. With implementation of Mitigation Measure BIO-8, the project would be compliant with CAP Measure 1.4 and related implementing actions. With implementation of this measure, the project would be designed and constructed in a manner that is consistent with the City's adopted CAP, reducing potential impacts due to GHG emissions to a less-than-significant level.

### Mitigation Measure BIO-8: Comply with City and County Tree Ordinance

See Section 3.4, Biological Resources.

**b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (Less than Significant)**

General Plan goal OSC-M and policy OSC-M-1 direct the City of Santa Rosa to meet local, regional and state targets for reduction of GHG emissions through implementation of the CAP. As summarized in impact "a", the City's CAP is considered a qualified GHG Reduction Strategy, as established by the BAAQMD's guidelines and consistent with State CEQA Guidelines Section 15183.5. The CAP would meet CARB's initial Scoping Plan recommendation that local agencies reduce community-wide emissions to 15 percent below 2005 levels by 2020. The CAP would achieve community-wide emission reductions that are consistent with AB 32's state-wide emission reduction goal for 2020. Finally, the CAP will set the City on a trajectory to achieve the state GHG reduction target set by Executive Order S-3-05 of reducing GHG emissions to 80 percent below 1990 levels by 2050. The project would be consistent with the Santa Rosa CAP and, by extension, the requirements of AB 32 and CARB's Scoping Plan adopted to achieve the emission reduction requirements of AB 32. Therefore, the project would comply with General Plan goal OSC-M and policy OSC-M-1 and would have a less-than-significant impact.

In addition to the City's CAP and General Plan, the City's Municipal Operations CAP identifies GHG reduction opportunities related to public lighting that are generally applicable to the project. Public lighting options identified in the Municipal Operations CAP that would reduce GHG emissions includes the retrofitting of existing streetlights with induction or LED fixtures. The project would use LED fixtures for street lighting which would retrofit the existing street lights along Fulton Road in the project area. Therefore, the proposed street lighting would be consistent with applicable measures identified in the Municipal Operations CAP.

## 3.8 Hazards and Hazardous Materials

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

**a,b) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or upset and accident conditions? (Less than significant)**

Construction of the project would include the transport and use of common hazardous materials inherent to the construction process, including petroleum products for construction equipment and vehicles, and paints, asphalt materials, concrete curing compounds, and solvents for construction of project improvements. These materials are commonly used during construction, are not acutely hazardous, and would be used in relatively small quantities.

In addition to the above-mentioned materials, construction would require the removal and disposal of existing storm drain pipe. In the event that the storm drain pipe to be removed consists of asbestos-containing material, removal and disposal of the pipe would require compliance with health and safety protocols and acceptance by a State-approved disposal facility.

Caltrans and the California Highway Patrol (CHP) regulate the transportation of hazardous materials and wastes, including container types and packaging requirements, as well as licensing and training for truck operators, chemical handlers, and hazardous waste haulers. The California Division of Occupational Safety and Health (Cal-OSHA) also enforces hazard communication program regulations which contain worker safety training and hazard information requirements, such as procedures for identifying and labeling hazardous substances, communicating hazard information related to hazardous substances and their handling, and preparation of health and safety plans to protect workers and employees.

Project construction would be required to implement storm water best management practices during construction in accordance with the State Water Resources Control Board General Construction Storm Water Permit. Best management practices addressing materials management would be required, including proper material delivery and storage, spill prevention and control, and management of concrete and other wastes.

Because the city and its contractors would be required to comply with existing and future hazardous materials laws and regulations and applicable best management practices addressing the transport, storage, use, and disposal of hazardous materials, the potential to create a significant hazard to the public or the environment during construction of the project would be less than significant.

Following construction, operation of the project would not result in the need for new hazardous materials that would need to be transported, used, or disposed. No operational impact would occur.

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

Piner High School, Northwest Prep Charter School, and Lytton Rancheria Education Center are located within one-quarter mile of the project site. Construction activities are assumed to include the use of hazardous materials such as fuels, lubricants, degreasers, paints, and solvents. These materials are commonly used during construction, are not acutely hazardous, and would be used in small quantities. Numerous laws and regulations ensure the safe transportation, use, storage, and disposal of hazardous materials (see Impact a & b above). Although construction activities could result in the inadvertent release of small quantities of hazardous construction chemicals, a spill or release at a construction area is not expected to endanger individuals at nearby schools given the nature of the materials and the small quantities that would be used. Therefore, because the City and its contractors would be required to comply with existing and future hazardous materials laws

and regulations covering the transport, use, and disposal of hazardous materials, and because of the nature and quantity of the hazardous materials to be potentially used by the project, the impact related to the use of hazardous materials during construction within one-quarter mile of a school would be less than significant.

**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? (Less than Significant with Mitigation)**

The provisions in Government Code Section 65962.5 are commonly referred to as the "Cortese List." A search of the Cortese List was completed to determine if any known hazardous waste sites have been recorded on or adjacent to the project alignment.

The project is not located on a hazardous materials site compiled pursuant to Government Code Section 65962.5. However, three properties located along the project corridor are known to have had releases of hazardous substances and/or petroleum products associated with historical uses. Such adjoining uses include a dry cleaning facility located within the Fulton Market Place Shopping Center and two gasoline stations located on the southeast and northeast corners of the Fulton Road/Guerneville Road intersection.

The former dry cleaning facility is located approximately 300 feet west of Fulton Road. A *Fourth Quarter 2016 Groundwater Monitoring Report* for the site indicates that the groundwater contamination plume associated with the former dry cleaning facility has not migrated to the east in the direction of Fulton Road (ADR Environmental Group 2017). Given that the contamination plume is located approximately 300 feet west of ground-disturbing activities, that monitoring has indicated the groundwater direction is to the southwest away from the project area and contamination has not migrated to the east, soil or groundwater contamination associated with the former dry cleaning site is not anticipated to be encountered during construction.

The gasoline stations located on the southeast and northeast corners of the Fulton Road/Guerneville Road intersection included the release of petroleum products to soil and groundwater. Corrective actions have been completed at both gasoline stations, and no further action letters have been issued for both sites by the North Coast Regional Water Quality Control Board (NCRWQCB 2012; 2017). Ground-disturbance in the vicinity of the gasoline stations near the Fulton Road/Guerneville Road intersection would include excavations associated with utility undergrounding, as well as clearing of existing landscape and removal of existing concrete flatwork. Given that residual contamination may be encountered in soil and/or groundwater during ground-disturbance work immediately adjacent to these land uses, the impact is considered significant.

### *Mitigation*

Implementation of Mitigation Measure HAZ-1 would reduce the potential for a hazardous waste-related impact from former potentially contaminated sites to a less-than-significant level, because it would require the proper handling and disposal of hazardous wastes per applicable local, state and federal regulations and/or guidelines.

#### Mitigation Measure HAZ-1: Handling and Disposal of Hazardous Wastes

The City and its contractor shall prepare and implement a Soil and Groundwater Management Plan for excavation and dewatering activities in the vicinity of the Fulton Road/Guerneville Road intersection (between approximately STA 12+00 and 15+00 on

the project plans). Elements of the Soil and Groundwater Management Plan shall include, but would not necessarily be limited to, the following:

- Measures to address hazardous materials and other worker health and safety issues during construction, including the specific level of protection required for construction workers. This shall include preparation of a site-specific health and safety plan in accordance with federal OSHA regulations (29 CFR 1910.120) and Cal-OSHA regulations (8 CCR Title 8, Section 5192) to address worker health and safety issues during construction.
- Monitoring of excavation activities for soil and groundwater contamination. Monitoring shall include, at minimum, visual and organic vapor monitoring by personnel with appropriate hazardous materials training, including 40 hours of Hazardous Waste Operations and Emergency Response (HAZWOPER) training. If visual or organic vapor monitoring indicates signs of suspected contaminated soil, then soil and groundwater samples shall be collected and analyzed to characterize soil and water quality.
- Groundwater brought to the surface as a result of construction dewatering shall be handled in a manner appropriate to construction-related permits for dewatering. If contamination is suspected or noted during the construction phase, then the groundwater shall be containerized and analyzed for contamination by a laboratory, certified by the California Environmental Protection Agency (CalEPA) Environmental Laboratory Accreditation Program (ELAP), using United States Environmental Protection Agency (USEPA)-approved analytical methods. If contaminated groundwater is encountered, precautions shall be taken to assure that the installation of piping or other construction activities do not further disperse contamination.
- All potentially contaminated materials encountered during project construction activities shall be evaluated in the context of applicable local, state and federal regulations and/or guidelines governing hazardous waste. All materials deemed to be hazardous shall be remediated and/or disposed of following applicable regulatory agency regulations and/or guidelines. Disposal sites for both remediated and non-remediated soils shall be identified prior to beginning construction. Management of these sites shall be documented in a Material Management Plan acceptable to applicable agencies. All evaluation, remediation, treatment, and/or disposal of hazardous waste shall be supervised and documented by qualified hazardous waste personnel.

**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 for people residing or working in the project area? (No Impact)**

The project is not located within the jurisdictional boundaries of the Sonoma County Comprehensive Airport Land Use Plan (Sonoma County 2016), or within two miles of the Charles M. Schulz-Sonoma County Airport. No impact would occur.

**f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? (No Impact)**

The project is not located within two miles of a private airport. Therefore, no potential safety hazards associated with airports would occur.

**g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (No Impact)**

The City's adopted Emergency Operations Plan (Santa Rosa 2013c) does not designate specific evacuation routes or emergency shelter locations, or include policies or procedures with which the project would conflict. Therefore, the project would not impair implementation of or physically interfere with the plan. No impact would occur.

**h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? (No Impact)**

The project is not located within the Santa Rosa Wildland Urban Interface zone, or within a CAL FIRE designated fire hazard severity zone (Santa Rosa 2009a, CAL FIRE 2008). No impact would occur.

## 3.9 Hydrology and Water Quality

| | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a) Violate any water quality standards or waste discharge requirements? | | ✓ | | |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | | | ✓ | |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off- site? | | | ✓ | |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off- site? | | | ✓ | |
| e) 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? | | | ✓ | |
| f) Otherwise substantially degrade water quality? | | | ✓ | |
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | | | | ✓ |
| h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | | | | ✓ |
| i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | | | | ✓ |
| j) Inundation by seiche, tsunami, or mudflow? | | | | ✓ |

**a,c,e,f) Violate water quality standards or waste discharge requirements, alter drainage patterns in a manner which results in erosion or siltation, exceed the capacity of drainage systems, or degrade water quality? (Less than Significant with Mitigation)**

Project-related construction activities would disturb greater than one acre of soil. Construction activities would include clearing, grading, excavation, concrete and asphalt cutting and removal, trenching, dewatering and other activities within and adjacent to the existing roadway, including storage of materials and equipment within staging areas. Construction activities would include work within portions of Forestview Creek, Peterson Creek, and other jurisdictional waters for installation of new and reconstructed storm drain facilities. If not properly managed, construction activities could result in erosion and sedimentation, as well the discharge of chemicals and materials, such as concrete, mortar, asphalt, fuels, and lubricants to storm drains and waterways. Applicable water quality standards and waste discharge requirements could be violated, and polluted runoff could substantially degrade water quality. The impact is considered significant.

As proposed, the project would be designed, constructed, and operated to meet the requirements of the City's Storm Water Low Impact Development Technical Design Manual. This includes the installation of bioretention areas adjacent to the roadway that would be sized to treat non-point source pollutants and runoff flows. The bioretention areas would be located along the majority of both sides of Fulton Road between the sidewalk and the curb and gutter and would function as a soil and plant-based infiltration feature to treat storm water. Therefore, the project would comply with the applicable requirements contained within the City's National Pollutant Discharge Elimination System (NPDES) storm water permit, as well as storm water policies contained within the City's General Plan for preserving drainage capacity and protecting water quality. The project would also install rock slope protection at and downstream of new and reconstructed storm drain culvert outfalls in Forestview Creek and Peterson Creek. The placement of rock slop protection generally helps to further dissipate storm water flows and to minimize the potential for downstream erosion or siltation. The operational impact would be less than significant.

### *Mitigation*

Implementation of Mitigation Measure HWQ-1, HWQ-2, HWQ-3, BIO-6, and BIO-7 would mitigate potential impacts on water quality standards and waste discharge requirements from construction activities to a less-than-significant level by ensuring compliance with applicable waste discharge requirements and other permit requirements.

#### Mitigation Measure HWQ-1: Seasonal Work Restrictions

Construction activities within Forestview Creek and Peterson Creek shall be conducted during the dry season, May 15 through October 15, when the creeks are completely or almost without standing water.

#### Mitigation Measure HWQ-2: Storm Water Control Measures during Construction

The City shall obtain coverage under State Water Resources Control Board Order No. 2009-0009-DWQ, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities, as amended by Order No. 2012-0006. The City and/or its contractor shall submit permit registration documents (notice of intent, risk assessment, site maps, Storm Water Pollution Prevention Plan (SWPPP), annual fee, and certifications) to the State Water Resources Control Board. The SWPPP shall address pollutant sources, non-storm water discharges, best

management practices, and other requirements specified in the above-mentioned Order. The SWPPP shall also include dust control practices to prevent wind erosion, sediment tracking, dust generation by construction equipment, management of concrete slurry, asphalt, pavement cutting, and other street and road activities to avoid discharge to storm drains from such work. A Qualified Storm Water Pollution Prevention Plan Practitioner shall oversee implementation of the Plan, including visual inspections, sampling and analysis, and ensuring overall compliance.

### Mitigation Measure HWQ-3: Manage Construction Dewatering

If construction dewatering is required, the City and its contractor shall evaluate reasonable options for dewatering management that would avoid discharging to a local surface water or storm drain. The following management options shall be considered:

- Reuse the water on-site for dust control, compaction, or irrigation.
- Retain the water on-site in a grassy or porous area to allow infiltration/evaporation.
- Discharge (by permit) to a sanitary sewer.

If discharging to the sanitary sewer, the City shall comply with a one-time discharge permit or other type of approval requiring, as necessary, measures for characterizing the discharge and ensuring filtering methods and monitoring to verify that the discharge is compliant with the City's local wastewater discharge requirements.

If discharging to a local surface water or storm drain, the City shall obtain coverage under Order No. R1-2009-0045, Waste Discharge Requirements for Low Threat Discharges to Surface Waters in the North Coast Region. The City shall submit permit registration documents to the North Coast Regional Water Quality Control Board, including development of a Best Management Practices/Pollution Prevention Plan to characterize the discharge and to identify specific measures to control the discharge, such as sediment controls to ensure that excessive sediment is not discharged, and flow controls to prevent erosion and flooding downstream of the discharge. The City shall ensure that the contractor oversees implementation of the Best Management Practices/Pollution Prevention Plan during construction dewatering activities, including visual inspections and ensuring overall compliance.

### Mitigation Measure BIO-6: Compensate for Loss of Riparian and Oak Woodland Vegetation

See Section 3.4, Biological Resources.

### Mitigation Measure BIO-7: Compensate for Loss of Wetlands and Waters

See Section 3.4, Biological Resources.

**b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? (Less than Significant)**

Construction of the project may require temporary groundwater dewatering to create reasonably dry work areas. Temporary groundwater dewatering would involve the pumping of groundwater in a

localized area to lower the water level to just below the bottom of the excavation. Such temporary dewatering would have an effect on localized groundwater levels in the immediate vicinity of an excavation area. However, because construction would be temporary and would continually be shifting, prolonged lowering of the groundwater levels in any one location would not occur. Therefore, no substantial deficit in aquifer volume or well interference would be expected to occur. The construction-related impact on groundwater levels would be less than significant.

Following construction, the project would not utilize groundwater and would not result in an increase in population or employment that would indirectly increase groundwater demand. Therefore, the project would not create a deficit in aquifer volume or a lowering of water levels. As proposed, the project would be designed to meet the requirements of the City's Storm Water Low Impact Development Technical Design Manual, which would increase surface water infiltration adjacent to the roadway. Therefore, the small increase in impervious areas would not substantially interfere with groundwater recharge. The operational impact would be less than significant.

**d) Substantially alter the existing drainage pattern resulting in substantial erosion or siltation or flooding on- or off- site? (Less than Significant)**

As proposed, the project would be designed to meet the requirements of the City's Storm Water Low Impact Development Technical Design Manual, which would increase surface water infiltration adjacent to the roadway and minimize surface water runoff. The proposed project would not be expected to cause on- or off-site flooding given that post-construction runoff would be detained on site and limited to pre-construction runoff rates, and that proper installation and long-term maintenance of the storm water controls would be conditionally required. The impact would be less than significant.

**g,h,i) Place housing or structures within a 100-year flood hazard area or expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? (No Impact)**

The project is not located within a 100-year flood hazard area (FEMA 2008), and does not include the construction of housing or structures for human occupancy. Additionally, as illustrated on Figure 12-4 of the City of Santa Rosa General Plan, the project is not located within a dam inundation zone (Santa Rosa 2009a). No impact would occur.

**j) Inundation by seiche, tsunami, or mudflow? (No Impact)**

The project site is not located near a larger isolated body of water that may be affected by a seiche, within an area mapped as being at risk to tsunamis, or below steep slopes at risk to mudslides. No impact would occur.

## 3.10 Land Use and Planning

| | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a) Physically divide an established community? | | | | ✓ |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | | ✓ | | |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | | | | ✓ |

**a) Physically divide an established community? (No Impact)**

The project would improve Fulton Road consistent with the City General Plan and applicable City design guidelines. The project does not include new features that would divide an established community. The facilities proposed by the project would improve access for both vehicles and alternative modes of transportation in the project vicinity. No impact would occur.

Refer to Section 3.16, Transportation/Traffic, for a discussion of temporary construction-related impacts on the community.

**b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? (Less than Significant with Mitigation)**

The project would be consistent with the Santa Rosa General Plan which envisions Fulton Road as a four-lane regional/arterial street by 2035. The project would provide Class II bike lanes in both directions of travel and would improve the pedestrian network via the provision of connected sidewalks on both sides of the roadway along the entire segment. Specific Santa Rosa and Sonoma County General Plan policies adopted for the purpose of avoiding environmental effects are evaluated throughout this Initial Study under the corresponding issue areas; for example, policies related to biological resources are evaluated in Section 3.4 Biological Resources. Where potential inconsistencies are identified, environmental protection actions and/or mitigation measures are identified to ensure consistency. Therefore, a less than significant impact with mitigation would occur.

**c) Conflict with any applicable habitat conservation plan or natural community conservation plan? (No Impact)**

Refer to Impact "f" in Section 3.4, Biological Resources.

## 3.11 Mineral Resources

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

**a, b) 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, or a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? (No Impact)**

Under the Surface Mining and Reclamation Act, the State Geologist classifies areas into Mineral Resource Zones (MRZs). The project is not located in an area classified as MRZ-2, and therefore is not located in an area of known economic mineral deposits of value to the region or state (DMG 2013). No impact would occur.

The Santa Rosa General Plan directs the City to work with the County of Sonoma to encourage the conservation of mineral resources and the protection of access to such resources. The Sonoma County General Plan and the Sonoma County Aggregate Resources Management Plan do not identify MRZ-2 resource areas on or in the vicinity of the project site (Sonoma County 2008, Sonoma County 2010). No impact would occur.

## 3.12 Noise

| | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | | | ✓ | |
| b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels? | | ✓ | | |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | | | ✓ | |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | | ✓ | | |
| 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 expose people residing or working in the project area to excessive noise levels? | | | | ✓ |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | | | | ✓ |

**a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (Less than Significant)**

Section 17-16.120 of the City's Noise Ordinance limits noise levels produced by stationary mechanical equipment to 60 dBA during daytime hours (7:00 a.m. to 7:00 p.m.), to 55 dBA during evening hours (7:00 p.m. to 10:00 p.m.), and to 50 dBA at night (10:00 p.m. to 7:00 a.m.) at single-family residential property lines.

The City's Noise Ordinance does not regulate traffic noise on public roadways. The proposed project does not include new mechanical equipment noise sources that would expose existing noise-sensitive receptors surrounding the project site to noise. The impact would be less than significant.

Please refer to impact "c" and "d" below for additional evaluation of increases in ambient noise in comparison to standards established in the City and County General Plan.

**b) Exposure of persons to or generation of excessive ground borne vibration or groundborne noise levels? (Less than Significant with Mitigation)**

The construction of the project may generate perceptible vibration when heavy equipment or impact tools (e.g. jackhammers, hoe rams) are used. Construction activities would include site demolition, preparation work, foundation work, and new building framing and finishing. The proposed project is not expected to require pile driving.

For structural damage, the California Department of Transportation recommends a vibration limit of 0.5 in/sec Peak Particle Velocity (PPV) for buildings structurally sound and designed to modern engineering standards, which typically consist of buildings constructed since the 1990s. A conservative vibration limit of 0.3 in/sec PPV has been used for buildings that are found to be structurally sound but where structural damage is a major concern (see Appendix C for further explanation). For historical buildings or buildings that are documented to be structurally weakened, a conservative limit of 0.08 in/sec PPV is often used to provide the highest level of protection. No historical buildings or buildings that are documented to be structurally weakened adjoin the project site. However, for the purposes of this study, groundborne vibration levels exceeding the conservative 0.3 in/sec PPV limit have been selected as the significance threshold for a vibration impact.

Table 3.12-1 presents typical vibration levels that could be expected from construction equipment at a distance of 25 feet. Construction activities, such as drilling, the use of jackhammers, rock drills and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.) may generate substantial vibration in the immediate vicinity. Vibration levels would vary depending on soil conditions, construction methods, and equipment used.

### Table 3.12-1 Vibration Source Levels for Construction Equipment

| Equipment | | PPV at 25 feet (in/sec) | Approximate $L_V$ at 25 feet (VdB) |
|---|---|---|---|
| Pile Driver (impact) | upper range | 1.158 | 112 |
| | typical | 0.644 | 104 |
| Pile Driver (sonic) | upper range | 0.734 | 105 |
| | typical | 0.170 | 93 |
| Clam shovel drop | | 0.202 | 94 |
| Hydromill (slurry wall) | in soil | 0.008 | 66 |
| | in rock | 0.017 | 75 |
| Vibratory Roller | | 0.210 | 94 |
| Hoe Ram | | 0.089 | 87 |
| Large Bulldozer | | 0.089 | 87 |
| Caisson Drilling | | 0.089 | 87 |
| Loaded Trucks | | 0.076 | 86 |
| Jackhammer | | 0.035 | 79 |
| Small Bulldozer | | 0.003 | 58 |

Source: Federal Transit Administration 2006

For the purposes of calculating vibration levels, the distances provided here reflect the distances from the existing residential structures to the roadway right-of-way. To the east of Fulton Road, land uses include single-family residences spread throughout the project corridor, a multi-family residential building, a commercial building near the intersection at Guerneville Road, a pre-school located just north of Green Acre Lane, Piner High School, Lytton Rancheria Educational Center, and the Wild Rose Care Home at Quail Run. To the west of Fulton Road, land uses include single-family residences spread throughout the project corridor, a shopping plaza with commercial uses located south of Appletree Drive, a park and skatepark located opposite the high school, and the Church of Christ located between Quail Hollow Drive and Piner Road. The distances to the right-of-way and estimated vibration levels at those distances are summarized in Table 3.12-2.

As part of the proposed roadway widening improvement project, retaining walls will be constructed near Peterson Creek and Forestview Creek. Peterson Creek is located on either side of Fulton Road just north of the High School's baseball field. The proposed retaining wall at Peterson Creek would be constructed to the west of Fulton Road and would run along the edge of the concrete curb, and, on the northern side of the creek, the retaining wall would angle to the west as far as the public utility easement. The nearest sensitive receptor would be over 200 feet from the retaining wall construction. At this distance, retaining wall construction would generate vibration levels up to 0.021 in/sec PPV. The retaining wall at Forestview Creek would be constructed on either side of the walking path, as well as the southern side of the creek. The existing residence near the path would be within 15 to 20 feet from the construction area. At this distance, vibration levels produced by retaining wall construction would be up to 0.368 in/sec PPV.

From the results shown in the table, any structure within 20 feet of the right-of-way or within 20 feet of the proposed retaining wall at Forestview Creek would be exposed to vibration levels exceeding the 0.3 in/sec PPV threshold. This would be a significant impact.

### Table 3.12-2 Estimated Vibration Levels Measured at the Building Façades along the Fulton Road Corridor

| Land Use | Distance from Right-of-Way, feet | Maximum Vibration Level, in/sec PPV |
|---|---|---|
| Single-family residences | 15 to 190 feet east | 0.023 to 0.368 in/sec PPV |
| | 25 to 435 feet west | 0.009 to 0.210 in/sec PPV |
| Multi-family residence | 15 feet east | 0.368 in/sec PPV |
| Commercial building | 10 feet east | 0.575 in/sec PPV |
| | 25 to 60 feet west | 0.080 to 0.210 in/sec PPV |
| Pre-school building | 95 feet east | 0.048 in/sec PPV |
| Piner High School | 120 feet east | 0.037 in/sec PPV |
| Wild Rose Care Home | 40 feet east | 0.125 in/sec PPV |
| Park and Skatepark | Within 10 feet west | 0.575 in/sec PPV |
| Church of Christ | 110 feet west | 0.041 in/sec PPV |

#### *Mitigation*

Implementation of Mitigation Measure NOI-1 would reduce the temporary vibration impact on structures adjacent to the project corridor to a less-than-significant level by prohibiting the use of equipment and activities that results in substantial vibration or groundborne noise.

**Mitigation Measure NOI-1: Manage Construction and Restore Disturbed Areas**

The City shall prohibit the use of heavy vibration-generating construction equipment, such as vibratory rollers or the dropping of heavy objects, within 20 feet of a residence.

**c) Substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? (Less than Significant)**

The City and County General Plans were reviewed to identify whether any adopted policies should be used as a threshold of significance for ambient noise increases. Based on the review, Policy NS-B-14 of the City General Plan was identified as the most applicable threshold for the project. Policy NS-B-14 discourages new projects that have the potential to create ambient noise levels more than 5 dBA Day/Night Sound Level (DNL) above existing background within 250 feet of sensitive receptors. For reference, a 5 dBA DNL noise increase would be expected if the project would triple existing traffic volumes along a roadway.

To calculate the traffic noise increase at the adjacent land uses, acoustical models of the existing corridor and of the future corridor under project conditions were created using the Federal Highway Administration's (FHWA) Traffic Noise Model, version 2.5 (TNM). The future 2040 peak hour traffic volumes, which were provided for four segments of Fulton Road along the project corridor, were used as the inputs for both models. Existing sound walls, fences, and buildings were also added to the models. The TNM model for the existing noise environment was calibrated using the short-term noise measurements summarized in Appendix C, and the traffic volumes counted during the corresponding time intervals.

Table 3.12-3 summarizes the predicted results for the existing roadway alignment, the future alignment, and the calculated increase at each of short-term measurement locations and the modeled noise-sensitive receptors along the project corridor. A permanent noise level increase of 0 to 3 dBA would occur with the future Fulton Road expansion. This would be a less-than-significant impact.

### Table 3.12-3 Predicted Noise Level Results for Receptors along the Fulton Road Project Corridor

| Receptor | Predicted Noise Levels, dBA DNL | | Calculated Noise Level Increase, dBA |
|---|---|---|---|
| | Existing Alignment | Future Alignment | |
| Backyards of residences along Gamels Way | 62 to 64 dBA | 62 to 64 dBA | 0 dBA |
| Residences to the west of Fulton Road, just south of the church | 62 to 64 dBA | 64 to 67 dBA | 2 to 3 dBA |
| Backyards of residences along Quail Run | 61 to 65 dBA | 61 to 65 dBA | 0 dBA |
| Wild Rose Care Home at Quail Run | 68 dBA | 69 dBA | 1 dBA |
| Backyards and side yards of residences along Quail Hollow Drive | 63 dBA | 64 dBA | 1 dBA |
| Piner High School baseball field | 61 dBA | 61 dBA | 0 dBA |
| Residence to the east of Fulton Road, just south of Piner High School | 69 dBA[a] | 69 dBA[a] | 0 dBA |

| Receptor | Predicted Noise Levels, dBA DNL | | Calculated Noise Level Increase, dBA |
|---|---|---|---|
| | Existing Alignment | Future Alignment | |
| Side yards of residences along Jenes Lane | 63 to 68 dBA[a] | 63 to 70 dBA[a] | 0 to 2 dBA |
| Backyards of residences in the future Fox Hollow development | 58 to 65 dBA[a] | 59 to 65 dBA[a] | 0 to 1 dBA |
| Backyards of residences along Alegra Street | 61 to 63 dBA[a] | 61 to 63 dBA[a] | 0 dBA |
| Side yards of residences along Wishing Well Way | 60 to 63 dBA[a] | 61 to 63 dBA[a] | 0 to 1 dBA |
| Backyards of residences along Pomeroy Place | 64 to 71 dBA | 64 to 72 dBA | 0 to 1 dBA |
| Side yard of residence along Appletree Drive | 69 dBA | 69 dBA | 0 dBA |
| Residence to the west of Fulton Road, between Appletree Drive and Wishing Well Way | 60 dBA | 60 dBA | 0 dBA |
| Backyards of residences along Westvale Court | 69 to 70 dBA | 69 dBA | -1 to 0 dBA |
| Side yards of residences along a private driveway north of ST-12 | 69 dBA | 69 dBA | 0 dBA |

Note: [a] During calibration of the TNM model, a K-factor of +3 dBA was applied to these predicted levels.

**d) Substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project (Less than Significant with Mitigation)**

Noise impacts resulting from construction depend upon the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, and the distance between construction noise sources and noise-sensitive areas. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (e.g., early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction lasts over extended periods of time.

The proposed project is expected to begin in the fall of 2018 and would be completed within approximately 26 months. Initially, construction of the PG&E undergrounding of the overhead utilities along the project corridor would occur, followed by the roadway reconstruction process. Most of the construction would occur during the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday and 9:00 a.m. to 5:00 p.m. on Saturdays. However, nighttime construction is anticipated between the hours of 7:00 p.m. and 7:00 a.m. near the intersections of Fulton Road/Guerneville Road and Fulton Road/Piner Road. Up to 10 days of nighttime work would occur at each of these intersections.

The proposed project would include construction demolition, site preparation, excavation, clearing and grading. During each stage of construction, there would be a different mix of equipment operating, and noise levels would vary by stage and vary within stages, based on the amount of equipment in operation and the location at which the equipment is operating. However, no one receptor would be exposed to construction for the entire 26-month period, due to the length of the

project corridor and the fact that construction activities would advance along the corridor as the construction project proceeds.

The City of Santa Rosa does not define allowable construction hours in the General Plan or Municipal Code and does not define any specific construction noise limits. Typically, where construction noise levels exceed 60 dBA $L_{eq}$ at a residential land use or exceed 70 dBA $L_{eq}$ at a commercial land use and exceed the ambient noise environment by 5 dBA $L_{eq}$ or more for a period of more than one year, temporary construction noise would be considered a significant impact. These temporary noise thresholds are typically applied at property lines during daytime construction activities. For construction activities that occur at night, thresholds are based on the potential for sleep disturbance. As discussed in Appendix C, steady noises of sufficient intensity (above 35 dBA) and fluctuating noise levels above about 45 dBA would affect sleep. Assuming a 15 dBA exterior-to-interior reduction, which is typical for standard residential construction with windows open, sleep disturbance may result when exterior noise levels exceed 50 dBA $L_{eq}$ for steady noises and 60 dBA $L_{eq}$ for fluctuating noises. Therefore, a nighttime exterior noise threshold of 50 dBA $L_{eq}$ measured at the building façades, since all nighttime activities would occur indoors, would be used to assess a temporary noise impact at residential land uses. Sleep disturbance is not a concern at commercial land uses; therefore, the daytime threshold of 70 dBA $L_{eq}$ could also be used at night.

For the noise-sensitive land uses adjacent to the project corridor of this project, daytime ambient noise levels would range from 68 to 73 dBA DNL at a distance of 60 feet from the centerline of Fulton Road. During nighttime hours, ambient noise levels typically range from 59 to 71 dBA DNL at the same distance.

Construction activities generate considerable amounts of noise, especially during earth-moving activities when heavy equipment is used. The highest maximum noise levels generated by project construction would typically range from about 80 to 90 dBA $L_{max}$ at a distance of 50 feet from the noise source (see Table 3.12-4). Typical hourly average construction-generated noise levels for roadway projects are about 78 to 88 dBA $L_{eq}$ measured at a distance of 50 feet from the center of the site during busy construction periods (e.g., earth moving equipment, impact tools), as shown in Table 3.12-5. Shielding by buildings or terrain can provide an additional 5 to 10 dBA noise reduction at distant receptors.

Table 3.12-5 indicates that noise levels would typically range from 84 to 88 dBA $L_{eq}$ during busy construction periods at a distance of 50 feet from the center of the construction site for roadway construction projects. Considering the project corridor would share a property line with adjacent residences, the high school, the preschool, the care home, and the church, this range of construction levels would represent the worst-case scenario for construction noise at the land uses along the project corridor. Therefore, construction noise levels would exceed 60 dBA $L_{eq}$, and the ambient noise environment at each land use would be exceeded 5 dBA $L_{eq}$ or more during daytime hours. The commercial retail uses would be exposed to construction noise levels exceeding 70 dBA $L_{eq}$, and ambient noise levels at these locations would be exceed by 5 dBA $L_{eq}$ or more during daytime hours. Further, nighttime construction noise levels would exceed 50 dBA $L_{eq}$ at the nearby residences, and the ambient noise environment would be exceeded by more than 5 dBA $L_{eq}$ during nighttime construction activities. This would result in a potentially significant impact.

## Table 3.12-4 Construction Equipment, 50-foot Noise Levels

| Equipment Category | $L_{max}$ Level (dBA)[1,2] | Impact/Continuous |
|---|---|---|
| Arc Welder | 73 | Continuous |
| Auger Drill Rig | 85 | Continuous |
| Backhoe | 80 | Continuous |
| Bar Bender | 80 | Continuous |
| Boring Jack Power Unit | 80 | Continuous |
| Chain Saw | 85 | Continuous |
| Compressor[3] | 70 | Continuous |
| Compressor (other) | 80 | Continuous |
| Concrete Mixer | 85 | Continuous |
| Concrete Pump | 82 | Continuous |
| Concrete Saw | 90 | Continuous |
| Concrete Vibrator | 80 | Continuous |
| Crane | 85 | Continuous |
| Dozer | 85 | Continuous |
| Excavator | 85 | Continuous |
| Front End Loader | 80 | Continuous |
| Generator | 82 | Continuous |
| Generator (25 KVA or less) | 70 | Continuous |
| Gradall | 85 | Continuous |
| Grader | 85 | Continuous |
| Grinder Saw | 85 | Continuous |
| Horizontal Boring Hydro Jack | 80 | Continuous |
| Hydra Break Ram | 90 | Impact |
| Impact Pile Driver | 105 | Impact |
| Insitu Soil Sampling Rig | 84 | Continuous |
| Jackhammer | 85 | Impact |
| Mounted Impact Hammer (hoe ram) | 90 | Impact |
| Paver | 85 | Continuous |
| Pneumatic Tools | 85 | Continuous |
| Pumps | 77 | Continuous |
| Rock Drill | 85 | Continuous |
| Scraper | 85 | Continuous |
| Slurry Trenching Machine | 82 | Continuous |
| Soil Mix Drill Rig | 80 | Continuous |
| Street Sweeper | 80 | Continuous |
| Tractor | 84 | Continuous |
| Truck (dump, delivery) | 84 | Continuous |
| Vacuum Excavator Truck (vac-truck) | 85 | Continuous |
| Vibratory Compactor | 80 | Continuous |
| Vibratory Pile Driver | 95 | Continuous |
| All other equipment with engines larger than 5 HP | 85 | Continuous |

Note: [1] Measured at 50 feet from the construction equipment, with a “slow” (1 sec.) time constant.
[2] Noise limits apply to total noise emitted from equipment and associated components operating at full power while engaged in its intended operation.
[3] Portable Air Compressor rated at 75 cfm or greater and that operates at greater than 50 psi.

Table 3.12-5 Hourly Average Noise Levels for Construction Equipment at 50 feet

| | Domestic Housing | | Office Building, Hotel, Hospital, School, Public Works | | Industrial Parking Garage, Religious, Amusement & Recreations, Store, Service Station | | Public Works Roads & Highways, Sewers, and Trenches | |
|---|---|---|---|---|---|---|---|---|
| | I | II | I | II | I | II | I | II |
| Ground Clearing | 83 | 83 | 84 | 84 | 84 | 83 | 84 | 84 |
| Excavation | 88 | 75 | 89 | 79 | 89 | 71 | 88 | 78 |
| Foundations | 81 | 81 | 78 | 78 | 77 | 77 | 88 | 88 |
| Erection | 81 | 65 | 87 | 75 | 84 | 72 | 79 | 78 |
| Finishing | 88 | 72 | 89 | 75 | 89 | 74 | 84 | 84 |

Source: United States Environmental Protection Agency, 1973, Legal Compilation on Noise, Vol. 1, P. 2-104.

Note: I – All pertinent equipment present at site.
II – Minimum required equipment present at site.

Reasonable regulation of the hours of construction, as well as regulation of the arrival and operation of heavy equipment and the delivery of construction material, are necessary to protect the health and safety of persons, promote the general welfare of the community, and maintain the quality of life. Understanding that construction for the proposed project would limit exposure of any one receptor to extended construction noise due to the concentration of activities moving along the corridor throughout the 26-month period and that nighttime construction would be limited to 10 days at the Fulton Road/Guerneville Road and Fulton Road/Piner Road intersections, the impact would be significant.

### *Mitigation*

Implementation of Mitigation Measure NOI-2 would reduce the temporary construction noise impact on adjacent sensitive receptors to a less-than-significant level by requiring the implementation of noise control measures that would reduce construction-phase noise generation. The implementation of the controls outlined below would reduce construction noise levels emanating from the project corridor by 5 to 10 dBA, minimizing disruption and annoyance. In addition, given the linear nature of the project, construction activities would continually be shifting as utilities are undergrounded and then roadway re-construction begins. Because of the shifting of the construction activities, prolonged exposure of individual sensitive receptors to substantial construction noise would not occur. The impact following construction would be less than significant.

#### Mitigation Measure NOI-2: Manage Construction and Restore Disturbed Areas

The City shall require the contractor to adhere to the following Construction Best Management Practices to reduce construction noise levels emanating from construction activities and minimize disruption and annoyance at existing noise-sensitive receptors in the project vicinity.

- Limit construction hours to between 7:00 a.m. and 7:00 p.m., Monday through Friday, and to between 9:00 a.m. to 5:00 p.m. on Saturdays, where feasible.
- Limit nighttime usage of noisy equipment, and avoid scheduling multiple noisy pieces of equipment simultaneously to minimize noise.

- Minimize nighttime deliveries to the degree feasible.
- Implement a construction noise monitoring plan, which includes a provision for noise monitoring at the nearby receptors to confirm that nighttime construction noise levels meet nighttime noise level thresholds at the single- and multi-family residential land uses. Construction monitoring shall occur for the initial three days of construction at each intersection to show that the nighttime construction activities are compliant with the construction noise level thresholds (50 dBA Leq exterior noise level).
- Sensitive residential receptors identified by the noise monitoring with the potential to be exposed to nighttime construction noise levels of 50 dBA Leq or greater, shall be provided with vouchers for alternate accommodations for the duration of the nighttime construction phase.
- Construct temporary noise barriers, where feasible, to screen stationary noise-generating equipment. Temporary noise barrier fences would provide a 5 dBA noise reduction if the noise barrier interrupts the line-of-sight between the noise source and receiver and if the barrier is constructed in a manner that eliminates any cracks or gaps.
- Construction equipment should be well-maintained and used judiciously to be as quiet as possible. The contractor should use equipment with efficient noise-suppression devices, where feasible.
- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Unnecessary idling of internal combustion engines should be strictly prohibited.
- All jackhammers, chainsaws, and pavement breakers used on the construction site shall be enclosed with shields, acoustical barrier enclosures, or noise barriers
- Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors as feasible. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used to reduce noise levels at the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors.
- Utilize “quiet” models of air compressors and other stationary noise sources where technology exists. Select hydraulically- or electrically-powered equipment and avoid pneumatically-powered equipment, where feasible.
- Locate material stockpiles, as well as maintenance/equipment staging and parking areas, as far as feasible from residential receptors.
- Control noise from construction workers’ radios to a point where they are not audible at existing residences bordering the project site.
- The contractor shall prepare a detailed construction schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.
- Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine

the cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.

**e, f) Exposure of people residing or working near a private or public airport to excessive noise levels? (No Impact)**

The project is not sensitive to aircraft noise and is not located within two miles of a public or private airport. The closest airport is the Charles M. Schulz – Sonoma County Airport, which is located approximately 3.5 miles northwest of the project area. Therefore, the project would not expose people to excessive aircraft noise and no impact would occur.

## 3.13 Population and Housing

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

**a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? (No Impact)**

The project does not include new homes or businesses that would directly induce population growth in the project area. The project is consistent with the Santa Rosa General Plan which envisions Fulton Road as a four-lane regional/arterial street by 2035. Additionally, the project would not result in urban development outside of the City's Urban Growth Boundary, consistent with General Plan policy GM-A-1. Therefore, the project would not indirectly induce population growth in the project area. No impact would occur.

**b,c) Displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere? (No Impact)**

Approximately 3.04 acres of permanent right-of-way would be acquired as part of the project (i.e., fee-title acquisition, utility easements, and sidewalk easements). However, the project would not displace existing housing or people; therefore, no replacement housing would be needed. No impact would occur.

## 3.14 Public Services

| | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| 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? | | | | ✓ |
| Police protection? | | | | ✓ |
| Schools? | | | | ✓ |
| Parks? | | | | ✓ |
| Other public facilities? | | | | ✓ |

**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 public services? (No Impact)**

As discussed in Section 3.13, Population and Housing, implementation of the project would not induce population growth and, therefore, would not require expanded fire or police protection facilities to maintain acceptable service ratios, response times, or other performance objectives. The project would not result in an increase in the City's student population and, therefore, no new or expanded schools would be required. The project would not result in the increased use of existing parks and other public facilities as it would not induce population growth. The project would not require the expansion of recreational facilities to maintain acceptable service ratios or expansion of other public facilities. No impact on public services would occur.

## 3.15 Recreation

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

**a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (Less than Significant)**

Construction activities would occur adjacent to and within a portion of Youth Community Park. Construction activities would not disturb the existing skate park or the existing pedestrian path adjacent to the skate park within Youth Community Park. Access to the park is expected to remain open during construction activities occurring adjacent to the park.

Given that Youth Community Park would remain accessible for recreational use during construction, and given the number of other existing parks and recreational options available in the project vicinity, construction activities would not be expected to divert park visitors to a different park such that an increase in visitation causes physical damage or requires additional levels of maintenance.

Following construction, disturbed areas within Youth Community Park would be restored, and the project would not directly or indirectly induce population growth in the project area (see Section 3.13, Population and Housing). Therefore, the use of existing neighborhood and regional parks or other recreational facilities would not change as a result of the project. The impact would be less than significant.

**b) Include or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? (No Impact)**

As summarized in Section 3.13, Population and Housing, the project would not directly or indirectly induce population growth in the project area. Therefore, the project would not result in the need for new or expanded recreational facilities. No impact would occur.

## 3.16 Transportation/Traffic

| | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | | ✓ | | |
| b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? | | | | ✓ |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | | | | ✓ |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | | | ✓ |
| e) Result in inadequate emergency access? | | ✓ | | |
| f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? | | ✓ | | |

**a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? (Less than Significant with Mitigation)**

No specific measures of effectiveness have been identified in adopted plans that apply to temporary construction traffic and activity. For example, Level of Service (LOS) standards are intended to regulate long-term impacts from operation of future projects, as opposed to temporary impacts from construction. Although no construction-related conflict would occur, given the extent

of construction activities necessary for the project, additional analysis is provided assessing the potential for construction to substantially decrease the performance and safety of the roadway.

**Construction**

During construction, the normal functionality of Fulton Road in the project area would be altered due to the need for temporary lane closures. In addition, construction would result in additional vehicle trips by construction workers, supply trucks, and haul trucks travelling to and from active portions of the project corridor. The number of construction-related vehicles traveling to and from the project site would vary on a daily basis, however, as indicated in Table 1.3-1 (Estimated Haul Volumes and Truck Trips), over 4,500 haul truck trips are anticipated over the course of construction. The increased construction traffic, in combination with normal traffic and lane closures, would decrease the performance and safety of the roadway, most notably during peak commute hours. Construction activities would create potential conflicts between construction vehicles and cars, school buses, and bicyclists / pedestrians sharing roadways; confusion or frustration of drivers related to construction activities and lane closures; and confusion of bicyclists and pedestrians due to temporary alterations in bicycle and pedestrian access and circulation. Work performed on the segment adjacent to Piner High School could also result in conflicts and delays if overlapping with the beginning and end of school days. The construction-related impact would be significant.

**Operation**

The segment of Fulton Road that would be modified by the project is within City limits and is therefore under jurisdiction of the City of Santa Rosa. The project would not conflict with the Santa Rosa General Plan 2035 which indicates that Fulton Road would be improved as a four-lane Regional/Arterial Street by 2035. Additionally, the City General Plan states:

> *"General Plan policies support construction of roadway improvements to accommodate new developments, and improve motor vehicle LOS on congested roadways. General Plan policies also encourage alternative modes of transportation be incorporated into the city circulation network which adhere to Complete Street objectives."*

As contained in the General Plan, the City aims to maintain LOS D, or better, operation along all major corridors. The proposed project does not include any aspects that would generate trips that could potentially degrade the existing levels of service or other travel demand measures of the network; rather, the project would add capacity to an existing facility and would therefore improve operation of the surrounding roadway network.

Traffic counts collected in April 2015 indicate that the segment of Fulton Road between Guerneville Road and Piner Road carries approximately 1,900 vehicles during the morning peak hour and 2,100 vehicles during the evening peak hour. Segment volumes for the horizon year 2040 were obtained from Sonoma County's gravity demand model maintained by the Sonoma County Transportation Authority (SCTA), and compared to existing volumes. The model indicates that the segment is projected to carry approximately 2,030 vehicles during the morning peak hour and 2,300 vehicles during the evening peak hour; this translates to about a seven percent traffic increase during the morning peak period and a ten percent increase during the evening peak period. The proposed project would increase the existing capacity of the roadway, making it adequate to accommodate the expected growth in traffic on the roadway while maintaining an LOS D in accordance with General Plan policies. Therefore, no operational impact would occur.

### *Mitigation*

Mitigation Measure TR-1 would reduce the temporary impact of construction activities on roadway functionality to a less-than-significant level by requiring the City to develop and implement appropriate traffic controls.

**Mitigation Measure TR-1: Traffic Controls**

The City shall require the project contractor to develop and implement a temporary Traffic Control Plan outlining work zones, activities, and time needed to complete the work in each zone. As stated in the "Traffic Standards" section of the City's Design and Construction Standards, no work shall be completed in the public right-of-way during peak hours, unless permitted by the City Traffic Engineer. The project shall keep at least one lane open in each direction of travel on Fulton Road at all times during the construction process. Work performed on the segment adjacent to Piner High School shall be scheduled to occur during the summer months when school is in recess to minimize impacts to school operations, or outside of normal drop-off and pick-up hours.

**b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? (No Impact)**

In 1997, the SCTA relinquished its position as the Congestion Management Agency of Sonoma County. As there is no applicable congestion management program, no impact would occur. Nevertheless, the project is included in the Comprehensive Transportation Plan for the County (SCTA 2009), and no conlficts with County transportation plans would occur.

**c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? (No Impact)**

The proposed project does not contain any feature or characteristic that would result in a change in air traffic patterns nor would any features be of sufficient height to affect air traffic. No impact would occur.

**d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (No Impact)**

The project would not pose hazards and/or safety concerns resulting from sharp curves as the segment of Fulton Road that would be modified is straight and flat. The project adheres to all local design and construction standards, and therefore, would not increase hazards due to a design feature. The project would provide a median along the majority of the segment to separate the directions of travel. The project would also provide left-turn lanes and two-way left-turn lanes, which would be expected to increase safety by providing a separate space for turning movements to occur without impeding through-traffic, and all sight lines have been found to be acceptable. Furthermore, the project would provide dedicated facilities for pedestrians and cyclists. No impact would occur.

**e) Result in inadequate emergency access? (Less than significant with mitigation)**

Construction activities would primarily occur within the public right-of-way, including travel lanes on Fulton Road, sidewalks, and other areas designated as right-of-way. During construction, the normal functionality of Fulton Road in the project area would be altered due to the need for

temporary lane closures. The impact would only occur during the day when construction is ongoing given that vehicle access would be restored at the end of each workday through the use of steel trench plates or trench backfilling. However, the lane closures could result in delays for emergency response vehicles or temporarily block access to driveways and cross-streets along the pipeline route. The impact would be significant.

Following construction, the project would be expected to improve overall emergency access as the added lanes would provide more space for emergency response vehicles to go around stopped vehicles and because it would add capacity, thereby reducing congestion that affects emergency response times. The proposed intermittent medians may make turning movements along portions of the corridor more difficult for larger fire response vehicles, however, such conditions are common along roadways with intermittent center medians. In such cases, emergency response vehicles may cross over medians or navigate around medians through oncoming traffic lanes. The operational impact would be less than significant.

### *Mitigation*

Mitigation Measure TR-2 would reduce the temporary impact of construction activities on emergency access to a less-than-significant level by requiring the City and its contractors to have ready at all times the means necessary to accommodate access by emergency vehicles, as well as notifying emergency responders in advance of construction activities.

> **Mitigation Measure TR-2: Maintain Emergency Access and Notify Emergency Responders**
>
> The City shall require contractors to provide adequate emergency access to all properties along the corridor during the construction process. At locations where the access to a nearby property is temporarily blocked, the contractor shall be required to have ready the means necessary to accommodate access by emergency vehicles to such properties, such as plating over excavations. As construction progresses, emergency providers shall be notified in advance of the timing, location, and duration of construction activities and the locations and durations of any temporary lane closures.

**f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? (Less than Significant with Mitigation)**

**Construction**

The project would not impact Piner High School bus service as access to the school would be maintained at all times and all school bus loading and unloading would continue to occur on campus, out of the construction zone. In addition, Mitigation Measure TR-1 requires that work performed on the segment adjacent to Piner High School be scheduled to occur during the summer months when school is in recess to minimize impacts to school operations, or outside of normal drop-off and pick-up hours.

Project-related construction activities would temporarily impact existing bus stops for City Bus Route 11 and transit riders. Additionally, the project has the potential to temporarily impact access for pedestrians and bicyclists during construction. The impact would be significant.

**Operation**

There are existing Class II bike lanes on Fulton Road between Guerneville Road and Piner Road; however, sidewalks are sporadic on the east side of the roadway and non-existent in many

locations on the west side. The project would provide Class II bike lanes in both directions of travel (consistent with the current configuration). The project would not conflict with the Santa Rosa Bicycle and Pedestrian Master Plan (Santa Rosa 2010) and would improve the pedestrian network via the provision of connected sidewalks on both sides of the roadway along the entire segment. The proposed sidewalks would be six feet wide and separated from the bike lanes and travel lanes by an approximately eight-foot planter area. Additionally, as part of the project, a Pedestrian Hybrid Beacon (HAWK) signal and crosswalk would be provided near Piner High School and Youth Community Park as counts collected in October 2016 indicated the need for a means to cross Fulton Road at this location. The facilities proposed by the project would improve access for alternative modes in the project vicinity and would not conflict with General Plan policies which encourage alternative modes of transportation. No operational impact would occur.

### *Mitigation*

Mitigation Measure TR-3 would reduce the temporary impact of construction activities on the performance and safety of public transit, bicycle, and pedestrian facilities to a less-than-significant level by ensuring the maintenance of adequate and safe access during construction.

#### Mitigation Measure TR-3: Reduce Construction Impacts on Transit, Bicycle, and Pedestrian Facilities

The City shall ensure that pedestrian and bicycle access and circulation shall be maintained during project construction where safe to do so. Where it is unsafe to maintain pedestrian and bicycle facilities at their current location, temporary signage will be used to guide users to alternate temporary paths. Temporary signage and other traffic control measures necessary to inform users of construction conditions shall be utilized. Any transit stops impacted by construction shall be temporarily relocated (with proper signage) within the temporary construction zone, if necessary, to maintain the existing transit service throughout the segment.

## 3.17 Tribal Cultural Resources

| | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **Would the project:** | | | | |
| a) Cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historic Resources, or in a local register of historic resources as defined in Public Resources Code section 5020.1(k)? | | ✓ | | |
| b) Cause a substantial adverse change in the significance of a tribal cultural resource that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe. | | ✓ | | |

The CEQA Guidelines define tribal cultural resources as: (1) a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American Tribe that is listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or (2) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code Section 5024.1(c), and considering the significance of the resource to a California Native American tribe.

**a,b) Cause a substantial adverse change in the significance of a tribal cultural resource? (Less than Significant with Mitigation)**

On November 30, 2016, the City notified the Federated Indians of Graton Rancheria, the Lytton Rancheria of California, and the Middletown Rancheria of Pomo Indians of California regarding the project in accordance with Assembly Bill 52 (AB52). Each of the three tribes replied within 30 days of the notification letter. The Federated Indians of Graton Rancheria and the Lytton Rancheria of California requested consultation for the project under AB52. The Middletown Rancheria of Pomo Indians of California did not have comments on the project and did not request consultation.

As described in Section 3.5, Cultural Resources, an Archaeological Resources Study was prepared for the project (ASC 2017). The study included: a records and literature search at the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS); communication with the Native American Heritage Commission (NAHC) to request a review of the Sacred Lands File; additional contact with appropriate local Native American tribes; and a pedestrian archaeological survey of the project area. The records and literature search found no

previously recorded cultural resources within the project-related area of potential effect. One prehistoric archaeological resource and a historic-era resource were found to have been recorded within a 0.25-mile search radius. The pedestrian archaeological survey identified no archaeological resources on the surface within the project area of potential effect.

On February 6, 2017, the City shared the Archaeological Resources Study report with the Federated Indians of Graton Rancheria and the Lytton Rancheria of California as part of the consultation process. On March 1, 2017, a telephone conversation was held between Buffy McQuillen, Tribal Heritage Preservation Officer for the Federated Indians of Graton Rancheria, and Christopher Catbagan, Project Manager for the City of Santa Rosa. During the conversation, Ms. McQuillen expressed concern that tribal cultural resources could be inadvertently discovered during ground-disturbing activities adjacent to the Youth Community Park and the Fox Hollow Subdivision site, both of which are located on the west side of Fulton Road in the project area.

If as-of-yet unknown tribal cultural resources are encountered during construction activities, a significant impact could occur.

### *Mitigation*

Implementation of Mitigation Measure TCR-1 would reduce the potential impact to tribal cultural resources to a less-than-significant level because a construction monitoring procedure to address discovery of unanticipated resources consistent with appropriate laws and requirements would be implemented. The actions summarized in Mitigation TCR-1 have been developed and agreed to by the City and applicable Native American Tribes during the AB52 consultation process. Implementation of Mitigation Measure TCR-1 would also ensure consistency with General Plan policies for protecting Native American heritage.

**Mitigation Measure TCR-1: Protect Tribal Cultural Resources during Construction Activities**

The City shall retain a Native American monitor from the Federated Indians of the Graton Rancheria to monitor construction related earth-moving activities of the project in the vicinity of Youth Community Park and the Fox Hollow Subdivision sites. In the event that any subsurface features or deposits are discovered during such monitoring that the Native American monitor identifies as potential tribal cultural resources, all ground-disturbing activity in the vicinity of the resource shall be halted. If the find qualifies as a tribal cultural resource as defined by CEQA, the City shall ensure that appropriate actions to protect the resource are taken and that no additional resources are affected.

## 3.18 Utilities and Service Systems

| | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| c) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | | | ✓ | |
| d) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | | ✓ |
| e) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | | ✓ |
| f) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | | | | ✓ |
| g) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | | | | ✓ |
| h) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | | | ✓ | |
| i) Comply with federal, state, and local statutes and regulations related to solid waste? | | | ✓ | |

**a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? (Less than Significant)**

During construction, dewatering operations may be necessary to provide a dry work area. Groundwater encountered during construction activities may potentially be conditioned to be discharged to the City's wastewater collection system, which would then convey the water to the City's Laguna Treatment Plant. Prior to any such discharges, the construction contractor would be required to obtain and implement a one-time wastewater discharge permit from the City of Santa Rosa. Because the discharge of groundwater to the Laguna Treatment Plant would be temporary in nature and would not substantially alter existing wastewater characteristics or result in the need for new treatment methods, the impact would be less than significant.

Following construction, the project would not alter existing wastewater characteristics or result in the need for new treatment methods. In addition, the project would not directly or indirectly induce population growth in the community and would not increase the amount of wastewater generated.

Therefore, the project would not cause an exceedance of wastewater treatment requirements. No operational impact would occur.

**b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (No Impact)**

The project would not result in an increase in the generation of wastewater or result in an increase in water demands or water supplies. Therefore, the project would not require or result in the construction of other facilities or expansion of existing facilities outside of those included and analyzed in this document. No impact would occur.

**c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (No Impact)**

The project includes new storm water drainage facilities, including roadside bioretention areas in accordance with the City's Storm Water Low Impact Development Technical Design Manual and storm water facility improvements within Forestview Creek and Peterson Creek. The potential environmental impacts associated with construction of the new storm water drainage facilities are evaluated as part of this Initial Study. The following subjects are related to the proposed storm water drainage facilities, and are evaluated in other sections of this Initial Study:

- Potential impacts related to biological resources are evaluated in Section 3.4, Biological Resources.
- Potential impacts related to cultural resources are evaluated in Section 3.5, Cultural Resources.
- Potential impacts related to hydrology and water quality are evaluated in Section 3.9, Hydrology and Water Quality.

No additional storm water drainage facilities or expansion of existing facilities beyond those identified in the project description and evaluated in this Initial Study would be required. Therefore, no additional impact would occur.

**d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? (No Impact)**

During construction, City of Santa Rosa water supplies could potentially be used for dust control and other activities. Construction-related water demands would be short-term and minimal in volume and would be sufficiently served by existing entitlements. Following construction, the project would not directly or indirectly induce population growth and would not result in an increased demand for water. Therefore, no new entitlements or facilities would be required. No impact would occur.

**e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? (No Impact)**

Refer to Impact "a" for a discussion of potential discharges of groundwater to the Laguna Treatment Plant during construction.

Following construction, the project would not directly or indirectly induce population growth and would not increase the amount of wastewater generated. The project would include re-location of an existing sewer pipeline along a portion of Fulton Road, however, the relocated pipeline would not increase wastewater generation or capacity. Because there would be no increase in wastewater discharges, the project would not impair the ability of the Laguna Treatment Plan to continue serving existing commitments. No impact would occur.

**f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? (Less than Significant)**

Construction of the project would result in a temporary increase in solid waste disposal needs associated with demolition and construction wastes. Construction wastes would include, but not be limited to, demolished asphalt pavement, concrete, tree removals, and excavated soils. Construction waste with no practical reuse or that cannot be salvaged or recycled would be disposed of at a local landfill. Active permitted in-County landfills include the Redwood Sanitary Landfill (26 million cubic yards remaining capacity), Potrero Hills Landfill (13.9 million cubic yards remaining capacity), Vasco Road Landfill (8 million cubic yards remaining capacity), and Keller Canyon Landfill (63.4 million cubic yards remaining capacity) (CalRecycle 2016). Solid waste generated by the project would represent a small fraction of the daily permitted tonnage of these facilities. Therefore, the project's construction-related solid waste disposal needs would be sufficiently accommodated by existing landfills, and the impact would be less than significant.

Following construction, project operation would not generate additional solid waste. No operational impact would occur.

**g) Comply with federal, state, and local statutes and regulations related to solid waste? (Less than Significant)**

The City of Santa Rosa has entered into a franchise agreement to provide construction and demolition debris collection service within the City in accordance with Municipal Code Chapter 9-12. The existing franchise agreement requires that the franchisee recycle 50 percent of all construction and demolition debris collected within the City. Compliance with applicable statutes and regulations regarding construction waste would be conditionally required as part of project. Therefore, no impact would occur.

No applicable federal solid waste regulations would apply to the project. At the State level, the Integrated Waste Management Act mandates a reduction of waste being disposed and establishes an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. The project would not conflict with or impede implementation of such programs.

Following construction, project operation would not generate additional solid waste. Therefore, no operational impact would occur.

## 3.19 Mandatory Findings of Significance

| | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| a) Does the project have the potential to 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? | | ✓ | | |
| 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)? | | ✓ | | |
| c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly? | | | ✓ | |

**a) Does the project have the potential to 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? (Less than Significant with Mitigation)**

As evaluated in this IS/MND, the 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 an endangered, rare, or threatened species; or eliminate important examples of the major periods of California history or prehistory.

Environmental protection actions are in place (see Section 1.5, Environmental Protection Actions Incorporated into the Project, of this IS/Proposed MND) to reduce impacts related to air quality, biological resources, geologic hazards, and greenhouse gas emissions. Additionally, mitigation measures are listed herein to reduce impacts related to aesthetics, biological resources, cultural resources, greenhouse gases, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, transportation/traffic, and tribal cultural resources. With implementation of the required mitigation measures, impacts would be less than significant.

**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)? (Less than Significant with Mitigation)**

Cumulative impacts are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines Section 15355). Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. This IS/proposed MND utilizes the "plan" approach, per CEQA Guidelines Section 15130(d), to determine if the project as a whole makes a considerable contribution to a significant cumulative impact. Cumulative impacts have been identified using the summary of projections contained in the Santa Rosa General Plan 2035 Draft and Final EIR (Santa Rosa 2009a and 2009b).

The General Plan 2035 Final EIR identified significant cumulative impacts related to transportation, air quality/climate change, and biological resources (Santa Rosa 2009b). Each of these cumulative impacts is summarized in more detail below.

### *Transportation Impacts*

Significant unavoidable transportation impacts were identified in the General Plan Final EIR related to increased traffic volumes, delay, and decreases in level of service along Highway 101 and other city roadways, including Wright Road and Stony Point Road in western Santa Rosa.

Implementation of the project would not contribute to congestion identified in the General Plan Final EIR. Level of service standards regulate long-term impacts due to future development and do not typically apply to temporary construction-related traffic. As described in Section 3.16, Transportation and Traffic, the project would increase the existing capacity of Fulton Road, making it adequate to accommodate the expected growth in traffic on the roadway while maintaining an LOS D in accordance with General Plan policies. The project would not conflict with the Santa Rosa General Plan 2035 which indicates that Fulton Road would be improved as a four-lane Regional/Arterial Street by 2035. Therefore, the project as a whole would not contribute to this cumulative impact.

### *Air Quality and Climate Change Impacts*

The General Plan Final EIR identified significant and unavoidable impacts relative to new development increasing population and vehicle miles travelled (VMT) at a rate greater than and inconsistent with the *2005 Bay Area Ozone Strategy*, which was the applicable regional air quality plan at the time of publication. In 2010, the Bay Area Air Quality Management District (BAAQMD) updated the *2005 Bay Area Ozone Strategy* and adopted the *Bay Area 2010 Clean Air Plan* (BAAQMD 2010). The City's General Plan 2035 growth forecasts were incorporated into the *Bay Area 2010 Clean Air Plan*. Therefore, the General Plan population and growth rates are no longer inconsistent with the regional Clean Air Plan.

The General Plan Final EIR also identifies a significant unavoidable impact related to implementation of state or local goals for reducing GHG emissions or generating GHG emissions that would exceed any applicable threshold of significance. As described in Section 3.7, Greenhouse Gas Emissions, the project would be designed and constructed in a manner that is consistent with the City's adopted CAP. Therefore, the project as a whole would not contribute to this cumulative impact.

The General Plan Final EIR also identified a significant cumulative impact related to air toxics and objectionable odors. The cumulative impact was reduced to a less-than-significant level through mitigation requiring new sensitive uses located near high volume traffic routes to utilize air conditioning filtration systems. Implementation of the project does not include any new sensitive uses or sources of objectionable odors, and would not result in increases in long-term traffic beyond those accounted for the in the General Plan. Therefore, the project would not contribute to this cumulative impact.

### *Biological Resources Impacts*

A significant biological resources impact was identified in the General Plan Final EIR related to conflicts with local, regional, or State habitat conservation plans for California tiger salamander. With implementation of Mitigation Measure BIO-2, which requires protection of California tiger salamander in accordance with the Santa Rosa Plain Conservation Strategy or any other subsequent guidance adopted by the USFWS, the project impact on California tiger salamander would be less than significant. Therefore, the project as a whole would not contribute to this cumulative impact.

No other significant cumulative impacts were identified in the General Plan Final EIR. Therefore, the project as a whole would not contribute to any significant cumulative impacts.

**c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly? (Less than Significant)**

As discussed in the analysis above, the project would not have environmental effects that would cause substantial adverse direct or indirect effects on human beings.

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# Appendices

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# Appendix A - Right-of-Way and Easements

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# Appendix A Summary of Right-of-Way Acquisition and Easements

It is anticipated that fee-title acquisition of right-of-way would be required at two locations along portions of the project corridor. Utility and sidewalk easements and temporary construction easements would also be required at approximately 39 locations along the project corridor. A list of potentially affected parcels is provided below. The permanent right-of-way that would be acquired as part of the project (i.e., fee-title acquisition, utility easements, and sidewalk easements) amounts to approximately 3.04 acres.

**Fee-title Right-of-Way Acquisition**

152-050-003 – approximately 1.34 acre fee-title right-of-way acquisition from Piner High School

157-010-035 – approximately 0.05 acre fee-title right-of-way acquisition from Sonoma County Water Agency

**Permanent Utility Easements and Temporary Construction Easements**

| | |
|---|---|
| 152-240-066 | 157-010-005 |
| 152-240-065 | 157-010-033 |
| 152-050-003 | 157-010-032 |
| 034-121-053 | 157-010-031 |
| 034-121-052 | 157-070-51 |
| 034-121-030 | 157-070-50 |
| 034-121-044 | 157-070-49 |
| 034-121-039 | 157-070-48 |
| 034-121-043 | 157-030-001 |
| 034-121-064 | 034-091-024 |
| 034-131-001 | 034-091-023 |
| 034-131-003 | 034-091-022 |
| 034-131-005 | 034-091-021 |
| 157-050-008 | 034-091-027 |
| 157-010-035 | |

**Temporary Construction Easements Only**

| | |
|---|---|
| 034-121-068 | 034-210-001 |
| 034-200-004 | 034-210-016 |
| 034-200-03 | 034-210-017 |
| 034-200-002 | 034-210-018 |
| 034-200-001 | 157-020-009 |

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# Appendix B - Biological Resource Documentation

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# Appendix B Biological Resource Documentation

**Table 1: Potentially Occurring Special-Status Plant Species in the Study Area**

| ***Scientific Name*** **Common Name** | **Status USFWS/ CDFG/ CNPS rank** | **Habitat Affinities and Blooming Period/Life Form** | **Potential for Occurrence** |
|---|---|---|---|
| *Alopecurus aequalis* var. *sonomensis* Sonoma alopecurus | FE/-/1B | Freshwater marshes and swamps, riparian scrub. May-July. Elevation: 5-365m. | None. Typical habitat not present in study area. |
| *Amorpha californica* var. *napensis* Napa false indigo | -/-/1B | Broadleafed upland forest (openings), chaparral, cismontane woodland. Blooms April-July. Elevation: 120-2000m. | None. No habitat in study area. |
| *Anomobryum julaceum* Slender silver moss | -/-/4 | Damp rock and soil on outcrops, usually on roadcuts in broadleafed upland forest, lower montane coniferous forest, North Coast coniferous forest. Elevation: 100-1000m | None. No habitat in study area. |
| *Arctostaphylos densiflora* Vine Hill manzanita | -/CE/1B | Chaparral on acid marine sand. Blooms February to April. Elevation: 50-120m. | None. No habitat in study area. |
| *Arctostaphylos stanfordiana* ssp. *decumbens* Rincon Ridge manzanita | -/-/1B | Chaparral on rhyolitic soils and cismontane woodland. Blooms February to April (sometimes May). Elevation: 75-370m. | None. No habitat in study area. |
| *Astragalus claranus* Clara Hunt's milk-vetch | FE/CT/1B | Openings in chaparral, cismontane woodland, valley and foothill grassland on serpentinite or volcanic, rocky or clay soils. Blooms March to May. Elevation: 75-275m. | None. No habitat in study area. |
| *Balsamorhiza macrolepis* Big-scale balsamroot | -/-/1B | Chaparral, cismontane woodland, valley and foothill grassland/sometimes serpentinite. Blooms March to June. Elevation 90-1555m. | None. Typical habitat not present in study area. |
| *Blennosperma bakeri* Sonoma sunshine | FE/CE/1B | Valley and foothill grassland (mesic), vernal pools. Blooms March to May. Elevation: 10-110m. | Low. Known occurrences along Piner and Fulton Rd. Habitat in study area may not suitable for this species. Spring surveys to be conducted. |

| ***Scientific Name*** **Common Name** | **Status USFWS/ CDFG/ CNPS rank** | **Habitat Affinities and Blooming Period/Life Form** | **Potential for Occurrence** |
|---|---|---|---|
| *Brodiaea leptandra* Narrow-anthered brodiaea | -/-/1B | Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland on volcanic soils. Blooms May to July. Elevation: 110-915m. | None. No habitat in study area. |
| *Calamagrostis bolanderi* Bolander's reed-grass | -/-/4 | Bogs and fens, broadleafed upland forest, closed-cone coniferous forest, coastal scrub, meadows and seeps (mesic), marshes and swamps (freshwater), North Coast coniferous forest/mesic. Blooms May to August. Elevation: 0-455m. | None. No habitat in study area. |
| *Calamagrostis crassiglumis* Thurber's reed grass | -/-/1B | Coastal scrub (mesic), marshes and swamps (freshwater). Blooms May to August. Elevation: 10-60m. | None. No habitat in study area. |
| *Calochortus uniflorus* Pink star tulip | -/-/4 | Coastal prairie, coastal scrub, meadows and seeps, North Coast coniferous forest. Blooms April to June. Elevation: 10-1070m. | None. No habitat in study area. |
| *Calystegia collina* ssp. *oxyphylla* Mt. Saint Helena morning-glory | -/-/4 | On serpentinite in chaparral, lower montane coniferous forest, valley and foothill grassland. Blooms April to June. Elevation: 279-1010m. | None. No habitat in study area. |
| *Campanula californica* Swamp harebell | -/-/1B | Bogs and fens, closed-cone coniferous forest, coastal prairie, meadows and seeps, marshes and swamps (freshwater), North Coast coniferous forest/mesic. Blooms June to October. Elevation: 1-405m. | None. No habitat in study area. |
| *Carex albida* *White sedge* | -/-/FE | Freshwater marsh, meadows and seeps. Blooms May to June. Elevation: 45-60m. | None. No habitat in study area. CNPS considered but rejected C. albida as being a synonym of C. lemmonii, a common species. |
| *Castilleja ambigua* var. *ambigua* Johnny-nip | -/-/4 | Coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, valley and foothill grassland, vernal pools margins. Blooms March to August. Elevation: 0-435m. | Low. Potential grassland habitat in study area. |
| *Castilleja uliginosa* Pitkin Marsh paintbrush | -/CE/1B | Freshwater marshes and swamps. Blooms June to July. Elevation: 240m. | None. No habitat in study area. |

| ***Scientific Name*** **Common Name** | **Status USFWS/ CDFG/ CNPS rank** | **Habitat Affinities and Blooming Period/Life Form** | **Potential for Occurrence** |
|---|---|---|---|
| *Ceanothus confusus* Rincon Ridge ceanothus | -/-/1B | Closed-cone coniferous forest, chaparral, cismontane woodland on volcanic or serpentinite. Blooms February to June. Elevation: 75-1065m. | None. No habitat in study area. |
| *Ceanothus divergens* Calistoga ceanothus | -/-/1B | Chaparral on serpentinite or volcanic, rocky soils. Blooms February to April. Elevation 170-950m. | None. No habitat in study area. |
| *Ceanothus foliosus* var. *vineatus* Vine Hill ceanothus | -/-/1B | Chaparral. Blooms March to May. Elevation: 45-305m. | None. No habitat in study area. |
| *Ceanothus gloriosus ssp. exaltatus* *Glory brush* | -/-/4 | Coastal bluff scrub, closed-cone coniferous forest, coastal dunes, coastal scrub/sandy. Blooms March to May. Elevation: 5-520m. | None. No habitat in study area. |
| *Ceanothus purpureus* Holly-leaved ceanothus | -/-/1B | Chaparral, cismontane woodland on volcanic, rocky soils. Blooms February to June. Elevation: 120-640m. | None. No habitat in project area. |
| *Ceanothus sonomensis* Sonoma Ceanothus | -/-/1B | Chaparral on sandy, serpentinite or volcanic soils. Blooms February to April. Elevation: 215-800m. | None. No habitat in study area. |
| *Centromadia parryi ssp. parryi* Pappose tarplant | -/-/1B | Chaparral, coastal prairie, meadows and seeps, marshes and swamps (coastal salt), valley and foothill grassland (vernally mesic)/often alkaline. Blooms May to November. Elevation 0-420m. | None. No habitat in study area. |
| *Chorizanthe valida* Sonoma spineflower | FE/CE/1B | Coastal prairie, sandy. Blooms June to August. Elevation: 10-305m. | None. No habitat in study area. |
| *Clarkia imbricata* Vine Hill clarkia | FE/CE/1B | Chaparral, valley and foothill grassland on acidic sandy loam. Blooms June to August. Elevation 50-75m. | None. No habitat in study area. |
| *Cordylanthus tenuis* ssp. *capillaris* Pennell's bird's-beak | FE/CR/1B | Closed-cone coniferous forest, chaparral. Blooms June-September. Elevation: 45-305m. | None. No habitat in study area. |
| *Cuscuta obtusiflora* var. *glandulosa* Peruvian dodder | -/-/2B | Freshwater marshes and swamps. Blooms July to October. Elevation: 15-280m. | None. No habitat in study area. |
| *Cypripedium montanum* Mountain lady's-slipper | -/-/4 | Broadleafed upland forest, cismontane woodland, lower montane coniferous forest, North Coast coniferous forest. Blooms March to August. Elevation: 185-2225m. | None. No habitat in study area. |

| ***Scientific Name*** **Common Name** | **Status USFWS/ CDFG/ CNPS rank** | **Habitat Affinities and Blooming Period/Life Form** | **Potential for Occurrence** |
|---|---|---|---|
| *Delphinium luteum* Golden larkspur | FE/CR/1B | Chaparral, coastal prairie, coastal scrub/rocky. Blooms March to May. Elevation 0-100m. | None. No habitat in study area. |
| *Downingia pusilla* Dwarf downingia | -/-/2B | Valley and foothill grassland (mesic), vernal pools. Blooms March to May. Elevation: 1-445m. | None. Potential habitat in adjacent habitats but not in study area. |
| *Erigeron bioletti* Streamside daisy | -/-/3 | Broadleafed upland forest, cismontane woodland, North Coast coniferous forest on rocky and mesic sites. Blooms June-October. Elevation 30-1100 | None. No habitat in study area. |
| *Erigeron serpentinus* Serpentine daisy | -/-/1B | Chaparral on serpentine seeps. Blooms May to August. Elevation: 60-670m. | None. No habitat in study area. |
| *Eriophorum gracile* Slender cottongrass | -/-/4 | Bogs and fens, meadows and seeps, upper montane coniferous forest/acidic. Blooms May to September. Elevation: 1280-2900m. | None. No habitat in study area. |
| *Fritillaria liliacea* Fragrant fritillary | -/-/1B | Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland often on serpentinite. Blooms February to April. Elevation: 3-410m. | None. No habitat in study area. |
| *Hemizonia congesta* ssp. *congesta* Congested-headed hayfield tarplant | -/-/1B | Valley and foothill grassland, sometimes roadsides. Blooms April to November. Elevation: 20-560m. | Low. Potential grassland habitat in study area. Spring surveys to be conducted. |
| *Horkelia tenuiloba* Thin-lobed horkelia | -/-/1B | Broadleafed upland forest, chaparral, valley and foothill grassland/mesic openings, sandy. Blooms May to July (August). Elevation: 50-500m. | None. No habitat in study area. |
| *Hosakia gracilis* Harlequin lotus | -/-/4 | Broadleafed upland forest, coastal bluff scrub, closed-cone coniferous forest, cismontane woodland, coastal prairie, coastal scrub, meadows and seeps, marshes and swamps, North Coast coniferous forest, valley and foothill grassland/wetlands, roadside. Blooms March to July. Elevation: 0-700m. | Low. Potential grassland habitat in study area. Spring surveys to be conducted. |

| ***Scientific Name*** **Common Name** | **Status USFWS/ CDFG/ CNPS rank** | **Habitat Affinities and Blooming Period/Life Form** | **Potential for Occurrence** |
|---|---|---|---|
| *Lasthenia burkei* Burke's goldfields | FE/CE/1B | Meadows and seeps (mesic), vernal pools. Blooms April to June. Elevation: 15-600m. | Low. Known occurrences near study area but the typical habitat for this species is lacking n the project area. Spring surveys to be conducted. |
| *Lasthenia californica* ssp. *bakeri* Baker's goldfields | -/-/1B | Closed-cone coniferous forest (openings), coastal scrub, meadows and seeps, marshes and swamps. Blooms April-October. Elevation: 60-520m. | None. No habitat in study area. |
| *Layia septentrionalis* Colusa layia | -/-/1B | Chaparral, cismontane woodland, valley and foothill grassland on sandy or serpentintie soils. Blooms April to May. Elevation: 100-1095m. | None. No habitat in study area. |
| *Legenere limosa* Legenere | -/-/1B | Vernal pools. Blooms April to June. Elevation: 1-880m. | None. Typical habitat not present in study area. |
| *Leptosiphon jepsonii* Jepson's leptosiphon | -/-/1B | Chaparral, cismontane woodland, usually volcanic. Blooms March to May. Elevation: 100-500m. | None. No habitat in study area. |
| *Lilium pardalinum* ssp. *pitkinense* Pitkin Marsh lily | FE/CE/1B | Cismontane woodland, meadows and seeps, freshwater marshes and swamps/mesic, sandy. Blooms June to July. Elevation: 35-65m. | None. No habitat in study area. |
| *Lilium rubescens* Redwood lily | -/-/4 | Broadleafed upland forest, chaparral, lower montane coniferous forest, North Coast coniferous forest, upper montane coniferous forest, sometimes serpentinite, sometimes roadsides. Blooms April to September. Elevation: 30-1910m. | None. No habitat in study area. |
| *Limnanthes vinculans* Sebastopol meadowfoam | FE/CE/1B | Vernally mesic meadows and seeps, valley and foothill grassland, vernal pools. Blooms April to May. Elevation: 15-305m. | None. This species mostly occurs south of Hwy 12. Habitat in study area not suitable. Closest known occurrence is Alton Lane where it was seeded and is not a natural community. |
| *Microphus amphibolus* Mt. Diablo cottonweed | -/-/4 | Broadleafed upland forest, chaparral, cismontane woodland, valley and foothill grassland in rocky areas. Blooms March to May. Elevation: 45-825 m. | None. No habitat in study area. |

| *Scientific Name* Common Name | Status USFWS/ CDFG/ CNPS rank | Habitat Affinities and Blooming Period/Life Form | Potential for Occurrence |
|---|---|---|---|
| *Microseris paludosa* Marsh microseris | -/-/1B | Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland. Blooms April-June (July). Elevation: 5-300m. | Low. Potential grassland habitat in study area. Spring surveys to be conducted. |
| *Monardella viridis* Green monardella | -/-/4 | Broadleafed upland forest, chaparral, cismontane woodland. June-September. Elevation: 100-1010m. | None. No habitat in study area. |
| *Navarretia leucocephala* ssp. *bakeri* Baker's navarretia | -/-/1B | Cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland, vernal pools/mesic. Blooms April to July. Elevation: 5-1740m. | None. Typical habitat not present in study area. |
| *Navarretia leucocephala* ssp. *plieantha* Many flowered navarretia | FE/CE/1B | Volcanic ash flow vernal pools. Blooms May to June. Elevation: 30-950 m. | None. No habitat in study area. |
| *Perideridia gairdneri* ssp. *gairdneri* Gairdner's yampa | -/-/4 | Broadleafed upland forest, chaparral, coastal prairie, valley and foothill grassland, vernal pools/vernally mesic. Blooms June to October. Elevation: 0-610m. | None. No habitat in study area. |
| *Ranuculus lobbii* Lobb's aquatic buttercup | -/-/4 | Cismontane woodland, North Coast coniferous forest, valley and foothill grassland, vernal pools/mesic. Blooms February to May. Elevation: 15-470m. | None. No habitat in study area. |
| *Rhynchospora alba* White beaked-rush | -/-/2B | Bogs and fens, meadows and seeps, freshwater marshes and swamps. Blooms July to August. Elevation: 60-2040m. | None. No habitat in study area. |
| *Rhynchospora californica* California beaked-rush | -/-/1B | Bogs and fens, lower montane coniferous forest, meadows and seeps, freshwater marshes and swamps. Blooms May to July. Elevation: 45-1010m. | None. No habitat in study area. |
| *Rhynchospora capitellata* Brownish beaked-rush | -/-/2B | Lower montane coniferous forest, meadows and seeps, freshwater marshes and swamps. Blooms May to July. Elevation: 45-1010m. | None. No habitat in study area. |
| *Rhyncospora globularis* Round-headed beaked-rush | -/-/2B | Freshwater marshes and swamps. Blooms July to August. Elevation: 45-60m. | None. No habitat in study area. |
| *Trifolium amoenum* Showy Rancheria clover | FE/-/1B | Coastal bluff scrub, valley and foothill grassland, sometimes on serpentinite. Blooms April to June. Elevation: 5-415m. | None. Typical habitat not present in study area. |

| ***Scientific Name*** **Common Name** | **Status USFWS/ CDFG/ CNPS rank** | **Habitat Affinities and Blooming Period/Life Form** | **Potential for Occurrence** |
|---|---|---|---|
| *Trifolium hydrophilum* Saline clover | -/-/1B | Marshes and swamps, valley and foothill grassland (mesic, alkaline), vernal pools. Blooms April to June. Elevation: 0-300m. | None. No habitat in study area. |
| *Triquetrella californica* Coastal triquetrella | -/-/1B | Coastal bluff scrub, coastal scrub/soil. Elevation: 10-100m. | None. No habitat in study area. |
| *Viburnum ellipticum* Oval-leaved viburnum | -/-/2B | Chaparral, cismontane woodland, lower montane coniferous forest. Blooms May to June. Elevation: 215-1400m. | None. No habitat in study area. |
| **Special-Status Vegetation Communities** | | | |
| *Coastal and Valley Freshwater Marsh* | | | **None** |
| *Northern Vernal Pool* | | | **None-** occurrences near project area but not in project area. |
| *Northern Hardpan Vernal Pool* | | | **None-** occurrences near project area but not in project area. |
| *Valley Needlegrass Grassland* | | | **None** |

NOTES:

**U.S. FISH AND WILDLIFE SERVICE**

FE = federally listed Endangered
FT = federally listed Threatened

**CALIFORNIA DEPT. OF FISH AND WILDLIFE**

CE = California listed Endangered
CR = California listed as Rare
CT = California listed as Threatened

**CALIFORNIA NATIVE PLANT SOCIETY -**

Rank 1B: Plants rare and endangered in California and elsewhere
Rank 2B: Plants rare and endangered in California but more common elsewhere
Rank 4: Plant of limited distribution – a watch list.

**Table 2: Potentially Occurring Special-Status Animal Species in the Project Area**

| Common Name *Scientific Name* | Status USFWS/ CDFG | Habitat Affinities and Reported Localities in the Project Area | Potential for Occurrence |
|---|---|---|---|
| **Invertebrates** | | | |
| **Blennosperma Vernal pool andrenid bee** *Andrena blennospermatis* | | Oligolectic (specialist pollinator) on vernal pool Blennosperma and nests the uplands around vernal pools. | None: no suitable habitat present. |
| **Obscure Bumble bee** *Bombus caliginosus* | -/- | Food plants include Baccharis, Circium, Lupinus, Lotus, Grindelia and Phacelia | None: no suitable habitat present. |
| **Western bumblebee** *Bombus occidentalis* | -/- | Generalist foragers. They do not depend on any one flower type but they favor Melilotus, Cirsium, Trifolium, Centaurea, Chrysothamnus, Eriogonum. Historically from the Pacific coast to the Colorado Rocky Mountains; severe population decline west of the Sierra-Cascade Crest. | **Low:** a diversity of flowering plants occur in the grasslands. |
| **San Bruno elfin butterfly** *Callophrys mossii bayensis* | FE | The adult flight period is late February to mid-April, with the peak flight period occurring in March and early April. Eggs are laid in small clusters or strings on the upper or lower surface of broadleaf stonecrop (Sedum spathulifolium). Larvae hatch from the eggs within 5-7 days of being laid. | None: no suitable habitat present. |
| **California linderiella** *Linderiella occidentalis* | -/- | Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions. | None: No vernal pools present. |
| **California freshwater shrimp** *Syncaris pacifica* | FE/CE | Endemic to Marin, Napa and Sonoma counties in low elevation and low gradient streams with moderate to heavy riparian cover. | None: no suitable habitat present. |
| **Fish** | | | |
| **Russian River tule perch** *Hysterocarpus traskii pomo* | -/SSC | Occurs in low elevation streams of the Russian River. Requires clear, flowing water with abundant cover and deep (>1M) pool habitat. | None: no suitable habitat present.<br>No deep pools within the stream corridors, well aerated streams, or cool waters. |
| **Navarro roach** *Lavinia symmetricus navarroensis* | -/SSC | Habitat generalists, found in warm intermittent streams as well as cold, well-aerated streams. | None: no suitable habitat present.<br>No deep pools within the stream corridors, well aerated streams, or cool waters. |

| Common Name<br>*Scientific Name* | Status<br>USFWS/<br>CDFG | Habitat Affinities and Reported Localities in the Project Area | Potential for Occurrence |
|---|---|---|---|
| **Coho salmon - Central California Coast DPS**<br>*Onchorhynchus kisutch* | FE/SE | Occurs from Punta Gorda, in northern California, to the San Lorenzo River, in Santa Cruz County, and includes coho salmon populations from several tributaries of San Francisco Bay (e.g., Corte Madera and Mill Valley Creek). No Coho have been mapped in the CNDDB for Forestview and Peterson creeks, and neither creek is part of a watershed designated as critical habitat. | None: no suitable habitat present.<br>No deep pools within the stream corridors, well aerated streams, or cool waters. |
| **steelhead - Central California Coast DPS**<br>*Onchorhynchus mykiss* | FT/SSC | Requires beds of loose, silt-free, coarse gravel for spawning. Also needs cover, cool water and sufficient dissolved oxygen. No steelhead have been mapped in the CNDDB for Forestview and Peterson creeks, and neither creek is part of a watershed designated as critical habitat. | None: no suitable habitat present.<br>No deep pools within the stream corridors, well aerated streams, or cool waters. |
| **Amphibians** | | | |
| **California tiger salamander**<br>*Ambystoma californiense* | FE/ST | Breeds in vernal pool and ponds and spends most of life terrestrially in small mammal burrows. | Low: Within the species range and in Critical Habitat. |
| **California giant salamander**<br>*Dicamptodon ensatus* | -/- | Known from wet coastal forests near streams and seeps. Larvae found in cold, clear streams and adults known from wet forests under rocks and logs near streams and lakes. Species occurs more than 3 miles W of the site (CNDDB 2017) | None: no suitable habitat present. |
| **foothill yellow-legged frog**<br>*Rana boylii* | -/SSC | Prefers permanent stream pools, and creeks with emergent and/or riparian vegetation Species occurs more than 3 miles E of the site (CNDDB 2017). | None: no suitable habitat present. |
| **California red-legged frog**<br>*Rana draytonii* | FT/- | Prefers semi-permanent and permanent stream pools, ponds and creeks with emergent and/or riparian vegetation. Occupies upland habitat especially during the wet winter months. The closes reported sighting is approximately 9 miles west near the Town of Guerneville (CNDDB 2017). | None: no suitable habitat present. |
| **Red-bellied newt**<br>*Taricha rivularis* | -/SSC | Spends dry season underground within root channels. Requires rapid streams with rocky substrate for breeding and egg-laying. Species occurs more than 3 miles E of the site (CNDDB 2017). | None: no suitable habitat present. |
| **Reptiles** | | | |
| **Western pond turtle**<br>*Emys marmorata* | SC/SPT | Prefers permanent, slow-moving creeks, streams, ponds, rivers, marshes and irrigation ditches with basking sites and a vegetated shoreline. Requires upland sites for egg-laying. Species occurs in Piner Creek and Santa Rosa Creek south of the project site (CNDDB 2017). | **High**: suitable aquatic habitat present in both Peterson and Forestview Creeks. |

| Common Name<br>*Scientific Name* | Status<br>USFWS/<br>CDFG | Habitat Affinities and Reported Localities in the Project Area | Potential for Occurrence |
|---|---|---|---|
| **Birds** | | | |
| **Cooper's hawk**<br>*Accipiter cooperi* | MB/ SSC | Nests primarily in deciduous riparian forests. May also occupy dense canopied forests from gray pine-oak woodland to ponderosa pine. Forages in open woodlands. | **Moderate**: Suitable nesting habitat present. |
| **Western grebe**<br>*Aechmophorus occidentalis* | BCC | Breeds on large bodied freshwater lakes and marshes with emergent vegetation. Nest is built on floating plants or submerged snag, among emergent vegetation. | None: no suitable habitat present |
| **tricolored blackbird**<br>*Agelaius tricolor* | BCC/ SSC | Nests primarily in dense freshwater marshes with cattail or tules, but also known to nest in upland thistles. Forages in grasslands. | None: no suitable habitat present |
| **Rufous-crowned sparrow**<br>*Aimophila ruficeps* | BCC | Nests constructed on the ground or in a small depression; occasionally near the base of a shrub up to about 1.5 feet off the ground. Often well concealed under grass, leaves, or rocks. Habitat occurs in dry, open hillsides covered with grasses, rocks, and scattered shrubs, including coastal sagebrush, open chaparral, scrub oaks, pinyon pine, and other woody plants. | None: no suitable habitat present due to domestic pets. |
| **Bell's sparrow**<br>*Amphispiza belli* | BCC | Nests in dense stands of chamise and chaparral. | None: no suitable habitat present. |
| **Great blue heron**<br>*Ardea herodius* | / SSC | Nests colonially in large trees near water | None: no suitable habitat present. |
| **Short-eared owl**<br>*Asio flammeus* | BCC/- | Nests in open areas in grasslands, marshes, or dunes on the ground sheltered by tall grasses, reeds or bushes. | None: no suitable habitat present. |
| **burrowing owl**<br>*Athene cunicularia hypugea* | BCC/ SSC | Nests in open, dry grasslands, deserts, prairies, farmland and scrublands with abundant active and abandoned small mammal burrows. Prefers short grasses and moderate inclined hills. | None: no suitable habitat present; lack of ground squirrel burrows. |
| **Oak titmouse**<br>*Baeolophus inornatus* | BCC/ SSC | Breeds in cavities in oak woodlands, gleaning insects from the bark. Occurs from southern Oregon to northern Mexico along the Central Valley and xeric coastal foothills. | **High**: suitable nesting habitat present. |
| **olive-sided flycatcher**<br>*Contopus borealis* | BCC/ SSC | Nests in open conifer or mixed oak woodland. Nests on horizontal branches, among a cluster of twigs and needles. | **High**: suitable nesting habitat present |
| **White-tailed kite**<br>*Elanus leucurus* | MB/SFP | Inhabits low rolling foothills and valley margins with scattered oaks and river bottom- lands or marshes adjacent to deciduous woodlands. Prefers open grasslands, meadows and marshes for foraging close to isolated, dense-topped trees for nesting and perching | **High**: suitable nesting habitat present |

| Common Name<br>*Scientific Name* | Status<br>USFWS/<br>CDFG | Habitat Affinities and Reported Localities in the Project Area | Potential for Occurrence |
|---|---|---|---|
| **American peregrine falcon**<br>*Falco peregrinus anatum* | BCC/FP | Nests and roosts on protected ledges of high cliffs, usually adjacent to lakes, rivers or marshes. Forages on shorebirds and small passerines. | None: no suitable habitat present. |
| **bald eagle**<br>*Haliaeetus leucocephalus* | BCC/CFP | Nests in tall snags near water and forages on fish. This species winters near large bodies of waters with fish. | None: no suitable habitat present |
| **Lewis's woodpecker**<br>*Melanerpes lewis* | BCC/SSC | Found in open forest and woodland, often logged or burned, including oak, coniferous forest, riparian woodland, orchards, less often pinyon-juniper. Closely associated with open ponderosa pine forest in western North America. Most commonly uses pre-made or natural cavities. Wintering areas must provide storage sites for grain or mast. | None: no suitable nesting habitat present. |
| **long-billed curlew**<br>*Numenius americanus* | BCC/SSC | Nests at high elevations in grasslands adjacent to lakes or marshes. Winters along the coast on mudflats or in interior valleys in grasslands and agricultural fields. | None: no suitable habitat present |
| **Osprey**<br>*Pandion haliaetus* | -/SSC | Nests in large trees within 15 miles of good fish-producing water body. | None: no suitable habitat present. Would have been detected. |
| **Fox sparrow**<br>*Passerella iliaca* | BCC/- | Nests in forests and chaparral on the ground or in low crotches of bushes or trees. | None: no suitable breeding habitat present. Occurs in the winter. |
| **Nuttall's woodpecker**<br>*Picoides nuttallii* | BCC/- | Found primarily in oak woodlands and riparian woods. Cavity nester. | **High**: suitable nesting habitat present |
| **Lesser yellowlegs**<br>*Tringa flavipes* | BCC/- | Breeds in open boreal forest with shallow wetlands. Winters in wide variety of shallow fresh and saltwater habitats. | None: no suitable habitat present |
| **Mammals** | | | |
| **Pallid bat**<br>*Antrozous pallidus* | -/SSC | Day roosts in crevices and cavities in rock outcrops, mines, caves, buildings, bridges, properly-designed bat houses, as well as hollows and cavities in a wide variety of tree species. May roost alone, in small groups (2 to 20 bats), or in 100s in maternity roosts, with males and non-reproductive subadults in other, smaller roosts. | **Moderate**: suitable roosting habitat present. |

| Common Name<br>*Scientific Name* | Status<br>USFWS/<br>CDFG | Habitat Affinities and Reported Localities in the Project Area | Potential for Occurrence |
|---|---|---|---|
| **Townsend's big-eared bat**<br>*Corynorhinus townsendii townsendii* | -/SSC, WBWG:H | Day roosts in cave analogs; mines, buildings, bridges, sometimes large tree hollows. Particularly sensitive to roost disturbance, this species has declined throughout its range in California; very few maternity roosts are known in California. Females form maternity colonies, males roost singly, and all disperse widely after maternity season. During winter, roosts in cold, but non-freezing roosts, which may include man-made structures. Forages in a variety of habitats, consistently in riparian and stream corridors, avoiding open habitat. May commute relatively long distances to forage. | None: no suitable roosting habitat present. |
| **Western red bat**<br>*Lasiurus blossevillii* | -/SSC, WBWG:H | Solitary roosting, except when females are with young (from 2 to 6 are born). Roosts almost exclusively in foliage, under overhanging leaves, in woodland borders, rivers, agricultural areas including orchards, and urban areas with mature trees. Typically found in large cottonwoods, sycamores, walnuts and willows associated with riparian habitats. Forages over mature orchards, oak woodland, low elevation conifer forests, riparian corridors, non-native trees in urban and rural residential areas, and around strong lighting. | **High**: suitable potential roosting habitat occurs in the oak woodlands on site. |
| **Hoary bat**<br>*Lasiurus cinereus* | -/-, WBWG:M | Roosts singly except when females are with young (from 2 to 4 are born) in dense foliage of medium to large coniferous and deciduous trees. Highly migratory, occurs from sea level to tree line in Sierra Nevada. Summer records predominantly male. Forages along stream and river corridors, open water bodies, meadows, and open forest above canopy. | **High**: suitable potential roosting habitat occurs in the oak woodlands on site. |
| **California myotis**<br>*Myotis californicus* | -/- | Females give birth to one young. Typically roosts alone or in small groups in almost every habitat from desert to mountains, but most abundant at lower to mid-elevations. Roosts in crevices in rocks, slabs, hollow trees, exfoliating bark, buildings, mines. In trees may exhibit low roost fidelity, switching frequently. Typically hibernates. | **High**: suitable potential roosting habitat occurs in the oak woodlands on site. |
| **Yuma myotis**<br>*Myotis yumanensis* | -/-, WBWG:M | Forms often large maternity colonies, females giving birth to one young. Males roost singly. Primarily a crevice roosting species in natural habitat, forms large maternity colonies in large spaces in man-made roosts, e.g. buildings. Also uses bridges, caves, mines, tree cavities, bat houses, abandoned swallow nests, exfoliating bark. Appears to migrate, may hibernate in colder portions of their range. | **High**: suitable potential roosting habitat occurs in the oak woodlands on site. |

| Common Name *Scientific Name* | Status USFWS/ CDFG | Habitat Affinities and Reported Localities in the Project Area | Potential for Occurrence |
|---|---|---|---|
| **American badger** *Taxidea taxus* | -/SSC | Inhabits open grasslands, savannas and mountain meadows near timberline. Requires abundant burrowing mammals, their principal food source, and loose, friable soils. | None: no suitable habitat present. |

NOTES:

**U.S. FISH AND WILDLIFE SERVICE (USFWS)**

FE = federally listed Endangered
FT = federally listed Threatened
FC = federal candidate for listing
BCC = Bird of Conservation Concern
MBTA = Migratory Bird Treaty Act.

**CALIFORNIA DEPT. OF FISH AND WILDLIFE (CDFW)**

CE = California listed Endangered
CT = California listed as Threatened
SSC = California Special Concern species

**WESTERN BAT WORK GROUP (WBWG)- PRIORITY**

California includes multiple regions where a species may have different WBWG Priority ranks, therefore the CNNDB includes categories for Medium-High, and Low-Medium Priority.

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# Appendix C - Noise Modeling Data

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# Appendix C Noise Modeling Data
# Fulton Road Widening Improvement Project

This appendix summarizes the fundamentals of environmental noise and groundborne vibration, the applicable regulatory criteria for the analysis of impacts pursuant to the California Environmental Quality Act, and the results of the ambient noise monitoring survey conducted for the Fulton Road Widening Improvement Project by Illingworth and Rodkin, Inc.

### *Fundamentals of Environmental Noise*

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its pitch or its loudness. Pitch is the height or depth of a tone or sound, depending on the relative rapidity (frequency) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. Loudness is intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

In addition to the concepts of pitch and loudness, there are several noise measurement scales which are used to describe noise in a particular location. A decibel (dB) is a unit of measurement which indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Technical terms are defined in Table 1.7-1.

There are several methods of characterizing sound. The most common in California is the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Representative outdoor and indoor noise levels in units of dBA are shown in Table 1.7-2. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called Leq. The most common averaging period is hourly, but Leq can describe any series of noise events of arbitrary duration.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends upon the distance the receptor is from the noise source. Close to the noise source, the models are accurate to within about plus or minus 1 to 2 dBA.

Since the sensitivity to noise increases during the evening and at night -- because excessive noise interferes with the ability to sleep -- 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The Community Noise Equivalent Level (CNEL) is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 pm - 10:00 pm) and a 10 dB addition to nocturnal (10:00 pm - 7:00 am) noise levels. The Day/Night Average

Sound Level (DNL or Ldn) is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period.

### *Effects of Noise – Sleep and Speech Interference*

The thresholds for speech interference indoors are about 45 dBA if the noise is steady and above 55 dBA if the noise is fluctuating. Outdoors the thresholds are about 15 dBA higher. Steady noises of sufficient intensity (above 35 dBA) and fluctuating noise levels above about 45 dBA have been shown to affect sleep. Interior residential standards for single- and multi-family dwellings are set by the State of California at 45 dBA DNL. Typically, the highest steady traffic noise level during the daytime is about equal to the DNL and nighttime levels are 10 dBA lower. The standard is designed for sleep and speech protection and most jurisdictions apply the same criterion for all residential uses. Typical structural attenuation is 12 to 17 dBA with open windows. With closed windows in good condition, the noise attenuation factor is around 20 dBA for an older structure and 25 dBA for a newer dwelling. Sleep and speech interference is, therefore, possible when exterior noise levels are about 57 to 62 dBA DNL with open windows and 65 to 70 dBA DNL if the windows are closed. Levels of 55 to 60 dBA are common along collector streets and secondary arterials, while 65 to 70 dBA is a typical value for a primary/major arterial. Levels of 75 to 80 dBA are normal noise levels at the first row of development outside a freeway right-of-way. In order to achieve an acceptable interior noise environment, bedrooms facing secondary roadways need to be able to have their windows closed; those facing major roadways and freeways typically need special glass windows.

### *Effects of Noise – Annoyance*

Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that the causes for annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. The DNL as a measure of noise has been found to provide a valid correlation of noise level and the percentage of people annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be disagreement about the relative annoyance of these different sources. When measuring the percentage of the population highly annoyed, the threshold for ground vehicle noise is about 50 dBA DNL. At a DNL of about 60 dBA, approximately 12 percent of the population is highly annoyed. When the DNL increases to 70 dBA, the percentage of the population highly annoyed increases to about 25 to 30 percent of the population. There is, therefore, an increase of about 2 percent per dBA between a DNL of 60 to 70 dBA. Between a DNL of 70 to 80 dBA, each decibel increases by about 3 percent the percentage of the population highly annoyed. People appear to respond more adversely to aircraft noise. When the DNL is 60 dBA, approximately 30 to 35 percent of the population is believed to be highly annoyed. Each decibel increase to 70 dBA adds about 3 percentage points to the number of people highly annoyed. Above 70 dBA, each decibel increase results in about a 4 percent increase in the percentage of the population highly annoyed.

## ***Fundamentals of Groundborne Vibration***

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One method is the Peak Particle Velocity (PPV). The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. In this report, a PPV descriptor with units of mm/sec or in/sec is used to evaluate construction generated vibration for building damage and human complaints. Table 1.7-3 displays the reactions of people and the effects on buildings that continuous vibration levels produce.

The annoyance levels shown in Table 1.7-3 should be interpreted with care since vibration may be found to be annoying at much lower levels than those shown, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage.

Construction activities can cause vibration that varies in intensity depending on several factors. The use of pile driving and vibratory compaction equipment typically generates the highest construction related groundborne vibration levels. Because of the impulsive nature of such activities, the use of the PPV descriptor has been routinely used to measure and assess groundborne vibration and almost exclusively to assess the potential of vibration to induce structural damage and the degree of annoyance for humans.

The two primary concerns with construction-induced vibration, the potential to damage a structure and the potential to interfere with the enjoyment of life, are evaluated against different vibration limits. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 in/sec PPV. Human perception to vibration varies with the individual and is a function of physical setting and the type of vibration. Persons exposed to elevated ambient vibration levels, such as people in an urban environment, may tolerate a higher vibration level.

Structural damage can be classified as cosmetic only, such as minor cracking of building elements, or may threaten the integrity of the building. Safe vibration limits that can be applied to assess the potential for damaging a structure vary by researcher and there is no general consensus as to what amount of vibration may pose a threat for structural damage to the building. Construction-induced vibration that can be detrimental to the building is very rare and has only been observed in instances where the structure is at a high state of disrepair and the construction activity occurs immediately adjacent to the structure.

Table 1.7-1 Definition of Acoustical Terms Used in this Chapter

| Term | Definition |
|---|---|
| Decibel, dB | A unit describing, the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20 micro Pascals. |
| Sound Pressure Level | Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or 20 micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e. g., 20 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter. |
| Frequency, Hz | The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and Ultrasonic sounds are above 20,000 Hz. |
| A-Weighted Sound Level, dBA | The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. |
| Equivalent Noise Level, $L_{eq}$ | The average A-weighted noise level during the measurement period. |

| Term | Definition |
|---|---|
| $L_{max}$, $L_{min}$ | The maximum and minimum A-weighted noise level during the measurement period. |
| $L_1$, $L_{10}$, $L_{50}$, $L_{90}$ | The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period. |
| Day/Night Noise Level, $L_{dn}$ or DNL | The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 p.m. and 7:00 a.m. |
| Community Noise Equivalent Level, CNEL | The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 p.m.to 10:00 p.m. and after addition of 10 decibels to sound levels measured in the night between 10:00 p.m. and 7:00 a.m. |
| Ambient Noise Level | The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location. |
| Intrusive | That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level. |

Source: Handbook of Acoustical Measurements and Noise Control, Harris, 1998.

Table 1.7-2 Typical Noise Levels in the Environment

| Common Outdoor Activities | Noise Level (dBA) | Common Indoor Activities |
|---|---|---|
| | 110 dBA | Rock Band |
| Jet fly-over at 1,000 feet | | |
| | 100 dBA | |
| Gas lawn mower at 3 feet | | |
| | 90 dBA | |
| Diesel truck at 50 feet at 50 mph | | Food blender at 3 feet |
| | 80 dBA | Garbage disposal at 3 feet |
| Noisy urban area, daytime | | |
| Gas lawn mower, 100 feet | 70 dBA | Vacuum cleaner at 10 feet |
| Commercial area | | Normal speech at 3 feet |
| Heavy traffic at 300 feet | 60 dBA | |
| | | Large business office |
| Quiet urban daytime | 50 dBA | Dishwasher in next room |
| | | |
| Quiet urban nighttime | 40 dBA | Theatre, large conference room |
| Quiet suburban nighttime | | |
| | 30 dBA | Library |
| | | Bedroom at night, concert hall (background) |
| | 20 dBA | |
| | | Broadcast/recording studio |
| | 10 dBA | |
| | | |
| | 0 dBA | |

Source: Technical Noise Supplement (TeNS), California Department of Transportation, September 2013.

Table 1.7-3 Reactions of People and Damage to Buildings from Continuous or Frequent Intermittent Vibration Levels

| Velocity Level, PPV (in/sec) | Human Reaction | Effect on Buildings |
|---|---|---|
| 0.01 | Barely perceptible | No effect |
| 0.04 | Distinctly perceptible | Vibration unlikely to cause damage of any type to any structure |
| 0.08 | Distinctly perceptible to strongly perceptible | Recommended upper level of the vibration to which ruins and ancient monuments should be subjected |
| 0.1 | Strongly perceptible | Virtually no risk of damage to normal buildings |
| 0.3 | Strongly perceptible to severe | Threshold at which there is a risk of damage to older residential dwellings such as plastered walls or ceilings |
| 0.5 | Severe – vibrations considered unpleasant | Threshold at which there is a risk of damage to newer residential structures |

Source: Transportation and Construction Vibration Guidance Manual, California Department of Transportation, September 2013.

### *Regulatory Background*

The City of Santa Rosa have established regulatory criteria that are applicable in this assessment. A summary of the applicable regulatory criteria is provided below.

#### *City of Santa Rosa General Plan 2035*

The City of Santa Rosa's General Plan includes the Noise and Safety Element, which provides guidelines to achieve the goal of maintaining an acceptable community noise level. The following goals and policies are applicable to the proposed project:

NS-B Maintain an acceptable community noise level to protect the health and comfort of people living, working and/or visiting in Santa Rosa, while maintaining a visually appealing community.

NS-B-3 Prevent new stationary and transportation noise sources from creating a nuisance in existing developed areas. Use a comprehensive program of noise prevention through planning and mitigation, and consider noise impacts as a crucial factor in project approval.

*The Land Use Compatibility Standards specify normally acceptable levels for community noise in various land use areas.*

NS-B-4 Require new projects in the following categories to submit an acoustical study, prepared by a qualified acoustical consultant:

- All new projects proposed for areas with existing noise above 60dBA DNL. Mitigation shall be sufficient to reduce noise levels below 45 dBA DNL in habitable rooms and 60 dBA DNL in private and shared recreational facilities. Additions to existing housing units are exempt.
- All new projects that could generate noise whose impacts on other existing uses would be greater than those normally acceptable (as specified in the Land Use Compatibility Standards).

NS-B-5 Pursue measures to reduce noise impacts primarily through site planning. Engineering solutions for noise mitigation, such as sound walls, are the least desirable alternative.

NS-B-6 Do not permit existing uses to generate new noises exceeding normally acceptable levels unless:

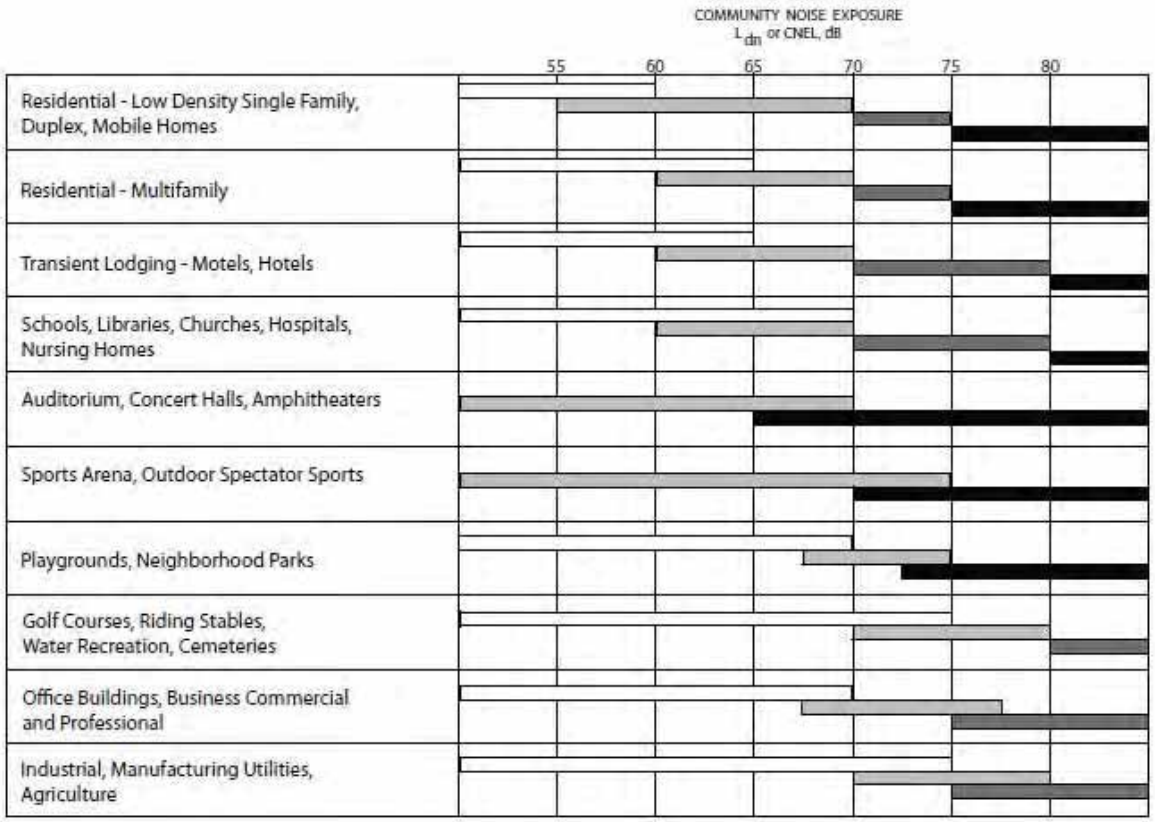
- Those noises are mitigated to acceptable levels; or
- The activities are specifically exempted by the City Council on the basis of community health, safety, and welfare.

NS-B-8 Adopt mitigations, including reduced speed limits, improved paving texture, and traffic controls, to reduce noise to normally acceptable levels in areas where noise standards may be exceeded (e.g., where homes front regional/arterial streets and in areas of mixed use development.).

NS-B-14 Discourage new projects that have potential to create ambient noise levels more than 5 dBA DNL above existing background, within 250 feet of sensitive receptors.

*Figure 12-1*

# Land Use Compatibility Standards




LEGEND:

NORMALLY ACCEPTABLE
Specified land use is satisfactory, based upon the assumption that any building involved is of normal conventional construction, without any special noise insulation requirements.

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

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

CLEARLY UNACCEPTABLE
New construction or development should generally not be undertaken.

*Source: Environmental Science Associates, 2001*

Source: Santa Rosa General Plan 2035, 2009.

### *Santa Rosa Noise Ordinance*

The City of Santa Rosa has adopted a quantitative noise ordinance in Chapter 17-16 of the Santa Rosa Noise Ordinance. Section 17-16.120 regulates noise from stationary machinery and equipment:

> *"It is unlawful for any person to operate any machinery, equipment, pump, fan, air conditioning apparatus, or similar mechanical device in any manner so as to create any noise which would cause the noise level at the property line of any property to exceed the ambient base noise level by more than five decibels."*

The ambient base noise levels for residential, office, commercial, and industrial areas are established in Section 17-16.030. The applicable ambient noise level criteria are shown in Table 1.7-4.

Table 1.7-4 Santa Rosa Noise Ordinance Ambient Base Noise Levels

| Land Uses | Daytime Level (7:00 a.m. to 7:00 p.m.) | Evening Level (7:00 p.m. to 10:00 p.m.) | Nighttime Level (10:00 p.m. to 7:00 a.m.) |
|---|---|---|---|
| Single-Family Residential (R1 and R2) | 55 dBA | 50 dBA | 45 dBA |
| Multi-Family Residential | 55 dBA | 55 dBA | 50 dBA |
| Office and Commercial | 60 dBA | 60 dBA | 55 dBA |
| Intensive Commercial | 65 dBA | 65 dBA | 55 dBA |
| Industrial | 70 dBA | 70 dBA | 70 dBA |

Source: Santa Rosa Noise Ordinance 17-16.030.

The Noise Ordinance defines ambient noise as follows:

> *"Ambient noise is the all-encompassing noise associated with a given environment usually a composite of sounds from many sources near and far. For the purpose of this chapter, ambient noise level is the level obtained when the noise level is averaged over a period of 15 minutes without inclusion of noise from isolated identifiable sources at the location and time of day near that at which a comparison is to be made."*

### *Existing Noise Environment*

The segment of Fulton Road to be widened is located between Piner Road and Guerneville Road in the City of Santa Rosa. Single-family residential developments are located to the east and to the west of Fulton Road. Other land uses include Piner High School located to the east of Fulton Road between Quail Hollow Drive and Jenes Lane, a skatepark located to the west of Fulton Road across from the high school, the Church of Christ located to the west of Fulton Road south of Piner Road, the Lytton Rancheria Education Center preschool located to the north of Green Acre Lane on the east side of Fulton Road, and commercial uses located to the north of Guerneville Road on both sides of Fulton Road.

A noise monitoring survey was performed at the site between Monday, February 13, 2017 and Wednesday, February 15, 2017. The noise monitoring survey included two long-term and 12 short-term noise measurements, which are shown in Figures 1.7-1 and 1.7-2. Traffic noise along Fulton Road dominates the noise environment at the surrounding land uses. Secondary noise sources include traffic along neighborhood and connector roadways. Occasional overhead aircraft associated with the Charles M. Schulz-Sonoma County Airport are also audible at times along the roadway corridor.

Long-term noise measurement LT-1 was made from a tree located near the skatepark. LT-1 was approximately 110 feet west of the centerline of Fulton Road and 10 feet above the ground. Hourly

average noise levels at this location typically ranged from 63 to 68 dBA Leq during the day, and from 53 to 65 dBA Leq at night. The day-night average noise level on Tuesday, February 14, 2017 was 68 dBA DNL. The daily trend in noise levels at LT-1 is shown in Figure 1.7-3.

LT-2 was positioned in a tree along the western property line of 1693 Wishing Well Way. LT-2 was approximately 60 feet east of the centerline of Fulton Road and 10 feet above the ground. Hourly average noise levels at this location typically ranged from 68 to 73 dBA Leq during the day, and from 59 to 71 dBA Leq at night. The day-night average noise level on Tuesday, February 14, 2017 was 73 dBA DNL. The daily trend in noise levels at LT-2 is shown in Figure 1.7-4.

Each of the short-term measurements were made on Tuesday, February 14, 2017 in two consecutive ten-minute intervals starting at 10:20 a.m. and concluding at 1:50 p.m. Short-term noise measurements, ST-1 through ST-3, were made north of Piner High School. ST-1 and ST-3 represented back yard equivalent noise levels of the adjacent residences; however, both measurements were made from the roadway-facing side of the six-foot wooden fence located along the western perimeter of the residences. ST-1 was approximately 50 feet east of the centerline of Fulton Road, and ST-3 was approximately 45 feet east of the centerline. The ten-minute average noise levels measured at ST-1 ranged from 71 to 72 dBA Leq(10-min). The ten-minute average noise levels measured at ST-3 ranged from 72 to 73 dBA Leq(10-min). ST-2 was made at the fence line of the Church of Christ in the driveway. The setback of ST-2 was approximately 75 feet west of the centerline of Fulton Road, and the ten-minute average noise levels measured at ST-2 were both 67 dBA Leq(10-min).

ST-4 through ST-7 were made between each of the long-term measurements locations. ST-4 was made at the skatepark at approximately the same setback as LT-1 (110 feet west of the centerline of Fulton Road). The ten-minute average noise levels measured at ST-4 were both 62 dBA Leq(10-min). ST-5 was made at the setback of the nearest residence in the development along Jenes Lane, which is approximately 90 feet east of the centerline of Fulton Road. The ten-minute average noise levels measured at ST-5 ranged from 65 to 66 dBA Leq(10-min). ST-6 was made along Green Acre Lane, adjacent to the Lytton Rancheria Education Center preschool. The setback of ST-6, which was approximately 70 feet east of the centerline of Fulton Road, was the same as the first residence along Wishing Well Way (1694 Wishing Well Way). The ten-minute average noise levels measured at ST-6 were both 66 dBA Leq(10-min). ST-7 was made opposite Fulton Road from LT-2 at the setback of the 1555 Alegra Street residence. ST-7 was approximately 70 feet west of the centerline of Fulton Road. The ten-minute average noise levels measured at ST-7 were both 70 dBA Leq(10-min).

Each of the remaining short-term measurements represented the existing noise environment of single-family residences located between Wishing Well Way and Guerneville Road. ST-8 was made along a driveway east of Fulton Road at the setback of the 1520 Fulton Road residence, which was approximately 70 feet from the centerline. The ten-minute average noise levels measured at ST-8 ranged from 66 to 67 dBA Leq(10-min). ST-9 was made from the backyard of 1521 Pomeroy Place, approximately 90 feet east of the centerline of Fulton Road. Due to excessive dog barking occurring during the first ten-minute interval, the range of ten-minute average noise levels measured at ST-9 was from 60 to 67 dBA Leq(10-min). ST-10 was made at the setback of the first residence located on the west side of Fulton Road north of the commercial shopping plaza. ST-10 was approximately 110 feet west of the centerline of Fulton Road. The ten-minute average noise levels measured at ST-10 were both 62 dBA Leq(10-min). Three ten-minute measurements were made at the 2471 Westvale Court residence (ST-11). The first two ten-minute measurements were made from the side yard, which was shielded from the Fulton Road traffic by a six-foot wooden fence. The distance from the centerline of Fulton Road to this position of ST-11 was approximately 100 feet. The ten-minute average noise levels measured at ST-11 were both 53 dBA Leq(10-min). For the third ten-minute measurement, ST-11 was moved to the backyard, which was not

shielded from the Fulton Road traffic noise. At this position, the ten-minute average noise level was 60 dBA Leq(10-min). The final short-term measurement ST-12 was made opposite the IHOP restaurant just north of Guerneville Road. ST-12 was positioned at the setback of the first multi-family residence located on the east side of Fulton Road, which is approximately 65 feet from the centerline. The ten-minute average noise levels measured at ST-12 ranged from 64 to 66 dBA Leq(10-min). All data collected at the short-term measurements are summarized in Table 1.7-5.

Figure 1.7-1 Noise Measurement Locations North of Piner High School

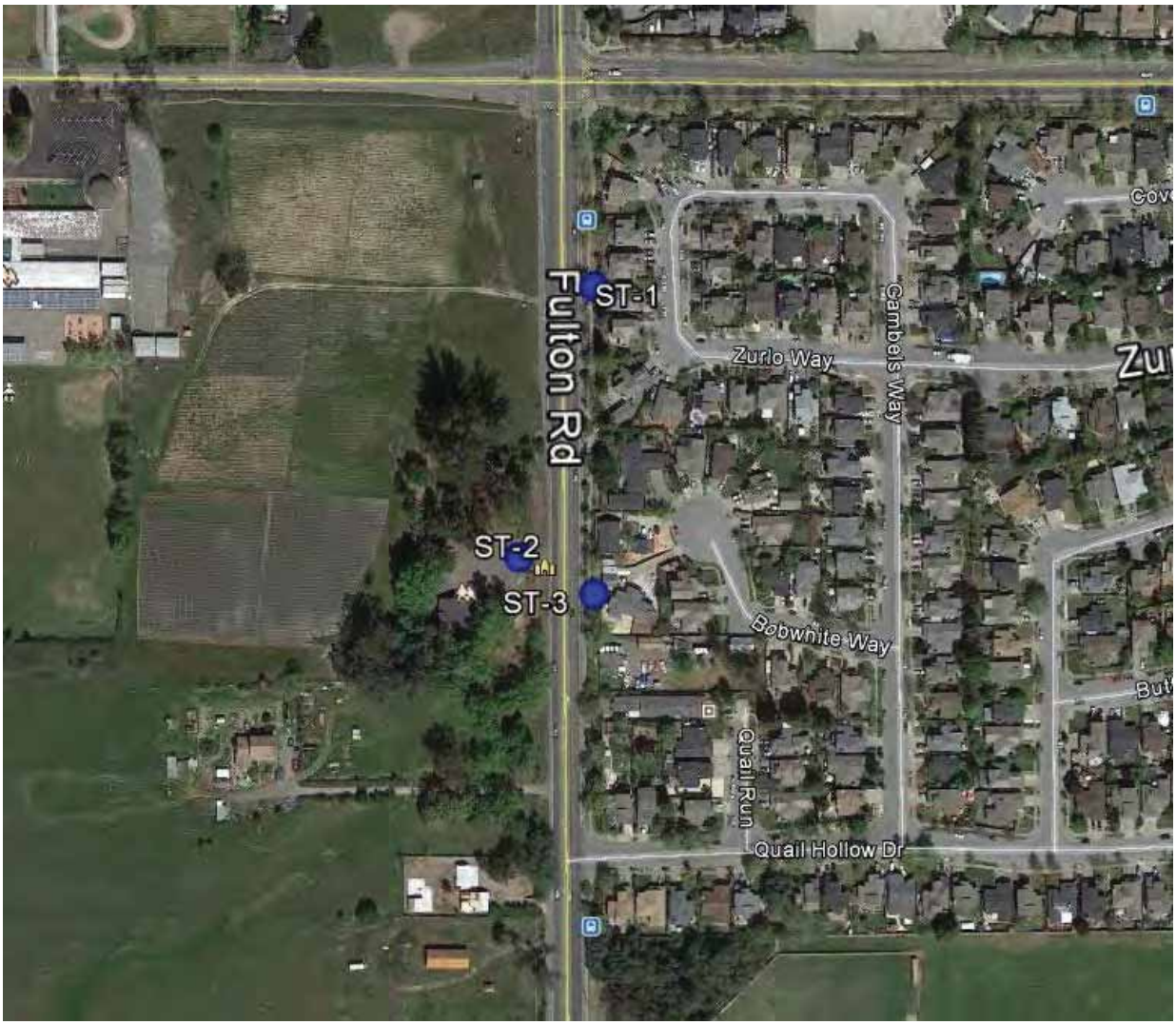


Figure 1.7-2 Noise Measurement Locations South of Piner High School

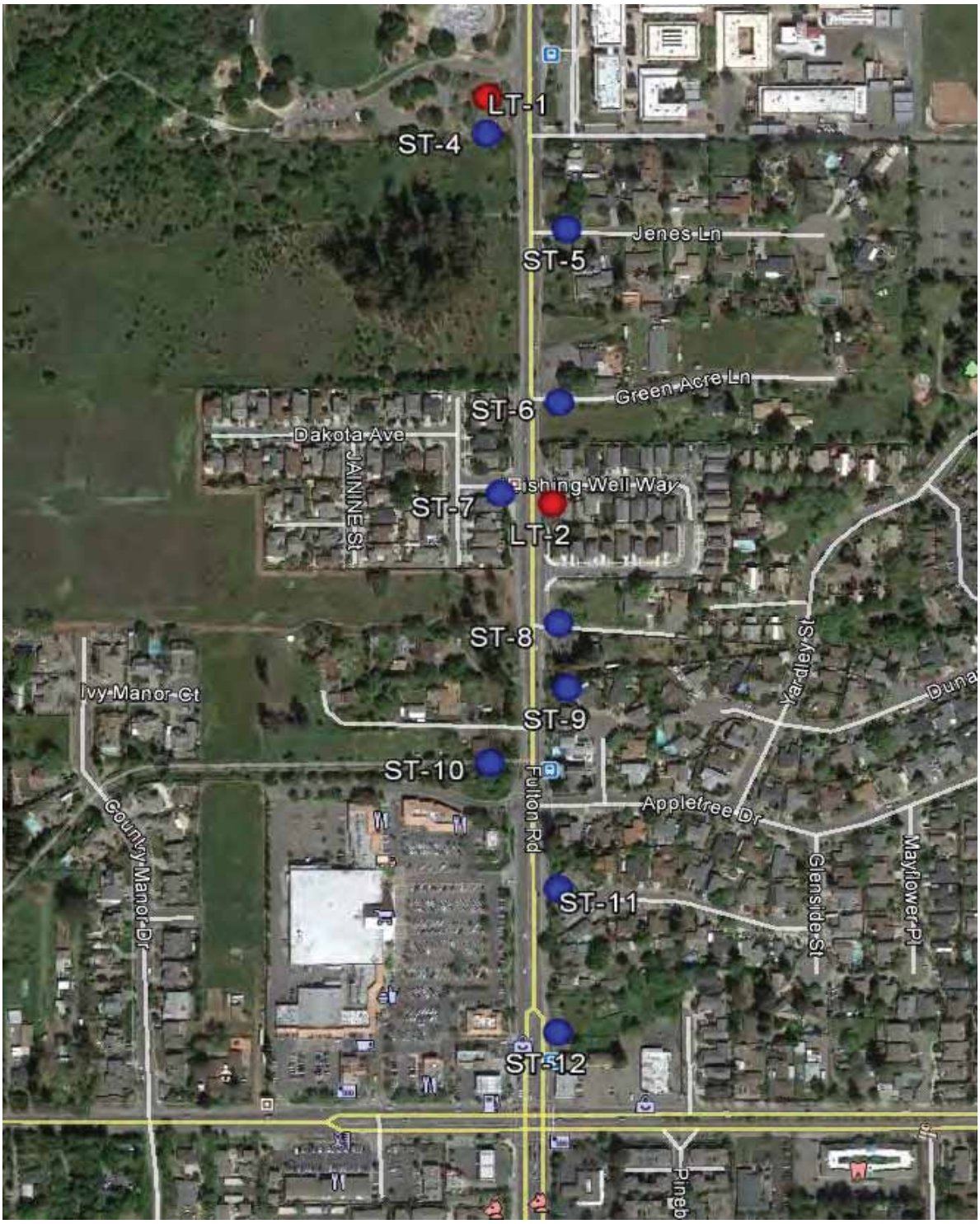


Figure 1.7-3 Daily Trend in Noise Levels at LT-1, February 14, 2017 through Wednesday, February 15, 2017

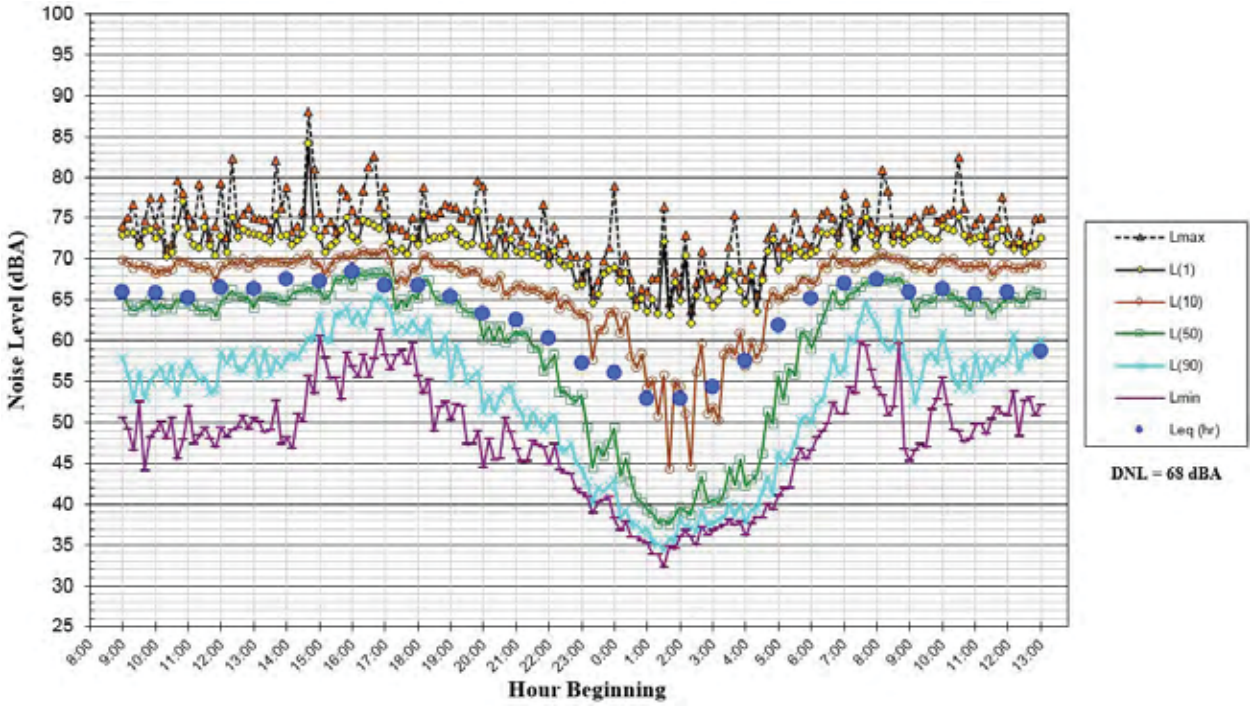



Figure 1.7-4 Daily Trend in Noise Levels at LT-2, February 14, 2017 through Wednesday, February 15, 2017

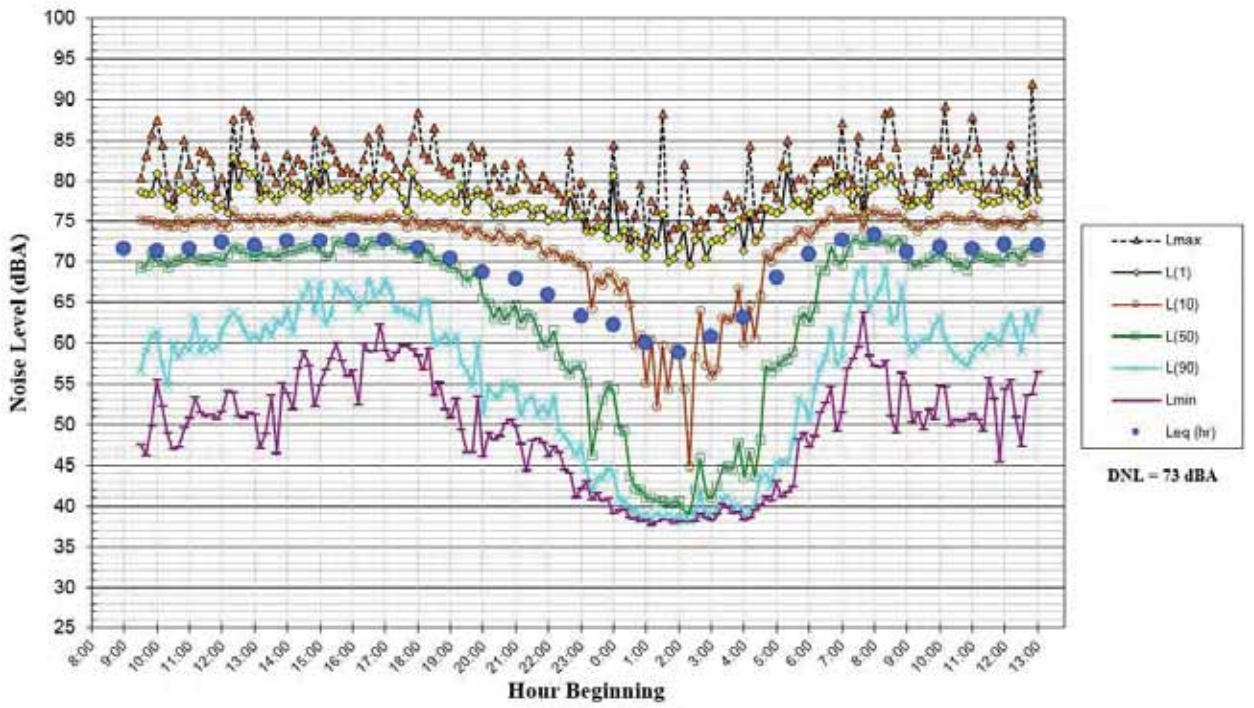


Table 1.7-5 Summary of Short-Term Noise Measurements (dBA)

| Noise Measurement Location | Date, Time | $L_{max}$ | $L_{(1)}$ | $L_{(10)}$ | $L_{(50)}$ | $L_{(90)}$ | $L_{eq(10)}$ |
|---|---|---|---|---|---|---|---|
| ST-1: backyard equivalent of 2384 Gambels Way | 2/14/2017, 13:20-13:30 | 82 | 78 | 74 | 69 | 58 | 71 |
| | 2/14/2017, 13:30-13:40 | 87 | 80 | 75 | 69 | 56 | 72 |
| ST-2: Church of Christ | 2/14/2017, 12:40-12:50 | 79 | 75 | 71 | 66 | 56 | 67 |
| | 2/14/2017, 12:50-13:00 | 78 | 74 | 70 | 66 | 59 | 67 |
| ST-3: backyard equivalent of 2009 Quail Run | 2/14/2017, 12:40-12:50 | 83 | 80 | 76 | 71 | 57 | 72 |
| | 2/14/2017, 12:50-13:00 | 90 | 79 | 75 | 71 | 62 | 73 |
| ST-4: skatepark | 2/14/2017, 10:20-10:30 | 69 | 68 | 65 | 61 | 52 | 62 |
| | 2/14/2017, 10:30-10:40 | 70 | 68 | 66 | 61 | 53 | 62 |
| ST-5: front yard equivalent of 2403 Jenes Lane | 2/14/2017, 11:50-12:00 | 72 | 71 | 69 | 65 | 55 | 65 |
| | 2/14/2017, 12:00-12:10 | 73 | 72 | 69 | 64 | 58 | 66 |
| ST-6: backyard equivalent of 1694 Wishing Well Way | 2/14/2017, 11:50-12:00 | 78 | 73 | 70 | 65 | 55 | 66 |
| | 2/14/2017, 12:00-12:10 | 73 | 71 | 69 | 65 | 58 | 66 |
| ST-7: backyard equivalent of 1555 Fulton Road | 2/14/2017, 12:00-12:10 | 77 | 75 | 73 | 69 | 58 | 70 |
| | 2/14/2017, 12:10-12:20 | 79 | 76 | 73 | 69 | 59 | 70 |
| ST-8: front yard equivalent of 1520 Fulton Road | 2/14/2017, 11:10-11:20 | 78 | 75 | 70 | 66 | 54 | 67 |
| | 2/14/2017, 11:20-11:30 | 80 | 76 | 70 | 65 | 55 | 66 |
| ST-9: backyard of 1521 Pomeroy Place | 2/14/2017, 11:00-11:10 | 85 | 81 | 65 | 60 | 53 | 67 |
| | 2/14/2017, 11:10-11:20 | 71 | 68 | 63 | 58 | 49 | 60 |
| ST-10: ~110 feet west of centreline of Fulton Road | 2/14/2017, 11:00-11:10 | 72 | 68 | 65 | 62 | 55 | 62 |
| | 2/14/2017, 11:10-11:20 | 73 | 69 | 66 | 60 | 53 | 62 |
| ST-11: side yard of 2471 Westvale Court (behind six-foot fence) | 2/14/2017, 10:30-10:40 | 64 | 61 | 56 | 51 | 45 | 53 |
| | 2/14/2017, 10:40-10:50 | 62 | 60 | 57 | 52 | 46 | 53 |
| ST-11a: backyard of 2471 Westvale Court (no shielding) | 2/14/2017, 10:50-11:00 | 70 | 68 | 64 | 58 | 51 | 60 |
| ST-12: ~65 feet east of centreline of Fulton Road | 2/14/2017, 10:20-10:30 | 73 | 72 | 69 | 60 | 53 | 64 |
| | 2/14/2017, 10:30-10:40 | 80 | 74 | 70 | 61 | 54 | 66 |

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# Appendix B Mitigation Monitoring Program

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| Mitigation Measures and Environmental Protection Actions (EPAs) | Implementation Procedure | Monitoring Responsibility | Monitoring / Reporting Action & Schedule | Monitoring Compliance Record (Name/Date) |
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| **EPA-1: Geotechnical Design**<br>As part of the project design process, a California-registered Geotechnical Engineer was engaged to conduct a design-level geotechnical study for the project. The project will be designed and constructed in compliance with the site-specific recommendations made in the project's geotechnical report. This will include design in accordance with recommendations for site preparation, grading, stripping, excavations, fill quality and placement, pavement sections, asphalt overlay, compactions, moisture barriers, and other factors. The geotechnical recommendations will be incorporated into the final plans and specifications for the project, and will be implemented during construction. | Incorporate recommendations into final plans and specifications. | City of Santa Rosa | Verify all geotechnical study design recommendations are incorporated into 90% plan set. | |
| **EPA-2: Implement Air Quality Control Measures during Construction**<br>To limit dust, criteria pollutants, and precursor emissions associated with the construction activity, the following Bay Area Air Quality Management District (BAAQMD) recommended Basic Construction Measures will be included in construction contract specifications and required during implementation of the project:<br>• All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas and unpaved access roads) shall be watered two times per day;<br>• All haul trucks transporting soil, sand, or other loose material off-site shall be covered or shall have at least two feet of freeboard;<br>• All visible mud or dirt tracked-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping shall be prohibited;<br>• All vehicle speeds on unpaved areas shall be limited to 15 miles per hour;<br>• All paving shall be completed as soon as possible after trenching work is finished;<br>• Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points;<br>• All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation;<br>• A publicly visible sign shall be posted with the telephone number and person to contact at the City regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations. | Incorporate into final plans and specifications. | City of Santa Rosa | Verify in 90% specifications.<br>Check daily jobsite compliance as necessary. | |
| **EPA-3: Implement Climate Action Plan Measures** | Incorporate into final plans and specifications. | City of Santa Rosa | Verify in 90% specifications. | |

| Mitigation Measures and Environmental Protection Actions (EPAs) | Implementation Procedure | Monitoring Responsibility | Monitoring / Reporting Action & Schedule | Monitoring Compliance Record (Name/Date) |
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| To ensure that the project is consistent with the Santa Rosa Climate Action Plan, the following measures shall be incorporated into the project design and/or be implemented during construction.<br>• Cool paving materials shall be used for new sidewalks and crosswalks associated with the project.<br>• Construction vehicle idling times shall be minimized by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes or less (as required by the California airborne toxics control measure Title 13, Section 2485 of CCR). Clear signage shall be provided to remind contractors of idling restrictions.<br>• Construction equipment shall be maintained in accordance with manufacturer's specifications.<br>• The contractor shall be required to implement one of the following measures, as feasible and appropriate to the construction project:<br>o Substitute electrified equipment for diesel- and gasoline-powered equipment where practical.<br>o Use alternative fuels for construction equipment onsite, where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane, or biodiesel.<br>o Avoid the use of on-site generators by connecting to grid electricity or utilizing solar-powered equipment. | | | Check daily jobsite compliance as necessary. | |
| **AES-1: Minimize Temporary Visual Impacts**<br>The City shall avoid or substantially lessen impacts by reducing construction disturbance. Measures shall include:<br>• The size of construction zones and staging areas shall be the minimum operable size. The location of such zones shall be adjusted to minimize the visual impacts.<br>• To the extent feasible, alignments and locations of facilities shall be adjusted to avoid visually sensitive features and conditions that would result in major landform alteration or mature landscape removal.<br>• During construction, temporary fencing with green fabric screen or similar screening shall be placed around primary staging areas to limit the prominence of views of construction equipment and associated construction materials.<br>• The City shall restore or revegetate staging areas disturbed or scarred by construction activities, including restoring pre-project topographic features and reseeding with species comparable to those removed or disturbed during construction. | Incorporate into final plans and specifications. | City of Santa Rosa | Verify in 90% specifications.<br>Check daily jobsite compliance as necessary.<br>Verify success of replacement vegetation annually for three years after project completion. | |
| **AES-2: Avoid Glare and Light Trespass from Nighttime Construction Lighting**<br>The City shall require the contractor to prepare and implement a Nighttime Construction Lighting Plan for any nighttime work so as to avoid glare that would be a hazard to vehicles and to avoid light trespass onto adjacent residential uses. The lighting plan shall be developed to guide the use of lighting during project construction in such a way as to | Incorporate into final plans and specifications. | City of Santa Rosa | Verify in 90% specifications.<br>Verify compliance with Nighttime Construction Lighting Plan prior to | |

| Mitigation Measures and Environmental Protection Actions (EPAs) | Implementation Procedure | Monitoring Responsibility | Monitoring / Reporting Action & Schedule | Monitoring Compliance Record (Name/Date) |
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| effectively light the work area while limiting light spill onto adjoining property. The Plan shall adequately describe the work including, but not be limited to, the layout of lighting equipment necessary for all work to be completed at night and descriptions of hardware, including hoods, louvers, shields or other means to be used to control glare and light trespass onto adjoining property. Lighting systems with flood, spot, or stadium type luminaires shall be aimed downward at the work. | Prepare Nighttime Construction Lighting Plan | | any work that requires lighting. | |
| **AES-3: Minimize Glare from LED Street Lights**<br>The City shall minimize glare from LED street light designs along the roadway. This may include, but not necessarily be limited to, the following:<br>• Control blue-rich lighting by using the lowest emission of blue light possible to reduce glare, with a color temperature of no greater than 3000 Kelvin (K).<br>• Utilization of shielding to minimize glare;<br>• Utilization of LED lighting with the ability to be dimmed for off-peak time periods. | Incorporate into final plans and specifications. | City of Santa Rosa | Verify in 90% specifications. | |
| **BIO-1: Avoid Loss of Sensitive Plant Species**<br>The City shall retain a qualified biologist to complete focused surveys for Sonoma sunshine, Burke's goldfields, and Sebastopol meadowfoam in accordance with USFWS protocols developed for the Santa Rosa Plain. This includes two years of focused spring plant surveys in March, April, and May.<br>In accordance with the established guidelines and procedures for mitigating impacts to the three listed vernal pool plants and their habitat, if no listed plants are found during plant surveys then the mitigation ratio shall be 1.5:1 for loss of potential habitat (i.e., seasonal wetland). If listed species are found within the project area and will be impacted, the mitigation ratio shall be 3:1. The City shall purchase credits in an approved mitigation bank within the Santa Rosa Plain. | Conduct floristic surveys for Santa Rosa Plain botanical species.<br>Purchase necessary credits dependent on results of surveys. | City of Santa Rosa | Verify surveys are conducted according to USFWS protocols.<br>Calculate and purchase credits prior to construction in areas with potential habitat. | |
| **BIO-2: Protect California Tiger Salamander**<br>Mitigation for impacts to California Tiger Salamander (CTS) habitat shall be as stipulated in the Santa Rosa Plain Conservation Strategy (USFWS 2005) or any subsequent guidance adopted by USFWS. To prevent loss of CTS habitat within the Santa Rosa Plain, the (United States Fish and Wildlife Service) USFWS and California Department of Fish and Wildlife (CDFW) require that mitigation lands be purchased for the acreage that is being impacted, or that land be conserved in accordance with the USFWS Santa Rosa Plain Conservation Strategy.<br>Prior to project construction, a qualified biologist shall quantify and map the acreage of CTS habitat that the project would impact. Because the project is located more than 2,200 feet but within 1.3 miles of a known breeding site, the City shall compensate for loss of CTS habitat by purchasing mitigation credits at a ratio of 1:1 or as required by USFWS and CDFW. The mitigation shall be purchased from a mitigation bank that is within the Critical | Quantify and map the acreage of CTS habitat that the project would impact.<br>Purchase mitigation credits prior to construction, or conserve land in accordance with SRP Conservation Strategy.<br>Incorporate minimization | City of Santa Rosa | Calculate and purchase credits prior to construction in areas with potential habitat.<br>Verify minimization measures in 90% specifications.<br>Conduct surveys / assessments as noted.<br>Verify success of replacement vegetation annually for | |

| Mitigation Measures and Environmental Protection Actions (EPAs) | Implementation Procedure | Monitoring Responsibility | Monitoring / Reporting Action & Schedule | Monitoring Compliance Record (Name/Date) |
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| Habitat for the species. Alternatively, the City may conserve land in accordance with the USFWS Santa Rosa Plain Conservation Strategy.<br>Initial ground disturbing construction activities in habitat shall be limited to the dry season (June through October) when salamanders are not moving between terrestrial habitat and aquatic breeding habitat.<br>Minimization measures contained in Section 5.2 (Minimization Measures) of the Santa Rosa Plain Conservation Strategy (USFWS 2005) or any subsequent guidance adopted by the USFWS shall be implemented during work within areas where California tiger salamanders may occur. These include:<br>• A USFWS-approved biological monitor will be on site each day during initial site grading.<br>• The biological monitor will conduct a training session for all construction workers before work begins on the project.<br>• Before the start of work each morning, the biological monitor will check for CTS under any equipment such as vehicles and stored pipes. The biological monitor will check all excavated steep-walled holes or trenches greater than one foot deep for any CTS. Any CTS found will be removed by the biological monitor and translocated under approval by the USFWS.<br>• An erosion and sediment control plan will be implemented to prevent impacts of wetland restoration and construction on habitat outside the work areas.<br>• Access routes and number and size of staging and work areas will be limited to the minimum necessary to achieve the project goals. Routes and boundaries of the roadwork will be clearly marked prior to initiating construction/grading.<br>• All foods and food-related trash items will be enclosed in sealed trash containers at the end of each day, and removed completely from the site once every three days.<br>• No pets will be allowed anywhere in the project site during construction.<br>• A speed limit of 15 mph on dirt roads will be maintained, if applicable.<br>• All equipment will be maintained such that there will be no leaks of automotive fluids such as gasoline, oils, or solvents.<br>• Hazardous materials such as fuels, oils, solvents, etc., will be stored in sealable containers in a designated location that is at least 200 feet from aquatic habitats. All fueling and maintenance of vehicles and other equipment and staging areas will occur at least 200 feet from any aquatic habitat.<br>• Grading and clearing will typically be conducted between April 15 and October 15, of any given year, depending on the level of rainfall and/or site conditions.<br>• Project areas temporarily disturbed by construction activities will be revegetated.<br>• If CTS are found, the City shall coordinate with the USFWS and CDFW to prevent take of individuals and mitigate for loss of habitat. | measures and recommendations into specifications.<br>Retain a qualified biological monitor for the duration of project construction.<br>Develop an erosion and sediment control plan as noted. | | three years after project completion. | |

| Mitigation Measures and Environmental Protection Actions (EPAs) | Implementation Procedure | Monitoring Responsibility | Monitoring / Reporting Action & Schedule | Monitoring Compliance Record (Name/Date) |
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| **BIO-3: Protect Western Pond Turtle**<br>Where work occurs within a creek, or where construction activities are located within 250 feet of a water body, the City shall ensure that preconstruction surveys for the western pond turtle are conducted by a qualified biologist. If western pond turtles are found during preconstruction surveys, CDFW shall be notified and individuals shall be captured by a qualified biologist and relocated to suitable areas. If preconstruction surveys identify active nests, a qualified biologist shall establish a no-disturbance buffer zone around the nest using temporary orange exclusion fencing. The radius of the buffer zone and the duration of the exclusion shall be determined in consultation with CDFW. The buffer zone and fencing shall remain in place until the young have left the nest, as determined by the biologist. | Conduct preconstruction surveys.<br>Implement protection measures as necessary. | City of Santa Rosa | Verify surveys are conducted prior to construction.<br>Verify that turtle relocation and exclusion fencing requirements are in 90% specifications. | |
| **BIO-4: Prevent Disturbance to Nesting Birds**<br>The City shall implement the following measures to prevent impacts to nesting birds:<br>• Grading or removal of any vegetation shall be conducted outside the nesting season, which occurs between approximately February 1 and August 31. (No survey is required for work conducted outside this period).<br>• If grading or vegetation removal between August 31 and February 1 is infeasible and work must occur within the breeding season, a pre-construction nesting bird (both passerine and raptor) survey of the landscaped areas and trees shall be performed by a qualified biologist within 7 days of ground breaking. If no nesting birds are observed, no further action is required and work shall occur within one week of the survey to prevent "take" of individual birds that could begin nesting after the survey.<br>• If bird nests (either passerine and/or raptor) are observed during the pre-construction survey, a disturbance-free buffer zone shall be established around the nest tree(s) until the young have fledged, as determined by a qualified biologist.<br>• The radius of the required buffer zone can vary depending on the species, (i.e., 75 to 100 feet for passerines and 200 to 300 feet for raptors), with the dimensions of any required buffer zones to be determined by a qualified biologist in consultation with California Department of Fish and Wildlife (CDFW).<br>• To delineate the buffer zone around a nesting tree, orange construction fencing shall be placed at the specified radius from the base of the tree within which no machinery or workers shall intrude.<br>• After the fencing is in place there will be no restrictions on grading or construction activities outside the prescribed buffer zones. | Incorporate recommendations into specifications.<br>Conduct preconstruction nesting surveys if grading or vegetation removal occurs during nesting season.<br>Implement recommended protection measures as necessary. | City of Santa Rosa | Verify that surveys are conducted prior to grading or disturbing during nesting season.<br>Verify that disturbance buffers and fencing requirements are in 90% specifications. | |
| **BIO-5: Prevent Disturbance of Roosting Bats**<br>Prior to construction, the City shall have a Bat Habitat Assessment conducted for the trees and culverts to be removed. The Habitat Assessment shall be completed by a qualified biologist (e.g., a biologist holding a California Department of Fish and Wildlife collection | Conduct Bat Habitat Assessment. | City of Santa Rosa | Verify Bat Habitat Assessment is conducted prior to construction. | |

| Mitigation Measures and Environmental Protection Actions (EPAs) | Implementation Procedure | Monitoring Responsibility | Monitoring / Reporting Action & Schedule | Monitoring Compliance Record (Name/Date) |
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| permit and a Memorandum of Understanding with the California Department of Fish and Wildlife allowing the biologist to handle and collect bats). The Habitat Assessment shall evaluate the trees for suitable entry points and roost features, and shall provide focused daytime surveys for day-roosting bats. If a special-status bat species is found, or if suspected day roosts for special-status bats are identified, then the Habitat Assessment shall identify suitable performance measures for avoiding impacts to roosts, which may include, but would not be limited to:<br>• Consultation with the California Department of Fish and Wildlife to determine appropriate measures for protecting bats with young if present, and for implementing measures to exclude non-breeding bat colonies during construction process.<br>• Phased removal of trees where selected limbs and branches not containing cavities are removed using chainsaws on the first day, with the remainder of the tree removed using chainsaws or other equipment on the second day.<br>Based on the daytime habitat assessment, and if culvert and site conditions warrant further surveys, additional surveys may be required, e.g. a night emergence survey, or radio-controlled remote vehicle with infrared camera system to determine presence of absence of bats further inside the culverts. If no bats are present during the day, the culverts may be partially blocked with appropriate mesh or netting to prevent subsequent occupation. If bats are present during the day, additional exclusion and eviction efforts would be required based on specific recommendations of a qualified bat biologist in consultation with the California Department of Fish and Wildlife. | Implement suitable performance measures as necessary. | | Verify that bat performance measures are in 90% specifications. | |
| **BIO-6: Compensate for Loss of Riparian and Oak Woodland Vegetation**<br>The City shall retain a licensed landscape architect or qualified biologist to develop a riparian and oak woodland revegetation plan for the project. The revegetation plan shall include replanting locally native tree species, riparian vegetation and oak trees (either on-site or off-site but in the local watershed and woodland areas) at a minimum of 1:1 ratio for loss of non-native trees and at a ratio of 3:1 for oak and non-oak native trees, or as required by CDFW during permitting.<br>This may include removing non-native invasive species from riparian corridors and adjacent areas and revegetating riparian corridors with native species to enhance aquatic and terrestrial habitat. Native, locally available and genetically appropriate riparian plant materials shall be selected for planting. Oak regeneration shall be prioritized to occur within existing oak woodland areas near the project site, with valley oak woodland restored at a 3:1 ratio based on acreage impacted, or as required by CDFW during permitting.<br>The goal of such a plan shall be to ensure no net loss of functional value of riparian and oak woodland habitat. The plan shall include planting requirements, monitoring requirements, and an adaptive management strategy, and the City shall implement the plan's provisions. Riparian restoration plantings and oak plantings shall be monitored | Quantify tree replacement and oak woodland acreage to be restored.<br>Develop a riparian and oak woodland revegetation plan.<br>Incorporate requirements into specifications. | City of Santa Rosa | Calculate impacts to be mitigated.<br>Verify riparian and oak woodland revegetation requirements are in 90% specifications.<br>Verify success of replacement vegetation annually for five years after project completion. | |

| Mitigation Measures and Environmental Protection Actions (EPAs) | Implementation Procedure | Monitoring Responsibility | Monitoring / Reporting Action & Schedule | Monitoring Compliance Record (Name/Date) |
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| annually for a minimum of 5 years after project completion to ensure that the replacement plantings have developed and survive. | | | | |
| **BIO-7: Compensate for Loss of Wetlands and Waters**<br>The City shall avoid fill of seasonal wetlands and waters, to the extent feasible. If fill cannot be avoided, the City shall compensate for the loss of seasonal wetland habitat through the purchase of wetland credits in an approved mitigation bank within the Santa Rosa Plain so that there is no net loss in wetlands. The City shall also compensate for impacts to creeks and other waters, including:<br>• Removal of sediments and foreign materials deposited by construction activities from jurisdictional waters.<br>• Restoration of disturbed waters or stream gradients to original contour and hydrologic condition, to the extent feasible.<br>• Bank stabilization prior to the onset of winter using erosion and sediment control best management practices.<br>• Required permits from the U.S. Army Corp of Engineers, the North Coast Regional Water Quality Control Board, the California Department of Fish and Game, and the Sonoma County Water Agency shall be received prior to the start of any on-site construction activity. The City shall ensure any additional measures outlined in the permits are implemented. | Quantify and map wetland impacts.<br>Purchase mitigation credits prior to construction. | City of Santa Rosa | Calculate and purchase credits prior to construction.<br>Verify minimization measures and permit requirements are in 90% specifications. | |
| **BIO-8: Comply with City and County Tree Ordinance**<br>The City shall replace any heritage, landmark, or other protected trees in accordance with tree replanting requirements indicated in Santa Rosa Municipal Code Chapter 17-24 and Sonoma County Code Chapter 26D. Replacement trees shall be planted within the project area; however, if the project area is inadequate in size to accommodate the replacement trees, the trees shall be planted on public property with the approval of the Director of the City's Planning and Economic Development Department, the Sonoma County Planning Department, or through payment of in-lieu fees. | Quantify tree replacement requirements.<br>Replant trees or pay in-lieu fees.<br>Incorporate tree replacement requirements into specifications. | City of Santa Rosa | Verify tree replacement requirements are calculated.<br>Verify that requirements are in 90% specifications. | |
| **Mitigation Measure CR-1: Protect Archaeological Resources during Construction Activities**<br>In the event that any subsurface archaeological features or deposits, including locally darkened midden soil, are discovered during construction-related earth-moving activities, all ground-disturbing activity in the vicinity of the resource shall be halted, a qualified professional archaeologist shall be retained to evaluate the find, and the appropriate tribal representative(s) shall be notified. If the find qualifies as a historical resource or unique archaeological resource as defined by CEQA, the archaeologist shall develop appropriate | Incorporate into specifications. | City of Santa Rosa | Verify requirements are in 90% specifications. | |

| Mitigation Measures and Environmental Protection Actions (EPAs) | Implementation Procedure | Monitoring Responsibility | Monitoring / Reporting Action & Schedule | Monitoring Compliance Record (Name/Date) |
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| measures to protect the integrity of the resource and ensure that no additional resources are affected. | | | | |
| **Mitigation Measure CR-2: Protect Paleontological Resources during Construction Activities**<br>In the event that fossils are encountered during construction (i.e., bones, teeth, or unusually abundant and well-preserved invertebrates or plants), construction activities shall be diverted away from the discovery within 50 feet of the find, and a professional paleontologist shall be notified to document the discovery as needed, to evaluate the potential resource, and to assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the material, if it is determined that the find cannot be avoided. The paleontologist shall make recommendations for any necessary treatment that is consistent with currently accepted scientific practices. Any fossils collected from the area shall then be deposited in an accredited and permanent scientific institution where they will be properly curated and preserved. | Incorporate into specifications. | City of Santa Rosa | Verify requirements are in 90% specifications. | |
| **Mitigation Measure CR-3: Protect Human Remains if Encountered during Construction**<br>If human remains, associated grave goods, or items of cultural patrimony are encountered during construction, work shall halt in the vicinity of the find and the County Coroner shall be notified immediately. The following procedures shall be followed as required by Public Resources Code § 5097.9 and Health and Safety Code § 7050.5. If the human remains are determined to be of Native American origin, the Coroner shall notify the Native American Heritage Commission within 24 hours of the determination. The Native American Heritage Commission shall then notify the Most Likely Descendant (MLD), who has 48 hours to make recommendations to the landowner for the disposition of the remains. A qualified archaeologist, the City and the MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of any human remains and associated or unassociated funerary objects. The agreement would take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, and final disposition of the human remains and associated or unassociated funerary objects. | Incorporate into specifications. | City of Santa Rosa | Verify requirements are in 90% specifications. | |
| **Mitigation Measure HAZ-1: Handling and Disposal of Hazardous Wastes**<br>The City and its contractor shall prepare and implement a Soil and Groundwater Management Plan for excavation and dewatering activities in the vicinity of the Fulton Road/Guerneville Road intersection (between approximately STA 12+00 and 15+00 on the project plans). Elements of the Soil and Groundwater Management Plan shall include, but would not necessarily be limited to, the following: | Develop Soil and Groundwater Management Plan.<br>Incorporate Soil and Groundwater Plan measures into specifications. | City of Santa Rosa | Verify soil and groundwater handling requirements are in 90% specifications. | |

| Mitigation Measures and Environmental Protection Actions (EPAs) | Implementation Procedure | Monitoring Responsibility | Monitoring / Reporting Action & Schedule | Monitoring Compliance Record (Name/Date) |
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| • Measures to address hazardous materials and other worker health and safety issues during construction, including the specific level of protection required for construction workers. This shall include preparation of a site-specific health and safety plan in accordance with federal OSHA regulations (29 CFR 1910.120) and Cal-OSHA regulations (8 CCR Title 8, Section 5192) to address worker health and safety issues during construction.<br>• Monitoring of excavation activities for soil and groundwater contamination. Monitoring shall include, at minimum, visual and organic vapor monitoring by personnel with appropriate hazardous materials training, including 40 hours of Hazardous Waste Operations and Emergency Response (HAZWOPER) training. If visual or organic vapor monitoring indicates signs of suspected contaminated soil, then soil and groundwater samples shall be collected and analyzed to characterize soil and water quality.<br>• Groundwater brought to the surface as a result of construction dewatering shall be handled in a manner appropriate to construction-related permits for dewatering. If contamination is suspected or noted during the construction phase, then the groundwater shall be containerized and analyzed for contamination by a laboratory, certified by the California Environmental Protection Agency (CalEPA) Environmental Laboratory Accreditation Program (ELAP), using United States Environmental Protection Agency (USEPA)-approved analytical methods. If contaminated groundwater is encountered, precautions shall be taken to assure that the installation of piping or other construction activities do not further disperse contamination.<br>• All potentially contaminated materials encountered during project construction activities shall be evaluated in the context of applicable local, state and federal regulations and/or guidelines governing hazardous waste. All materials deemed to be hazardous shall be remediated and/or disposed of following applicable regulatory agency regulations and/or guidelines. Disposal sites for both remediated and non-remediated soils shall be identified prior to beginning construction. Management of these sites shall be documented in a Material Management Plan acceptable to applicable agencies. All evaluation, remediation, treatment, and/or disposal of hazardous waste shall be supervised and documented by qualified hazardous waste personnel. | | | | |
| **HWQ-1: Seasonal Work Restrictions**<br>Construction activities within Forestview Creek and Peterson Creek shall be conducted during the dry season, May 15 through October 15, when the creeks are completely or almost without standing water. | Incorporate into specifications. | City of Santa Rosa | Verify restrictions are in 90% specifications. | |
| **HWQ-2: Stormwater Control Measures during Construction**<br>The City shall obtain coverage under State Water Resources Control Board Order No. 2009-0009-DWQ, Waste Discharge Requirements for Discharges of Storm Water Runoff | Incorporate into specifications. | City of Santa Rosa | Verify requirements are in 90% specifications. | |

| Mitigation Measures and Environmental Protection Actions (EPAs) | Implementation Procedure | Monitoring Responsibility | Monitoring / Reporting Action & Schedule | Monitoring Compliance Record (Name/Date) |
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| Associated with Construction and Land Disturbance Activities, as amended by Order No. 2012-0006. The City and/or its contractor shall submit permit registration documents (notice of intent, risk assessment, site maps, Storm Water Pollution Prevention Plan (SWPPP), annual fee, and certifications) to the State Water Resources Control Board. The SWPPP shall address pollutant sources, non-storm water discharges, best management practices, and other requirements specified in the above-mentioned Order. The SWPPP shall also include dust control practices to prevent wind erosion, sediment tracking, dust generation by construction equipment, management of concrete slurry, asphalt, pavement cutting, and other street and road activities to avoid discharge to storm drains from such work. A Qualified Storm Water Pollution Prevention Plan Practitioner shall oversee implementation of the Plan, including visual inspections, sampling and analysis, and ensuring overall compliance. | Prepare SWPPP and permit registration documents prior to construction.<br>Retain a Qualified Storm Water Pollution Prevention Plan Practitioner to oversee SWPPP implementation. | | Confirm that SWPPP meets State Board requirements and is implemented during construction. | |
| **HWQ-3: Manage Drinking Water System Discharges**<br>If construction dewatering is required, the City and its contractor shall evaluate reasonable options for dewatering management that would avoid discharging to a local surface water or storm drain. The following management options shall be considered:<br>• Reuse the water on-site for dust control, compaction, or irrigation.<br>• Retain the water on-site in a grassy or porous area to allow infiltration/evaporation.<br>• Discharge (by permit) to a sanitary sewer.<br>If discharging to the sanitary sewer, the City shall comply with a one-time discharge permit or other type of approval requiring, as necessary, measures for characterizing the discharge and ensuring filtering methods and monitoring to verify that the discharge is compliant with the City's local wastewater discharge requirements.<br>If discharging to a local surface water or storm drain, the City shall obtain coverage under Order No. R1-2009-0045, Waste Discharge Requirements for Low Threat Discharges to Surface Waters in the North Coast Region. The City shall submit permit registration documents to the North Coast Regional Water Quality Control Board, including development of a Best Management Practices/Pollution Prevention Plan to characterize the discharge and to identify specific measures to control the discharge, such as sediment controls to ensure that excessive sediment is not discharged, and flow controls to prevent erosion and flooding downstream of the discharge. The City shall ensure that the contractor oversees implementation of the Best Management Practices/Pollution Prevention Plan during construction dewatering activities, including visual inspections and ensuring overall compliance. | Incorporate requirements into specifications.<br>If discharging to local surface water or storm drain, prepare Best Management Practices / Pollution Prevention Plan and obtain required permit prior to construction.<br>Implement applicable measures in permit. | City of Santa Rosa | Verify requirements are in 90% plan set.<br>Verify obtainment of permit and that requirements are implemented during construction. | |
| **NOI-1: Reduce Vibration Levels**<br>The City shall prohibit the use of heavy vibration-generating construction equipment, such as vibratory rollers or the dropping of heavy objects, within 20 feet of a residence. | Incorporate requirement into specifications. | City of Santa Rosa | Verify requirements are in 90% specifications. | |

| Mitigation Measures and Environmental Protection Actions (EPAs) | Implementation Procedure | Monitoring Responsibility | Monitoring / Reporting Action & Schedule | Monitoring Compliance Record (Name/Date) |
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| | | | Monitor weekly during primary phases of construction. | |
| **NOI-2: Reduce Construction Noise Levels**<br>The City shall require the contractor to adhere to the following Construction Best Management Practices to reduce construction noise levels emanating from construction activities and minimize disruption and annoyance at existing noise-sensitive receptors in the project vicinity.<br>• Limit construction hours to between 7:00 a.m. and 7:00 p.m., Monday through Friday, and to between 9:00 a.m. to 5:00 p.m. on Saturdays, where feasible.<br>• Limit nighttime usage of noisy equipment, and avoid scheduling multiple noisy pieces of equipment simultaneously to minimize noise.<br>• Minimize nighttime deliveries to the degree feasible.<br>• Implement a construction noise monitoring plan, which includes a provision for noise monitoring at the nearby receptors to confirm that nighttime construction noise levels meet nighttime noise level thresholds at the single- and multi-family residential land uses. Construction monitoring shall occur for the initial three days of construction at each intersection to show that the nighttime construction activities are compliant with the construction noise level thresholds (50 dBA Leq exterior noise level).<br>• Sensitive residential receptors identified by the noise monitoring with the potential to be exposed to nighttime construction noise levels of 50 dBA Leq or greater, shall be provided with vouchers for alternate accommodations for the duration of the nighttime construction phase.<br>• Construct temporary noise barriers, where feasible, to screen stationary noise-generating equipment. Temporary noise barrier fences would provide a 5 dBA noise reduction if the noise barrier interrupts the line-of-sight between the noise source and receiver and if the barrier is constructed in a manner that eliminates any cracks or gaps.<br>• Construction equipment should be well-maintained and used judiciously to be as quiet as possible. The contractor should use equipment with efficient noise-suppression devices, where feasible.<br>• Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.<br>• Unnecessary idling of internal combustion engines should be strictly prohibited.<br>• All jackhammers, chainsaws, and pavement breakers used on the construction site shall be enclosed with shields, acoustical barrier enclosures, or noise barriers<br>• Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors as feasible. If they must | Incorporate requirements and Construction Best Management Practices into specifications.<br><br>Develop and implement construction noise monitoring plan.<br><br>Notify adjacent sensitive receptors | City of Santa Rosa | Verify requirements are in 90% specifications.<br>Monitor weekly during primary phases of construction. | |

| Mitigation Measures and Environmental Protection Actions (EPAs) | Implementation Procedure | Monitoring Responsibility | Monitoring / Reporting Action & Schedule | Monitoring Compliance Record (Name/Date) |
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| be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used to reduce noise levels at the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors.<br>• Utilize “quiet” models of air compressors and other stationary noise sources where technology exists. Select hydraulically- or electrically-powered equipment and avoid pneumatically-powered equipment, where feasible.<br>• Locate material stockpiles, as well as maintenance/equipment staging and parking areas, as far as feasible from residential receptors.<br>• Control noise from construction workers’ radios to a point where they are not audible at existing residences bordering the project site.<br>• The contractor shall prepare a detailed construction schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.<br>• Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule. | | | | |
| **TR-1: Traffic Controls**<br>The City shall require the project contractor to develop and implement a temporary Traffic Control Plan outlining work zones, activities, and time needed to complete the work in each zone. As stated in the “Traffic Standards” section of the City’s Design and Construction Standards, no work shall be completed in the public right-of-way during peak hours, unless permitted by the City Traffic Engineer. The project shall keep at least one lane open in each direction of travel on Fulton Road at all times during the construction process. Work performed on the segment adjacent to Piner High School shall be scheduled to occur during the summer months when school is in recess to minimize impacts to school operations, or outside of normal drop-off and pick-up hours. | Develop and implement a Traffic Control Plan.<br><br>Incorporate into specifications. | City of Santa Rosa | Verify requirements are in 90% specifications.<br>Verify Plan prepared prior to construction.<br>Monitor weekly during primary phases of construction. | |
| **TR-2: Maintain Emergency Access and Notify Emergency Responders**<br>The City shall require contractors to provide adequate emergency access to all properties along the corridor during the construction process. At locations where the access to a nearby property is temporarily blocked, the contractor shall be required to have ready the means necessary to accommodate access by emergency vehicles to such properties, such as plating over excavations. As construction progresses, emergency providers shall be notified in advance of the timing, location, and duration of construction activities and the locations and durations of any temporary lane closures. | Incorporate into specifications.<br><br>Notify emergency responders and property owners and occupants whose driveways may be blocked. | City of Santa Rosa | Verify requirements are in 90% specifications.<br>Verify requirements are implemented during construction. | |

| Mitigation Measures and Environmental Protection Actions (EPAs) | Implementation Procedure | Monitoring Responsibility | Monitoring / Reporting Action & Schedule | Monitoring Compliance Record (Name/Date) |
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| **TR-3: Reduce Construction Impacts on Transit, Bicycle, and Pedestrian Facilities**<br>The City shall ensure that pedestrian and bicycle access and circulation shall be maintained during project construction where safe to do so. Where it is unsafe to maintain pedestrian and bicycle facilities at their current location, temporary signage will be used to guide users to alternate temporary paths. Temporary signage and other traffic control measures necessary to inform users of construction conditions shall be utilized. Any transit stops impacted by construction shall be temporarily relocated (with proper signage) within the temporary construction zone, if necessary, to maintain the existing transit service throughout the segment. | Incorporate into specifications. | City of Santa Rosa | Verify in 90% specifications.<br>Monitor weekly during primary phases of construction. | |
| **TCR-1: Protect Tribal Cultural Resources during Construction Activities**<br>The City shall retain a Native American monitor from the Federated Indians of the Graton Rancheria to monitor construction related earth-moving activities of the project in the vicinity of Youth Community Park and the Fox Hollow Subdivision sites. In the event that any subsurface features or deposits are discovered during such monitoring that the Native American monitor identifies as potential tribal cultural resources, all ground-disturbing activity in the vicinity of the resource shall be halted. If the find qualifies as a tribal cultural resource as defined by CEQA, the City shall ensure that appropriate actions to protect the resource are taken and that no additional resources are affected. | Coordinate construction monitoring with Federated Indians of the Graton Rancheria during construction near Youth Community Park and the Fox Hollow Subdivision site. | City of Santa Rosa | Verify monitoring requirements in 90% specifications.<br>Verify that construction monitoring occurs. | |