# State Route 12 Boas Drive Intersection Safety Project

Sonoma County, California
District 4 – SON – 12 (PM 19.83)
04-2Q780/0419000048
SCH #2022040470

# Initial Study with Negative Declaration

**Prepared by the**
**State of California, Department of Transportation**

**June 2022**

# General Information about this Document

## What's in this document:

The California Department of Transportation (Caltrans) has prepared this Initial Study with Negative Declaration (IS/ND) for the State Route (SR) 12/Boas Drive Intersection Safety Project in in the City of Santa Rosa, Sonoma County, California (Project). The Project proposes to install traffic signals and construct pedestrian facilities at the SR 12/Boas Drive/South Boas Drive intersection. The Project would also include drainage modifications, landscaping, and construction of a retaining wall to ensure that adequate corner sight distance at the intersection is provided to traffic from South Boas Drive. Additional Project information is provided in Chapter 2.

Caltrans is the lead agency under the California Environmental Quality Act (CEQA). This document describes why the project is being proposed, how the existing environment could be affected by the project, potential environmental impacts, and the proposed Project Features and Avoidance and Minimization Measures.

The Proposed IS/ND was circulated to the public for 32 days, between April 21 and May 23, 2022. Caltrans received 12 comment submittals. Responses to these comments are included in Appendix E. Throughout this document, a vertical line in the margin indicates a change made since the Proposed IS/ND was circulated for public review. Minor editorial changes and clarifications are not so indicated.

## Document Available Upon Request:

A printed copy of the IS/ND is available upon request. For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to: Department of Transportation, Attn: Arnica MacCarthy, Senior Environmental Planner, Office of Environmental Analysis, 111 Grand Avenue, MS 8-B, Oakland, CA 94612; Telephone (510) 506-0481 (voice); or use the **California Relay Service (800) 735-2929 (TTY to voice)**, **(800) 735-2922 (voice to TTY)**, (800) 855-3000 (Spanish TTY to voice and voice to TTY), (800) 854-7784 (Spanish and English speech-to-speech) or **711**.

An accessible electronic copy of this document is available to download at: the Caltrans environmental document website (https://dot.ca.gov/caltrans-near-me/district-4/d4-popular-links/d4-environmental-docs).

# Initial Study with Proposed Negative Declaration

| 04-SON-12 | 19.83 | 04-2Q780 |
|---|---|---|
| Dist. – Co. – Rte. | PM | E.A. |

| | |
|---|---|
| Project title: | State Route 12/Boas Drive Intersection Safety Project |
| Lead agency name and address: | California Department of Transportation<br>111 Grand Avenue, Oakland, CA 94612 |
| Contact person and phone number: | Arnica MacCarthy, Branch Chief<br>(510) 506-0481 |
| Project location: | City of Santa Rosa, Sonoma County, California |
| General plan description: | Highway Intersection in Residential Area |
| Zoning: | Transportation Corridor |
| Other public agencies whose approval is required (e.g., permits, financial approval, or participation agreements) | California Transportation Commission |

Additional copies of this document are available online at the Caltrans environmental document website (https://dot.ca.gov/caltrans-near-me/district-4/d4-popular-links/d4-environmental-docs).

Lindsay Vivian
Chief, Office of Environmental Analysis
District 4, California Department of Transportation

April 12, 2022
Date

To obtain a copy in Braille, in large print, on computer disk, or on audiocassette, please contact: Department of Transportation, Attn: Arnica MacCarthy, Senior Environmental Planner, Office of Environmental Analysis, 111 Grand Avenue, MS 8-B, Oakland CA 94612: (510) 506-0481 (Voice) or use the California Relay Service 1 (800) 735-2929 (TTY), 1 (800) 735-2929 (Voice) or 711.

# Negative Declaration

## Project Description

The California Department of Transportation (Caltrans) prepared this Initial Study with Negative Declaration for the State Route 12/Boas Drive Intersection Improvement Project (Project) in the City of Santa Rosa, Sonoma County, California, along State Route 12, at post mile 19.83. The Project would install traffic signals and construct pedestrian facilities at the SR 12/Boas Drive/South Boas Drive intersection. The Project would also include drainage modifications, landscaping, and construction of retaining walls to ensure that adequate corner sight distance at the intersection.

## Determination

Caltrans has prepared an Initial Study for this Project and, following public review, has determined that the Project will not have a significant effect on the environment for the following reasons:

The Project will have no impact on agriculture and forest resources, cultural resources, geology and soils, land use and planning, mineral resources, population and housing, public services, recreation, tribal cultural resources, and utilities and service systems.

The Project will have less than significant impacts on aesthetics, air quality, biological resources, energy, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, transportation and traffic, wildfire, and mandatory findings of significance.

Melanie Brent

06/26/2022

Melanie Brent
Deputy District Director, Environmental Planning and Engineering
District 4, California Department of Transportation

Date

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# Chapter 1 Introduction

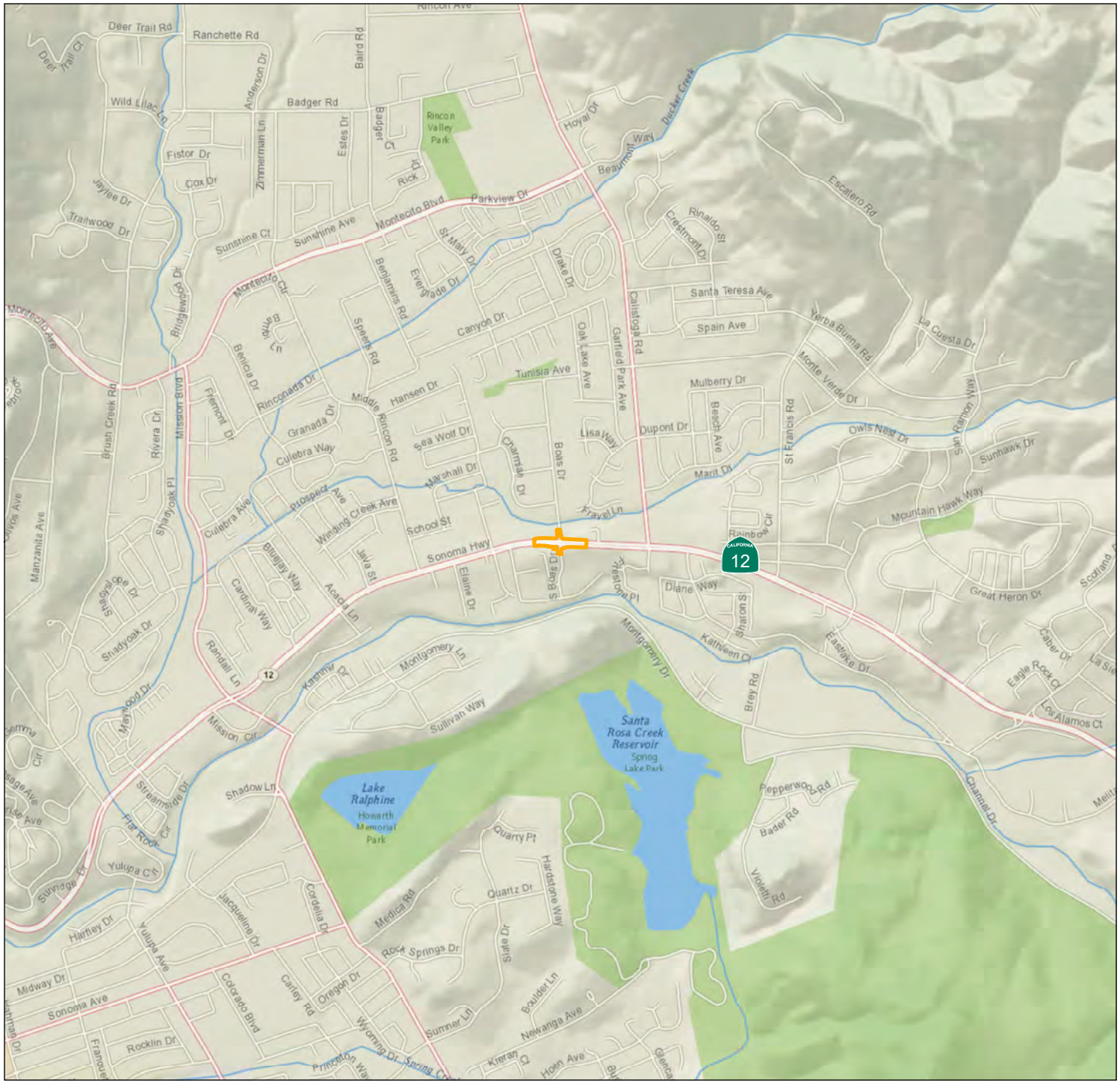
The California Department of Transportation (Caltrans) is the California Environmental Quality Act (CEQA) lead agency and sponsor for the State Route (SR) 12/Boas Drive/South Boas Drive Intersection Improvement Project (Project) and has prepared this Initial Study with Negative Declaration (IS/ND).

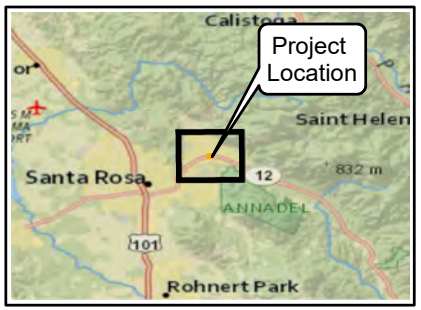
The Project proposes to improve the pedestrian safety and traffic operations at the SR 12/Boas Drive/South Boas Drive intersection (intersection) at Post Mile 19.83 in the City of Santa Rosa in Sonoma County (Figure 1-1). The Project includes constructing pedestrian facilities and installing traffic signals at the intersection.

Total Project costs, including capital and support costs for the proposed Project, are estimated at $6.14 million and would be funded through the State Highway Operation and Protection Program for the 2023/2024 Fiscal Year.

## 1.1 Purpose and Need

The purpose of the Project is to reduce the number and severity of accidents, and to improve the pedestrian safety and traffic operations at the intersection. The Project is needed to reduce the number of accidents at the intersection. Based on a traffic collision report covering the latest 3-year period between July 1, 2018, and June 30, 2021, there were 10 collisions at the intersection, of which 5 involved injury (Caltrans 2022a). This injury rate is greater than the statewide average for similar facilities. An evaluation by the District Office of Traffic Safety determined that the intersection meets the criteria for a Signal Warrant and that the Project (Signalization) would have a Traffic Safety Index of 548. The Traffic Safety Index is calculated based on the benefit of the Project as total dollar value of accident savings to motorists over the Project life compared to the cost of constructing the Project. To be eligible for State Highway Operation and Protection Program (SHOPP) funding, the benefit must outweigh the cost and the Traffic Safety Index must be greater than 200. Additionally, pedestrian crossings are needed at the intersection for pedestrians to safely cross SR 12 and access transit facilities (bus stops).




**LEGEND**

Project Footprint

Service Layer Credits: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.
Date: 12-15-21

N

0 1,000 2,000 feet

Caltrans

**FIGURE 1-1**
**Project Location**

SR 12 Boas Drive
Intersection Safety Project
*EA 2Q780, SON-12 PM-19.83*
*Sonoma County, California*

Document Path: D:\AWE\20-021 SJCOG I-205 Managed Lanes\mxd\21-002-005_SR12_1-1_Vicinity_letter.mxd

## 1.2 Existing Facilities

The existing intersection is not currently signalized. SR 12 at the Project location is a four-lane, divided conventional highway with free-flowing traffic through the intersection. SR 12 also has left-turn lanes in both directions that are both unsignalized but are subject to yielding rules to oncoming traffic. Boas Drive and South Boas Drive form the other two legs of the intersection and are two-lane local streets with stop signs as the traffic control at the intersection. There are no existing crosswalks across SR 12 at this intersection. There are bus stops on both sides of SR 12.

# Chapter 2 Project Description

Caltrans proposes to construct improvements at the intersection in the City of Santa Rosa in Sonoma County. The Project includes constructing pedestrian facilities and installing traffic signals at the intersection. The Project would also include drainage modifications, landscaping, and construction of two retaining walls to provide adequate corner sight distance. Figure 2-1 shows the proposed Project layout. The following sections describe the components included in the proposed Project.

## 2.1 Installation of Traffic Signals

The traffic signals would control all four legs of the intersection for all modes of traffic. Also, pedestrian signals for proposed crosswalks would be added at this intersection. Traffic signal assemblies would include posts on cast-in-drilled-hole (CIDH) pile foundations, mast arms connected to the posts, and mounted signal devices. These assemblies would be located in each of the four corners of the intersection in the sidewalk behind the curb. The signal and lighting system would require a controller cabinet, electrical hookup, and tie-in to City of Santa Rosa traffic signal interconnect.

Crosswalks would be installed across the northern, eastern, and southern legs of the intersection by pavement marking. Features such as curb ramps and pedestrian refuge areas within paved islands would also be installed. Warning signs and additional pavement markings would be installed, as needed, to support a signalized intersection.

## 2.2 Sidewalk/Curb Ramp Construction

The existing sidewalks and curb returns at all four corners of the intersection would be reconstructed with new curb, gutter, and sidewalk. Curb ramps would be constructed at all four of these locations and would be designed in accordance with Caltrans Standard Plans and Americans with Disabilities Act (ADA) requirements. A pedestrian refuge area would be constructed within the existing raised island on the eastern leg of the intersection. Additionally, about 180 feet of new curb, gutter, and sidewalk would be constructed along eastbound SR 12 in the southwestern quadrant along a proposed new retaining wall.

## 2.3 Retaining Wall Construction

To improve corner sight distance and minimize the right of way (ROW) needed from adjacent properties, the Project includes construction of a 63-foot-long concrete retaining wall with a maximum height of 5 feet. This wall would be installed along Caltrans' ROW line along eastbound SR 12 in the southwestern quadrant.

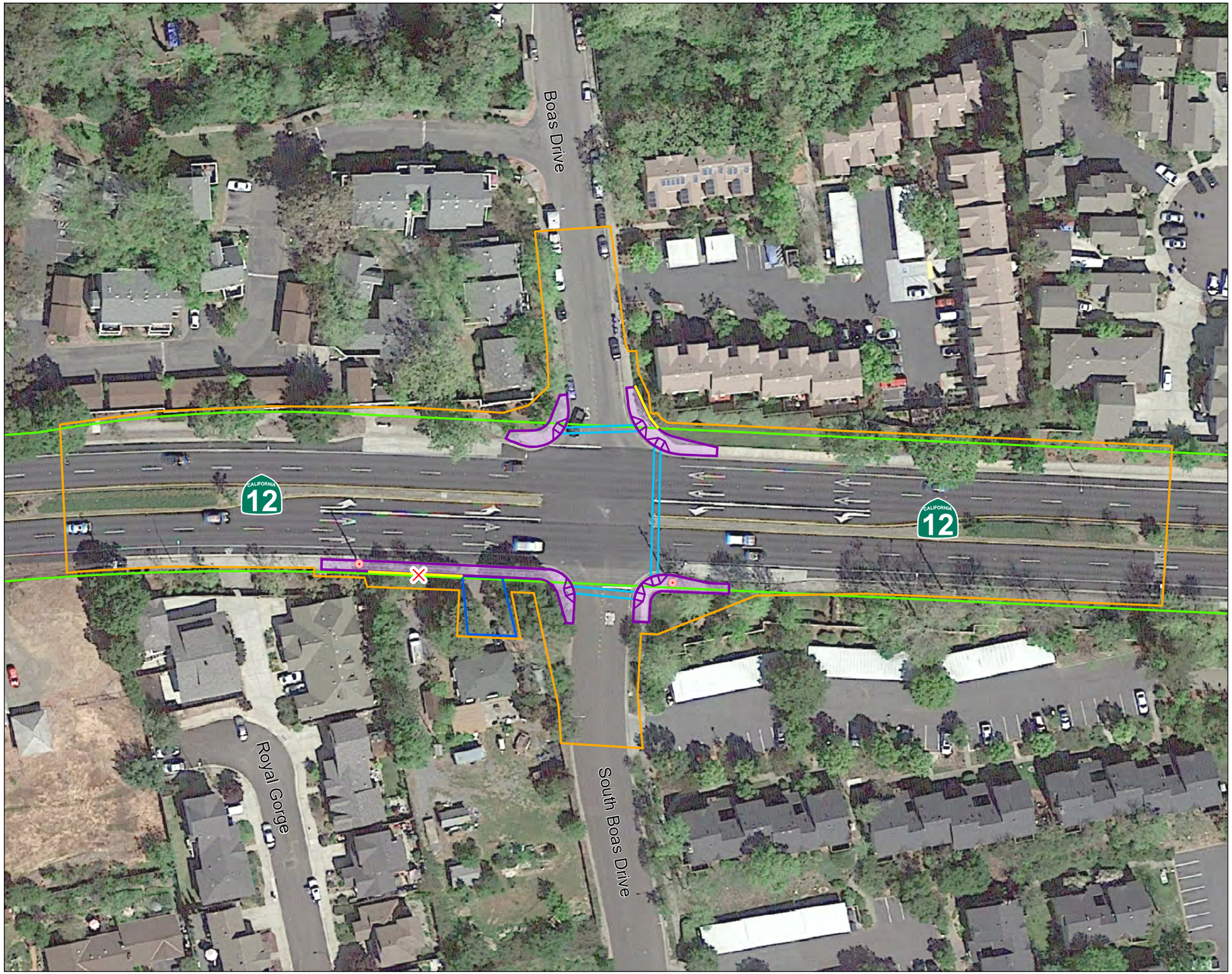
The retaining wall would likely be made of concrete on spread footing or interlocking concrete block wall. The new wall would be constructed to blend in with the character of the surrounding area. A chain-link fence may be installed on top of the retaining wall, as required for maintenance worker fall protection.

In the northeastern quadrant, a 16-foot-long concrete retaining wall with a maximum height of 3 feet would be constructed along westbound SR 12 at the back edge of the sidewalk to minimize the amount of ROW needed from the adjacent property. Where needed, retaining curbs would be used at the back edge of the sidewalk consistent with Caltrans Standard Specification for curb ramps.

## 2.4 Drainage Construction

The Project would include the following drainage improvements at the intersection:

- Replace the existing G1 inlet along eastbound SR 12 near the southwestern corner of the intersection.
- Replace the existing curb drainage inlet along South Boas Drive at the southeastern corner of the intersection.
- Construct a new inlet at the northeastern corner of the intersection, upstream of the curb ramp, along westbound SR 12.
- Construct a new inlet at the southeastern corner of the intersection, upstream of the curb ramp, along eastbound SR 12.
- Construct additional inlets near the low points in the SR 12 eastbound outside shoulder and the westbound median shoulder.
- Upgrade and/or supplement the existing drainage, depending on condition, age, and latest rainfall data.




**LEGEND**

- Project Footprint
- Existing Right Of Way
- Proposed Sidewalk
- Proposed Retaining Wall
- Proposed Crosswalk
- Driveway Conform
- Utility Pole (to be relocated)
- Tree (to be removed)

Data Sources:
Area West Environmental, Inc. 2021;
Caltrans 2021; Date: 4-7-22

N

0 50 100 feet

Caltrans

**FIGURE 2-1**
**Proposed Project Layout**

SR 12 Boas Drive
Intersection Safety Project
*EA 2Q780, SON-12 PM-19.83*
*Sonoma County, California*

## 2.5 Utilities

Overhead and underground utilities are at the intersection, including gas, telecommunications, water, and possibly sewer. Verification of utilities would be conducted during the design phase of the Project. Relocation of two utility poles on the south side of SR 12 would be required (Figure 2-1). Relocations of underground utilities may be required; utility coordination is ongoing. Additionally, the Project may require that utility boxes or valve covers are adjusted to final grade.

## 2.6 Right of Way

Right of way acquisition would be needed for the Project. Although most work would be within Caltrans' or Santa Rosa's ROW, narrow "sliver" acquisitions from adjacent properties would be needed for installation of sidewalks, ramps, retaining walls, and other project features. Temporary construction easements also would be needed during construction of the Project for access and driveway conforms.

## 2.7 Construction Equipment, Staging, and Schedule

### 2.7.1 Equipment

The equipment listed in Table 2-1 would be needed to construct the Project.

**Table 2-1. Project Equipment**

| Construction Activity | Equipment Type | Purpose |
|---|---|---|
| Traffic Signal Installation<br>Drainage Modification | Pavement saws<br>Jackhammers | Remove a small section of sidewalk at the location of each traffic signal post<br>Remove pavement sections at trench locations for drainage modification |
| Traffic Signal Installation<br>Drainage Modification | Backhoe | Remove existing sidewalk sections<br>Dig trenches for culverts and holes for drainage inlets<br>Remove pavement at trench locations |
| Traffic Signal Installation<br>Retaining Wall Construction<br>Drainage Modification | Trucks | Deliver materials<br>Off-haul old pavement and soil material<br>Deliver drainage improvement materials, such as culverts |
| Traffic Signal Installation | Drill rig | Signal Installation |

| Construction Activity | Equipment Type | Purpose |
|---|---|---|
| Traffic Signal Installation<br>Retaining Wall Construction<br>Drainage Modification | Concrete ready-mix trucks | Deliver Portland cement concrete for sidewalk, retaining walls, drainage inlets |
| Retaining Wall Construction<br>Drainage Modification | Loader | Move materials within the site |
| Retaining Wall Construction | Excavator | Soil removal |

### 2.7.2 Staging and Lane Closures

The Project would be constructed in four stages, with one construction stage per corner. Work in each of the four stages would require shoulder closure and would include construction of sidewalks, curb ramps, drainage, and utility modifications/ relocations.

Lane closures using traffic cone lane closures and flagged overnight one-way traffic control would be used during the placement of signal detectors in pavement, hoisting of signal equipment, and placement of traffic striping. Lane closure would occur only during nighttime hours to minimize traffic impacts on SR 12.

### 2.7.3 Ground Disturbance and Vegetation Removal

Ground-disturbing activity is anticipated to include the following:

- Retaining wall – Construction of the retaining walls would require soil excavation, with a maximum depth of 15 feet at the southwestern retaining wall and less than 5 feet at the northeastern retaining wall.

- Drainage – Trenching for the new drainage systems would be mostly within the limits of existing pavement. Work would also include excavation for new drainage inlets, which would be within the limits of the existing pavement. These excavations could go as deep as 8 feet.

- CIDH piling for signals and lighting – Foundations for the traffic signals would be drilled for CIDH piling. The holes could be as deep as 14 feet.

- New sidewalks and curb ramps would require some excavation, as deep as 1 foot.

- New signing would require drilling holes in soil to place signposts.

The Project would generate surplus soil, which would be hauled offsite to an approved location for disposal.

Vegetation removal and trimming would be required to construct the retaining walls and install new sidewalks. All disturbed areas would be revegetated with climatically appropriate plants to the maximum extent feasible.

### 2.7.4 Schedule and Number of Working Days

The Project would require approximately 75 working days to construct. Nighttime work is anticipated. Construction would occur in one season and is anticipated to begin in May 2024.

## 2.8 Project Features

The proposed Project contains a number of standardized project components which are employed on most, if not all, of Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed Project. These components are referenced as Project Features in Chapter 3 as they pertain to different environmental resources and are separate from Avoidance and Minimization Measures (AMMs), which directly relate to the impacts resulting from the proposed Project.

Appendix B lists the Project Features that would be implemented to reduce or avoid potential impacts to the human and natural environment.

## 2.9 No-Build Alternative

The No-Build Alternative would mean that the Project would not be constructed, and there would be no improvements to the intersection within the Project limits. As such, there would be no safety improvements for motorists and pedestrians, and the curb ramps would continue to be nonstandard. This alternative does not meet the purpose and need for the Project.

## 2.10 Alternatives Considered but Eliminated from Further Discussion

During the Project's early design phase, Caltrans considered constructing a 2-lane roundabout at the intersection. The Roundabout Alternative (also referred to as Build Alternative 2 in preliminary design reports) would consist of constructing a roundabout to control the intersection. Construction would involve demolition of existing pavement, earthwork, grading, and roadway/street paving, in order to convert

the current intersection geometry into the alignment of a roundabout. This alternative would reconstruct the entire intersection, along with about 400 feet of SR 12 on both sides of the intersection, and about 200 feet of local street both north and south of the intersection.

Under the Roundabout Alternative, crosswalks would be installed across all legs of the intersection at each approach to the roundabout by pavement marking, and curb ramps and pedestrian refuge areas, within paved islands, would also be installed.

The Roundabout Alternative was rejected from further consideration because it would not minimize adverse environmental impacts and is considered infeasible for the following reasons:

- The Roundabout Alternative would have a larger footprint and greater ROW requirements. The Roundabout Alternative would require the permanent acquisition of a portion of the residential properties at all four corners of the intersection.

- To accommodate the larger footprint of the proposed roundabout, this alternative would require demolition of apartment buildings northeast and northwest of the intersection, and demolition of the single-family home southwest of the intersection. This would result in the relocation of residents in 9 apartment units and one single-family home.

- The affected apartments are affordable housing units. Sonoma Creekside Homes are located northeast of the intersection; Woodcreek Village Apartments are located northwest of the intersection. Of Sonoma Creekside Homes' 43 total units, 21 units are set aside for Section 8 subsidized low-income housing, and forty percent of Sonoma Creekside's Section 8 subsidized vacancies each year are set-aside for households whose income does not exceed 30% of the area median income ("extremely low income") as published by the Department of Housing and Urban Development (Sonoma Creekside Homes 2021). Woodcreek Village Apartments is also an affordable housing complex with 50 residential units and is listed on the City of Santa Rosa's 2020 affordable housing list (City of Santa Rosa 2020). Therefore, the Roundabout Alternative would displace low-income populations.

- Because of the required acquisition of residential properties and demolition of affordable housing, this alternative would not be consistent with the City of Santa

Rosa's general plan goal *H-B: Maintain and rehabilitate, as needed, the existing affordable housing supply* (City of Santa Rosa 2009).

- The roundabout would result in a greater change to the visual character at the intersection.
- Constructing the roundabout would move operational lanes of the highway closer to existing residences, resulting in increased noise levels for nearby sensitive receptors.
- The Roundabout Alternative would have a significantly higher cost than the proposed signalization Project. Estimated capital cost (construction and ROW) for the proposed Project is $2,176,000 and for the Roundabout Alternative is $9,003,655. Furthermore, unlike the proposed Project, the Roundabout Alternative does not meet State Highway Operations and Protection Program (SHOPP) funding requirements, making this alternative less economically viable than the proposed Project.

## 2.11 Permits and Approvals Needed

No permits are anticipated to be needed for the proposed Project. Approval of project funding is required by the California Transportation Commission board for each phase of the Project.

# Chapter 3 California Environmental Quality Act Evaluation

The following discussions evaluate potential environmental impacts of the proposed Project, as described in Chapter 2, as they relate to the CEQA checklist to comply with State CEQA Guidelines (Title 14 California Code of Regulations, Division 6, Chapter 3, Section 15091).

## 3.1 Environmental Factors Potentially Affected

As part of the scoping and environmental analysis carried out for the proposed Project, the following environmental issues were considered, but no impacts were identified: agriculture and forestry, cultural resources, geology and soils, land use and planning, mineral resources, population and housing, public services, recreation, tribal cultural resources, and utilities and service systems. The environmental factors checked below in Table 3-1 would be potentially affected by the proposed Project. Further analysis of these environmental factors is included in the following sections.

**Table 3-1 Environmental Factors Potentially Affected**

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

## 3.2 Determination

On the basis of this initial evaluation:

| | |
|---|---|
| X | I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. |
| | I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. |
| | I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. |
| | I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. |
| | I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier environmental impact report (EIR) or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required |

| | |
|---|---|
| **Signature:** Lindsay A Vivian | **Date:** April 22, 2022 |
| **Printed Name: Lindsay Vivian** | |

## 3.3 CEQA Environmental Checklist

This checklist (presented at the beginning of each resource section below in the form of a table listing the pertinent questions applicable to the resource and four columns of check boxes where the degree of impact is indicated) identifies physical, biological, social, and economic factors that might be affected by the proposed Project. In many cases, background studies performed in connection with the Project indicate that there are no impacts to a particular resource. A “no impact” answer in the last column reflects this determination. The words "significant" and "significance" used throughout the checklist are related to CEQA impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

As noted previously, Project Features, which may include both design elements of this Project and standardized measures that are applied to all or most Caltrans projects, such as best management practices (BMPs) and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the Project and are considered prior to any significance determinations. A list of this Project’s Project Features and AMMs can be reviewed in Appendix B.

### 3.3.1 Aesthetics

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

The Project location is within the post mile range for a portion of SR 12 that is listed as "Eligible" for designation as a State Scenic Highway.

The visual environment at the Project location is heavily landscaped and suburban in character. The highway is lined with street trees, manicured lawns, screen planting and public sidewalks, and wood property fences visible in part behind screening planting. The forested, rural mountains that ring the Sonoma Valley are visible from the Project location to the north, south, and east. SR 12 has two lanes in each direction, divided by a landscaped median that includes ground cover and tree planting. There are protected left turn lanes in both directions turning onto Boas Drive, which is a two-lane residential road that is lined with sidewalks, landscaping and a densely-spaced street tree canopy. (Caltrans 2021a)

A Visual Impact Assessment (VIA) was completed by the Caltrans Office of Landscape Architecture on November 15, 2021 (Caltrans 2021a). The VIA concluded that the Project would not adversely affect any "Designated Scenic Resource" (such as a rock outcropping, tree grouping, or historic property). Existing vistas are expected to remain unaltered. Project elements would not substantially affect the appearance of the highway corridor and would be visually consistent with the character of the surrounding area.

**a, b, d) Less Than Significant Impacts**

The proposed Project would present a low level of visual change in views to and from the highway. The Project would construct pedestrian facilities (sidewalks with corner bulb-outs) and install traffic signals at the intersection. The addition of traffic signals would add minor visual clutter to the intersection in the form of signal masts, and control and electrical equipment boxes to the roadside areas. These changes would however be visually consistent with nearby intersections in the scenic corridor, including the intersections of SR 12 with Middle Rincon Road 0.4 mile to the west, and Calistoga Road, 0.2 mile to the east. (Caltrans 2021a)

The Project would not result in new substantial light or glare that would adversely affect nighttime views. As part of the project, construction lighting would be limited to the area of work, and light trespass to adjacent residences and to the travelling public will be avoided with the use of directional lighting, shielding, and other measures as needed.

The pedestrian facility improvements would result in a low level of visual change, where sidewalks are re-configured and curb ramps are modernized to provide ADA-compliant configurations and surfacing. Striped crosswalks would add new delineation paint to the highway surface. The pedestrian facilities would maintain existing curb lines and expand away from the highway into planting areas. Pedestrian facility improvements result in a low level of visual change consistent with existing conditions by expanding portions of the lighter gray of sidewalks at and beyond the intersection.

Retaining walls added to some roadside areas to allow for appropriate corner sight distance would result in a minor visual change to roadside landscaping and would be visually compatible with the scenic corridor with avoidance and minimization measures and Project Features. The following Project Features would further reduce visual impacts of the Project; refer to Appendix B for more information.

- PF-AES-1: Avoid Unnecessary Removal of Vegetation.
- PF-AES-2: Revegetate Disturbed Areas Upon Completion of Construction.
- PF-AES-3: Replace Removed Fences in Kind.
- PF-AES-4: Minimize Appearance of Construction Equipment and Staging Areas.

- PF-AES-5: Minimize Construction Lighting.
- PF-AES-6: Locate Staging Areas on Paved Surfaces.

Impacts to scenic resources in the Project corridor would be less than significant. The avoidance and minimization measure listed below would further reduce the aesthetic impact of the Project.

**c) No Impact**

The proposed Project would not conflict with applicable zoning and other regulations governing scenic quality.

***Avoidance, Minimization and Mitigation Measures***

The following avoidance and minimization measure would further reduce the visual impacts of the Project.

- AMM-AES-1: Aesthetically Treat Retaining Walls and Median Islands. Prior to construction, Caltrans would develop the design of the retaining walls. Retaining walls and appurtenances would be aesthetically treated to be visually appropriate for the location, and alternatives to chain link fencing would be considered for fall protection (if needed). Aesthetic treatments would be provided at median islands, splitter islands, central island, and truck aprons, compatible with the colors and textures of the highway corridor and adjacent areas. Final aesthetic treatment for walls, and fall protection, medians and appurtenances would be selected during final design.

### 3.3.2 Agriculture and Forest Resources

| Question | CEQA Determination |
|---|---|
| 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? | No Impact |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | No Impact |
| 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))? | No Impact |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | No Impact |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | No Impact |

The Project is located in a residential area in the City of Santa Rosa and does not support areas that would qualify as farmland, forestland, or timberland (California Department of Conservation 2016). There are no Williamson Act contracts in or surrounding the Project.

**a, b, c, d, e) No Impact**

The Project would not affect agricultural land and would not convert Farmland to a non-agricultural use. The Project would not affect any areas under a Williamson Act contract. The proposed Project would not conflict with existing zoning for forest land or timberland or convert forest land to non-forest use land. The Project would not involve other changes in the existing environment that would result in conversion of forest or agricultural land. There would be no impact.

***Avoidance, Minimization and Mitigation Measures***

The Project would not affect agricultural and forest resources; no avoidance, minimization, and mitigation measures are needed.

### 3.3.3 Air Quality

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

The Project is located in the San Francisco Bay Area Air Basin (SFBAAB), which is regulated by the Bay Area Air Quality Management District (BAAQMD). The SFBAAB is considered to be in federal and state nonattainment for ozone and fine particulate matter 2.5 microns ($PM_{2.5}$) and in state nonattainment for particulate matter 10 microns ($PM_{10}$). It is in attainment or unclassified for other state and federal air quality standards.

The Project is exempt from the requirement to determine air quality conformity per 40 Code of Federal Regulations (CFR) 93.126, Table 2 Exempt Projects, which covers Highway Safety Improvement Program implementation. Therefore, an Air Quality Study was not required.

**a, d) No Impact**

Construction activities would not conflict with an air quality plan or generate emissions resulting in excessive odors. There would be no impact.

**b, c) Less Than Significant Impact**

Installation of the traffic signals would not significantly alter characteristics of the existing highway and local roadways, increase operational capacity, or change the horizontal or vertical alignments of the highway. No long-term impacts to air quality would occur.

Construction air pollutants are expected to be short-term and minimal. Construction-generated air pollutants include emissions resulting from material processing by onsite construction equipment, workers commuting to and from the Project site, and traffic delays due to construction. The emissions would be produced at different rates throughout the Project depending on the activities involved at various phases of construction. Potential impacts to air quality, including violation of air quality standards, criteria pollutants, and exposure of sensitive receptors to pollutants, would not be significant based on the construction activities of the proposed Project (Caltrans 2021b). The Project would be required to comply with Caltrans Standard Specification 14-9, Air Quality, which requires compliance with applicable air-pollution control rules, regulations, ordinances, and statutes.

The following Project Features, described in Appendix B, would further reduce potential air quality impacts.

- PF-AIR-1: Control Fugitive Dust.
- PF-AIR-2: Minimize Idling.
- PF-AIR-3: Maintain Construction Equipment and Vehicles.
- PF-AIR-4: Contractor Air Quality Compliance.

#### *Avoidance, Minimization and Mitigation Measures*

The Project would have no long-term impacts on air quality and temporary construction-related impacts would be minor. No avoidance, minimization, and mitigation measures are needed.

### 3.3.4 Biological Resources

| Question | CEQA Determination |
|---|---|
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service, or NOAA Fisheries? | No Impact |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | No Impact |
| 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? | No Impact |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | No Impact |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | Less Than Significant Impact |
| 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 |

Caltrans has prepared a *Biological Resources Evaluation Memorandum* for the Project (Caltrans 2021c). The Project is located in an urbanized, developed area dominated by transportation infrastructure and residential land uses, with landscaped plantings. A regional list of special-status wildlife and plant species was compiled by querying databases from the U.S. Fish and Wildlife Service (USFWS), California Native Plant Society (CNPS), California Natural Diversity Database (CNDDB), and National Wetlands Inventory (Caltrans 2021c, USFWS 2021a, USFWS 2021b). Each special-status wildlife and plant species on these regional lists was evaluated to determine its potential to occur within the Project area. The Project area does not

provide habitat needed to support special-status species; there are no wetlands, streams, riparian corridors, forests, or grasslands to support special-status species.

Landscape trees and vegetation along the highway and in neighboring yards provide habitat for birds and other common wildlife found in this suburban environment.

The Project does not occur within the boundaries of an adopted Habitat Conservation Plan or Natural Community Conservation Plan.

**a, b, c, d and f) No Impact**

The *Biological Resources Evaluation Memorandum* (Caltrans 2021c) concludes that the Project area does not provide habitat to support listed plant and wildlife species. The USFWS identifies six federally listed or candidate wildlife species and six federally listed plan species with potential to occur in the region. Biologists assessed the potential for these and other special-status species to occur in the Project area based on the vegetation present, the degree of disturbance, the results of the database queries, and whether suitable habitat for each species was observed. The *Biological Resources Evaluation Memorandum* (Caltrans 2021c) presents results of the database searches and tables listing each special-status wildlife and plant species identified by USFWS, CNDDB, and CNPS, and a conclusion as to whether or not they could occur in the Project area. Based on this analysis, suitable habitat for special-status plants and wildlife does not occur in the Project area. The Project would have no impact on listed or special-status species.

The Project area does not support sensitive natural communities such as riparian habitat and wetlands. The Project would not affect riparian habitat, sensitive natural communities, or wetlands and waters of the U.S. and State.

Nearby riparian and open space areas provide migratory corridors for movement of wildlife and fish species. There are creek corridors that roughly parallel SR 12 to the north (Austin Creek) and south (Santa Rosa Creek) of the Project interchange. These corridors are outside the Project area and would not be affected by the proposed Project. Therefore, the Project would not interfere with the movement of any native resident or migratory fish or wildlife species; no impact would occur.

The following Project Feature, described in Appendix B, would further reduce potential impacts to wildlife during construction.

- PF-BIO-1: Avoid Entrapment of Wildlife.

**e) Less Than Significant Impact**

Vegetation and tree removal would be required to construct the Project. Based on the preliminary Project design, it is estimated that up to 7 landscape trees would be trimmed or removed. Street tree removal on city streets is governed by the City of Santa Rosa Tree Preservation Ordinance (Santa Rosa City Code Chapter 17-24 Trees), which requires a Tree Removal Permit prior to the removal of any tree within 50 feet of a scenic road. The tree ordinance includes a list of approved tree species for replanting and requires replanting of street trees at a 1:1 ratio. As noted in the Aesthetics section and the Project Features listed below, all disturbed areas would be revegetated with climactically appropriate plants to the maximum extent feasible. The following Project Features would reduce impacts of vegetation and tree trimming and removal.

- PF-AES-1 Avoid Unnecessary Removal of Vegetation.
- PF-AES-2 Revegetate Disturbed Areas Upon Completion of Construction.

Additionally, landscape trees and shrubs may provide habitat for nesting birds. Migratory and nesting birds are protected by the Migratory Bird Treaty Act and the California Fish and Game Code. Project Feature BIO-1, described in Appendix B and listed below, would avoid impacts on nesting birds.

- PF-BIO-2: Conduct Preconstruction Bird Survey and Establish Buffers.

***Avoidance, Minimization and Mitigation Measures***

The Project would not adversely affect sensitive species and habitats. No avoidance, minimization, and mitigation measures are needed.

### 3.3.5 Cultural Resources

| Question | CEQA Determination |
|---|---|
| a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5? | No Impact |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | Less Than Significant Impact |
| c) Disturb any human remains, including those interred outside of dedicated cemeteries? | Less Than Significant Impact |

Caltrans prepared a memorandum on cultural compliance for the Project titled *Office of Cultural Resource Studies (OCRS) Section 106 Closeout Memo for the State Route 12/Boas Drive Intersection Project at Postmile 19.83 in Sonoma County* (Caltrans 2021d).

A Historic Property Survey Report (HPSR) and an Archaeological Survey Report (ASR) were prepared for the Project. The studies for this undertaking were carried out in a manner consistent with Caltrans' regulatory responsibilities under the January 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer*, *the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it pertains to the Administration of the Federal-Aid Highway Program in California* (Programmatic Agreement) and the January 2015 Memorandum of Understanding Between the California Department of Transportation and the California State Historic Preservation Officer Regarding Compliance With Public Resources Code Section 5024 and Governor's Executive Order W-26-92.

As described in the HPSR and ASR, the Area of Potential Effects (APE) for this Project was established by a Professionally Qualified Staff architectural historian and archaeologist. The APE includes the resource study areas for cultural resources. The HPSR and ASR contain confidential information that cannot be publicly shared. Based on these reports, Caltrans made a Finding of "No Historic Properties Affected" under the Section 106 Programmatic Agreement and "No Historical Resources Present" under CEQA (Caltrans 2021d).

**a) No Impact**

The Caltrans Office of Cultural Resource Studies' (OCRS) review consisted of a detailed search of records, maps, plans, and digital files found in Caltrans' Cultural Resources Database, a field investigation conducted in July 2021, and consultation with local tribes. One historic resource was identified within the APE, which was determined not be eligible for listing in the California or National Registers of Historic Resources. The background research and field investigation identified no other historic properties/historical resources within the APE.

Based on the above, Caltrans has determined that a Finding of No Historic Properties Affected is appropriate for the proposed Project, and that there are no historical resources present for the purposes of CEQA. The above-referenced documentation would be archived in the OCRS files and the Northwest Information Center of the California Historical Resources Information System. Compliance with Section 106 via the Programmatic Agreement and California Public Resources Code (PRC) Section 5024 is complete. Therefore, the Project would have no impact on known cultural resources.

**b, c) Less Than Significant Impact**

During construction, ground-disturbing activities could inadvertently disturb previously unknown buried archaeological resources, including human remains. The following Project Features, described in Appendix B, would address undiscovered cultural resources associated with ground-disturbing activities during construction.

- PF-CUL-1: Stop Work Upon Discovery of Cultural Materials.
- PF-CUL-2: Procedures for Discovery of Human Remains.

With these Project Features, the Project would have a less-than-significant impact on archaeological resources and human remains.

***Avoidance, Minimization and Mitigation Measures***

The Project would not adversely affect known cultural resources. No avoidance, minimization, and mitigation measures are needed.

### 3.3.6 Energy

| Question | CEQA Determination |
|---|---|
| a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | Less Than Significant Impact |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | No Impact |

Caltrans prepared an *Energy Analysis Report* for the proposed Project (Caltrans 2021i), which evaluated energy use during construction and operation of the Project. Since the Project is not capacity increasing nor would it provide congestion relief, a qualitative energy analysis was completed to comply with CEQA. The report analyzes energy use during construction (quantitative), during operation of the Project (qualitative) and maintenance (qualitative). Results of the report are summarized below.

**a) Less Than Significant Impact**

The proposed Project would not increase highway capacity or otherwise alter long-term circulation, traffic volumes, vehicle mix, or any other factor that could affect energy consumption compared to the No Build Alternative. During Project operation, energy consumption would be limited to routine maintenance, which is anticipated to be less than existing conditions since the Project would reduce the number and severity of collisions, traffic flow would be smoother, and less maintenance may be needed to repair damages to highway structures caused by accidents (Caltrans 2021i).

Energy would be consumed during construction, but this consumption would not be wasteful, inefficient, or unnecessary. The Energy Analysis Report (Caltrans 2021i) assessed gasoline and diesel consumed by construction equipment and vehicles using the Road Construction Emissions Model (RCEM), version 9.0.0, and U.S. Environmental Protection Agency (EPA) GHG equivalencies formulas to determine fuel consumption (reported as gallons of diesel and gasoline). It was assumed that diesel would be used by construction vehicles and equipment, gasoline would be used during workers' commute, and construction duration would be approximately 4 months. The estimated total diesel consumption during construction would be 16,620.96 gallons, and gasoline consumption would total 177.03 gallons. Because construction activities are short-term, the increase of fuel consumption in the Project

area would also be short-term. During construction, implementation of the following Project Features, described in Appendix B, would increase energy efficiency of construction equipment.

- PF-AIR-2: Minimize Idling.
- PF-AIR-3: Maintain Construction Equipment and Vehicles.
- PF-GHG-1: Waste Reduction.
- PF-GHG-2: Energy Reduction.

The impact would be less than significant.

**b) No Impact**

The Project proposes to reduce the number and severity of accidents, and to improve the pedestrian safety and traffic operations at the intersection. As such, this Project would not result in changes in traffic volumes, vehicle mix, or any other factor that would cause an increase in energy consumption of the Project from that of the No-Build Alternative. Therefore, the proposed Build Alternative would not conflict with the regional/statewide goals on climate change, air quality and petroleum reduction. There would be no impact.

***Avoidance, Minimization and Mitigation Measures***

The Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources. No avoidance, minimization, and mitigation measures are needed.

### 3.3.7 Geology and Soils

| Question | CEQA Determination |
|---|---|
| a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:<br>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. | No Impact |
| ii) Strong seismic ground shaking? | No Impact |
| iii) Seismic-related ground failure, including liquefaction? | No Impact |
| iv) Landslides? | No Impact |
| b) Result in substantial soil erosion or the loss of topsoil? | No Impact |
| 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? | No Impact |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | No Impact |
| 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 |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | Less Than Significant Impact |

Caltrans investigated impacts to geology and soils from the proposed Project and prepared the *Paleontology and Geology Environmental Study Memorandum* (Caltrans 2021e). This section summarizes the findings of this review.

The Project is located within the California Coast Ranges geomorphic province. This province is a northwest-trending band of folded and faulted mountains that roughly parallel the San Andreas fault zone. In general, the Coast Ranges consist of

complexly folded Mesozoic and Cenozoic sedimentary, metamorphic, and volcanic rock.

The Project area is underlain by undivided Quaternary alluvial units (U.S. Geological Survey [USGS] 2007). The Quarternary alluvial units consist of Pleistocene to Holocene era deposits of alluvium, lake, playa and terrace deposits.

**a, b, c, d, and e) No Impact**

The Project is approximately 2.5 miles east of the Rodgers Creek Fault, a continuously active fault zone that extends approximately 30 miles to the northern margin of San Pablo Bay (California Division of Mines and Geology 1982).

The proposed work would be subject to strong ground shaking from local faults. The work would not further expose the public to hazards from ground shaking. The Project site does not lie within an Alquist Priolo Special Studies Zone and would not experience hazards due fault rupture, nor would the site expose the public to other seismic hazards such as liquefaction or seismically induced landslides. The Project site does not lie in an area of erodible soil, soils or geologic units prone to landsliding, collapsible, or expansive soils. The site would not be supporting septic systems. (Caltrans 2021e)

The Project would disturb a small area of soil. Those soils are not highly erodible and BMPs would be used to minimize soil erosion during construction activities. The following Project Features, described in Appendix B, would minimize soil erosion associated with ground-disturbing activities during construction.

- PF-WQ-1: Water Pollution Control Plan.
- PF-WQ-2: Construction Site Best Management Practices.

The Project would not result in substantial soil erosion. There would be no impacts.

**f) Less Than Significant Impact**

The project area is underlain by undivided Quaternary alluvial units that have the potential of containing fossils. Construction depth would occur up to 15 feet below the ground surface for the installation of the new signal poles and lighting poles. Foundations for both types of poles would be constructed by auguring holes. This method of construction is not conducive to intact fossil recovery because fossils may be ground during auguring, and any remnant bone will lack stratigraphic context.

With the implementation of AMM PALEO-1, potential impacts to paleontological resources would be less than significant.

### *Avoidance, Minimization and Mitigation Measures*

The following avoidance and minimization measure would further reduce impacts to paleontological resources associated with ground-disturbing activities during construction.

- AMM-PALEO-1. Paleontological Evaluation Report. Prior to construction, Caltrans would determine whether the Project area has a low or high sensitivity for paleontological resources. If Caltrans determines the Project area is sensitive for paleontological resources, a person who meets Caltrans requirements of a Principal Paleontologist would prepare a Paleontological Evaluation Report. The Paleontological Evaluation Report would identify measures to avoid or/and minimize impacts to paleontological resources.

### 3.3.8 Greenhouse Gas Emissions

| Question | CEQA Determination |
|---|---|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | Less Than Significant Impact |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | No Impact |

Caltrans investigated potential impacts to greenhouse gas (GHG) emissions from the proposed Project and prepared the *Construction Greenhouse Gas Emissions Analysis Memorandum* (Caltrans 2021b). This section summarizes the findings of this review.

**a) Less Than Significant Impact**

The GHG emissions resulting from construction activities would not result in long-term impacts on the environment. Construction-generated GHG includes emissions resulting from material processing, onsite construction equipment, workers commuting to and from the Project site, and traffic delays from construction. The emissions would be produced at different levels throughout the Project depending on the activities involved at various phases of construction.

The analysis was focused on vehicle-emitted GHGs. Carbon dioxide ($CO_2$) is the single most important GHG pollutant due to its abundance when compared with other vehicle-emitted GHGs, including methane, nitrous oxide, hydrofluorocarbon, and black carbon. Their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

The Project's construction-related GHG emissions were calculated using the Federal Highway Administration (FHWA) Road Construction Emissions Model (RCEM), version 9.0.0, provided by the Sacramento Metropolitan Air Quality Management District. The estimated total amount of $CO_2$ produced during the 4-month construction timeframe would be 186.63 tons (Caltrans 2021b). The analysis also estimated annual tons of $CO_2$ equivalent ($CO_2e$), a unit calculated by multiplying GHG contributing gases by their global warming potential, which is a measure of how much energy the emission of 1 ton of a given gas will absorb over a period of time relative the emissions of 1 ton of $CO_2$. The proposed Project's construction-

related annual $CO_2e$ would be 171.10 metric tons (Caltrans 2019b). Although the BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions (BAAQMD 2017), the Project would not generate short-term GHG emissions that exceed the operational screening level established by BAAQMD of 1,100 metric tons $CO_2e$ per year. Because construction activities are short-term, the GHG emissions would not result in long-term adverse effects on the environment. The Project's GHG emissions are considered less than cumulatively considerable. The frequency and occurrence of GHG emissions would be reduced through implementation of the following Project Features, described in Appendix B.

- PF-AIR-2: Minimize Idling.
- PF-AIR-3: Maintain Construction Equipment and Vehicles.
- PF-GHG-1: Waste Reduction.
- PF-GHG-2: Energy Reduction.

Additionally, with innovations such as longer pavement lives, improvement in traffic management and changes in materials, construction-related GHG emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

**b) No Impact**

Plans and policies adopted for the purposes of reducing GHG emissions in California include multiple Senate and Assembly bills and Executive Orders. These policies establish GHG emissions reduction goals, set low-carbon fuel standards, support rapid commercialization of zero-emission vehicles, fund clean vehicle programs, and require climate adaptation planning. The Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) developed Plan Bay Area, a Regional Transportation Plan and Sustainable Communities Strategy for the Bay Area, which includes strategies and policies for reducing GHG emissions. The proposed Project would be consistent with these GHG reduction goals and policies.

The Project would not increase the vehicular capacity of SR 12 or Boas Drive, encourage additional traffic to the area, or increase vehicle miles traveled. Because technological advances improve automobile efficiencies, it is anticipated that the operational emissions within the project limits would decrease over time. As such, it is not foreseeable for the Project to contribute to an increase in GHG emissions.

Since the proposed Project would not contribute to a long-term increase in GHG emissions, it is not in conflict with applicable plans, policies or regulations adopted for the purpose of reducing long term GHG emissions. There would be no impact.

### *Avoidance, Minimization and Mitigation Measures*

While the Project would result in minor GHG emissions during construction, the Project would not result in an increase in operational GHG emissions and would not conflict with GHG-reduction policies and plans. No avoidance, minimization, and mitigation measures are needed.

### 3.3.9 Hazards and Hazardous Materials

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

**a, b) <u>No Impact</u>**

The Project would not create a significant hazard to the public related to hazardous materials. The Project would not involve the routine transport or use of hazardous materials once operational. During construction, Caltrans' Standard Specifications would be implemented to prevent spills or leaks from construction equipment and from storage of fuels, lubricants, and solvents. All aspects of Project construction associated with removal, storage, transportation, and disposal of hazardous materials would be done in accordance with the appropriate California Health and Safety Code. Handling of hazardous materials would comply with Caltrans Standard Specification

14-11, Hazardous Waste and Contamination, which outlines handling, storage, and disposal of hazardous waste. The following Project Features, described in Appendix B, would avoid impacts associated with hazards and hazardous materials.

- PF-HAZ-1: Asbestos and Lead-based Paint Survey.
- PF-HAZ-2: Aerially Deposited Lead Work Plan.
- PF-HAZ-3: Hazardous Material Incident Contingency Plan.

There are no anticipated impacts.

**c) No Impact**

There is one school located within 0.25-mile of the proposed Project, consisting of Douglas Whited Elementary Charter School, on SR 12 approximately 0.25 mile west of the Project. The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste. There would be no impact.

**d) No Impact**

Screening of environmental regulatory databases (the State Water Resources Control Board's GeoTracker and California Department of Toxic Substances Control's EnviroStor) revealed no known hazardous materials or hazardous waste sites within approximately 900 feet that could negatively affect the soil and groundwater. The proposed drainage improvement might disturb roadside shallow soil that may contain elevated levels of aerially deposited lead from past vehicle emissions. However, the Project is not expected to generate surplus excavated material requiring off-site disposal and the need for soil testing is not anticipated. If plans change and off-site disposal of soils is required, additional soils testing and characterization may be necessary during the design phase. Compliance with Caltrans Standard Specifications 14-11, Hazardous Waste and Contamination, would be required and therefore, result in the adequate handling, storing, and disposing of hazardous waste. There would be no impact.

**e) No Impact**

There are no airports or airstrips in the Project vicinity. The closest airport is the Sonoma County Airport located approximately 6.0 miles from the Project. There would be no impact.

**f) Less Than Significant Impact**

Potential delays to traffic along SR 12 would result from lane closures and overnight traffic control in effect during construction. A Traffic Management Plan (TMP) (see Project Feature TRA-1 in Appendix B) would be developed during the design phase that would identify traffic delays and alternative routes. Emergency response times are not anticipated to change during construction because the TMP would provide priority to emergency vehicles during traffic control. The TMP would provide instructions for response or evacuation in the event of an emergency. In addition, this Project would not conflict with the City of Santa Rosa Emergency Operation Plan (City of Santa Rosa 2017) any other emergency response or evacuation plan. The impact would be less than significant.

**g) No Impact**

The Santa Rosa Fire Department, which serves the Project area, is responsible for the management of fire operations during emergency response efforts. There are two Santa Rosa Fire Department stations within 0.5 mile of the Project intersection: Station 6 at 205 Calistoga Road (0.4 mile east of the intersection) and Station 9 at 91 Middle Rincon Road (0.5 mile west of the intersection) (City of Santa Rosa 2021a)

The Project does not have permanent features that would expose people or structures to risk of loss, injury, or death involving wildland fires. There would be no impact.

***Avoidance, Minimization and Mitigation Measures***

The Project would not create a significant hazard to the public or the environment through the transport, emission, or release of hazardous materials. No avoidance, minimization, and mitigation measures are needed.

### 3.3.10 Hydrology and Water Quality

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

Caltrans investigated impacts to hydrology and water quality from the proposed Project and prepared the *Hydraulics Technical Memorandum* (Caltrans 2021f) and *Water Quality Study* (Caltrans 2021g). This section summarizes the findings of that review.

The Project is located within the jurisdiction of North Coast Regional Water Quality Control Board (Region 1), which is responsible for implementation and enforcement of state and federal laws and regulations concerning water quality. The Project is within the Russian River hydrologic unit, Mark West Creek watershed, and Upper Santa Rosa Creek subwatershed (USGS 2021).

Per Federal Emergency Management Agency (FEMA) mapping, the Project is located within a Zone X floodplain (Figure 3-1). Zone X indicates areas of minimal flood hazard, i.e., areas outside the 0.2% annual floodplain chance (500 year).

**a) Less Than Significant Impact**

The proposed Project would not violate water quality standards or waste discharge requirements. The Project would not appreciably increase the impervious surface area at the intersection; any changes in surface runoff would be accommodated by the existing municipal stormwater facilities.

The Project is expected to have a total disturbed soil area of less than 1 acre. During construction, excavation and earth-moving activities associated with the installation of the signals, retaining walls, and drainage improvements could result in temporary water quality impacts such as increased sediment discharge and increased turbidity to receiving waters. Interaction of stormwater with newly poured concrete could also result in changes in pH. In addition, impacts to water quality could result from staging and active construction including the release of fluids, concrete material, construction debris, sediment, and litter. To prevent or reduce these impacts, temporary construction site BMPs would be deployed for sediment control, stormwater management, spill control, and materials management. The following Project Features, described in Appendix B, would further reduce impacts associated water quality and hydrology.

- PF-WQ-1: Water Pollution Control Plan.
- PF-WQ-2: Construction Site Best Management Practices.

The proposed Project would not substantially degrade surface or groundwater quality. In addition, the Project would not violate water quality standards or waste discharge requirements. Impacts would be less than significant.

**b) No Impact**

The proposed Project would have no effect to groundwater supplies or groundwater recharge areas in the Project vicinity. There would be no impact.


**LEGEND**

Project Footprint

**FEMA Flood Hazard Area**

X: Area of Minimal Flood Hazard

Data Sources:
Area West Environmental, Inc. 2021;
Federal Emergency Management Agency 2019;
ESRI Basemaps aerial imagery accessed 2021;
Date: 4-7-22

N

0 300 600 feet

Caltrans

**FIGURE 3-1**
**FEMA Flood Insurance Rate Map**

SR 12 Boas Drive
Intersection Safety Project
*EA 2Q780, SON-12 PM-19.83*
*Sonoma County, California*

**c) No Impact**

The Project would not create runoff that would exceed existing storm drain systems or create substantial additional sources of polluted runoff. The Project would not impede or redirect flood flows and would not substantially alter the existing drainage pattern of the site. According to the initial design, new impervious surface is less than 1 acre on this Project, and no post-construction storm water treatment measures would be required. There would be no impact.

**d) No Impact**

The project corridor is not within the 100-year floodplain as defined by FEMA Flood Insurance Rates Maps (Figure 3-1). The proposed Project is not in flood hazard, seiche, or tsunami zone. There would be no impact.

**e) No Impact**

The Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

***Avoidance, Minimization and Mitigation Measures***

The Project would not adversely affect water quality or substantially alter existing hydrology. No avoidance, minimization, and mitigation measures are needed.

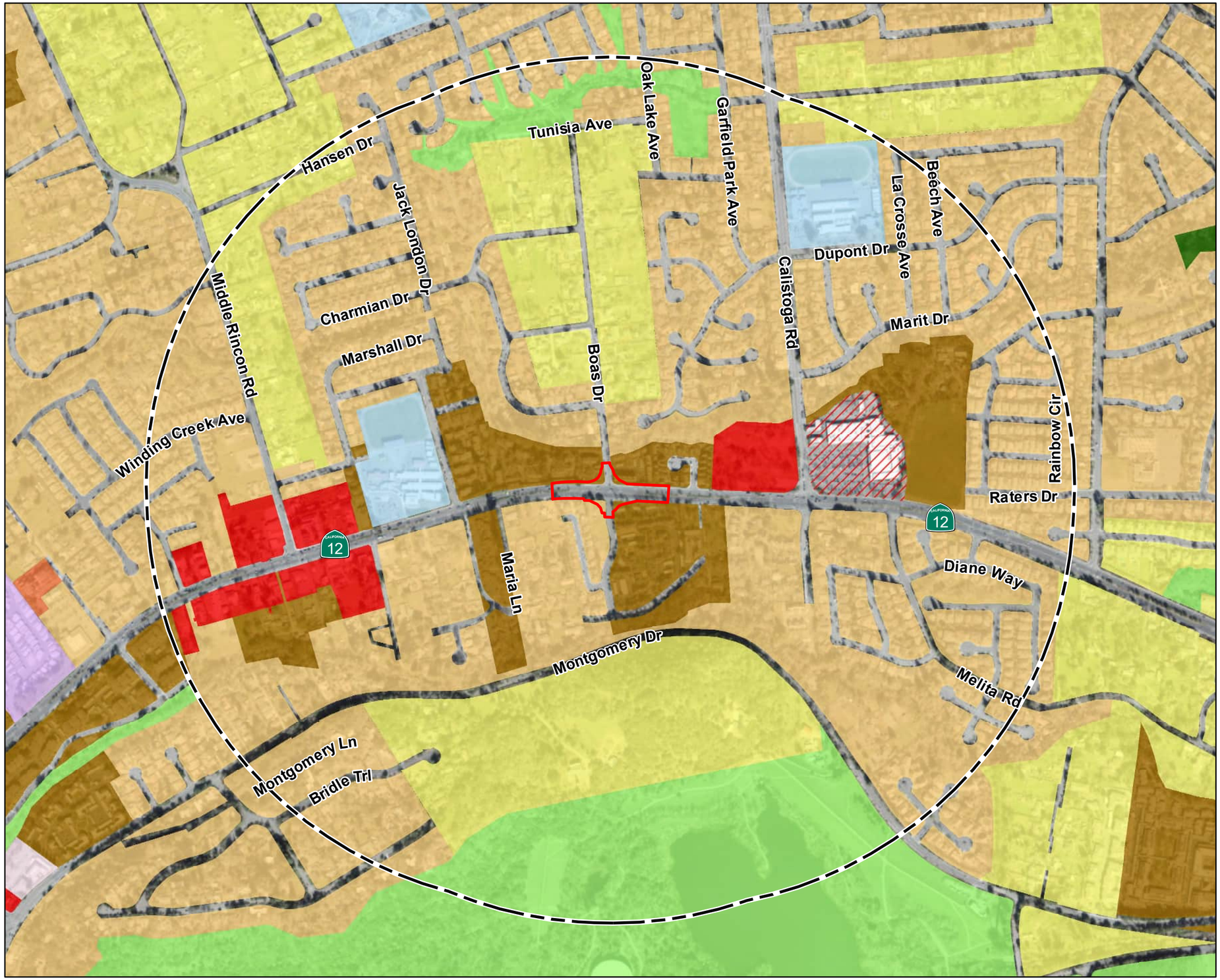
### 3.3.11 Land Use and Planning

| Question | CEQA Determination |
|---|---|
| a) Physically divide an established community? | No Impact |
| b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | No Impact |

Caltrans prepared a *Community Impact Assessment Memorandum* (Caltrans 2021h) to evaluate potential impacts of the Project on the adjacent community, including neighboring residents. The Project is located in a developed residential area in the City of Santa Rosa. The Santa Rosa General Plan 2035 (City of Santa Rosa 2009) identifies the vision, guiding principles, and goals for the City of Santa Rosa. The City General Plan's goals and policies are intended to provide a guide for future development and preservation of resources.

The parcels immediately adjacent to the intersection include apartment complexes and single-family residences. The Woodcreek Village Apartments are located to the northwest of the intersection, the Sonoma Creekside Homes to the northeast, the Oak Creek Apartments to the southeast, and single-family residences to the southwest. General Plan Land Use designations at the intersection are medium-density residential (8 – 18 units per acre) and low-density residential (2 – 8 units per acre); surrounding parcels are zoned planned development (PD), rural residential (RR-40), and single-family residential (R-1-6) (Figure 3-2).

The Project area and surrounding vicinity is fully developed with limited opportunities for new infill or redevelopment projects. The SR 12 highway corridor within the Project limits isrelatively built out, with one planned development at the northwest corner of SR 12 and Calistoga Road (APN 183-410-060). This project, the Mahonia Glen project, would construct 99 multi-family dwelling units and was recently approved (City of Santa Rosa 2021b). No other approved or pending development projects are planned in the Project vicinity.




**LEGEND**

- Project Footprint
- 0.5 Mile Radius

**Land Use**

- Very Low Density Residential
- Low Density Residential
- Medium Density Residential
- Medium High Density Residential
- Mobile Homes
- Retail and Business Services
- Retail/Medium Residential Mixed-Use
- Office
- Public/Institutional
- Parks and Recreation
- Open Space

Source:
City of Santa Rosa GIS, 2020

Impagery:
ESRI, City of Santa Rosa, 2/10/2020

N

0 650 1,300
Feet

Caltrans

**FIGURE 3-2**
**Land Use**
SR 12 Boas Drive Intersection Safety Project
*EA 2Q780, SON-12 PM-19.83*
*Sonoma County, California*

**a, b) No Impact**

The Project would not physically divide an established community and would not conflict with any land use plan, policy, or regulation adopted to mitigate an environmental effect. The Project would not alter existing land uses along the highway corridor. No impact to land use or planning would occur.

The *Community Impact Assessment Memorandum* (Caltrans 2021h) evaluated the consistency of the proposed Project with local and regional plan policies.

The proposed Project would be consistent with most Santa Rosa General Plan (City of Santa Rosa 2009) and all Sonoma County Comprehensive Transportation Plan (Sonoma County Transportation Authority 2016) policies. By improving intersection safety, installing crosswalks, and modifying pedestrian facilities near the existing bus stops, the Project is consistent with City of Santa Rosa and Sonoma Transportation Authority policies regarding promoting access to transit. Although the Project would not be consistent with the City of Santa Rosa policy promoting the use of roundabouts over signalized intersections, Caltrans considered a roundabout as a project design option, but dismissed it because a roundabout at this location would have significant environmental effects on land use, low-income housing units, and aesthetics (see Section 2.10 *Alternatives Considered but Eliminated from Further Discussion*). The Project does not conflict with land use plans and policies; there would be no impacts to land use.

***Avoidance, Minimization and Mitigation Measures***

The Project would affect existing land use or conflict with land use policies. No avoidance, minimization, and mitigation measures are needed.

### 3.3.12 Mineral Resources

| Question | CEQA Determination |
|---|---|
| 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? | No Impact |
| b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | No Impact |

**a, b) <u>No Impact</u>**

The Project does not occur in a known mineral resource zone (Miller and Busch 2013) and the Project does not propose activities that would disturb mineral resources, if present. The Project would have no impact on mineral resources.

***Avoidance, Minimization and Mitigation Measures***

The Project would not affect mineral resources. No avoidance, minimization, and mitigation measures are needed.

### 3.3.13 Noise

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

A *Noise Analysis Memorandum* was completed for the Project (Caltrans 2022b). Title 23 CFR Part 772 provides procedures for preparing operational and construction noise studies and evaluating noise abatement considered for federal and federal-aid highway projects. The Project was determined not to be a Type I project per 23 CFR 772, which defines Type I projects as construction of a highway on a new location, substantial horizontal or vertical alteration of an existing highway, or the addition or relocation of traffic lanes. Because the Project would not increase highway capacity or modify the horizontal or vertical alignment of the highway, a traffic noise study was not required, and noise abatement need not be considered. Nevertheless, there are sensitive receptors (residential homes) located near areas where noisy construction activities may occur at night. The analysis evaluated whether the Project may result in adverse temporary construction noise impacts to nearby residences.

The FHWA Roadway Construction Noise Model (RCNM) was used to estimate the noise levels during construction based on representative sound levels for the most common types of construction equipment and the estimated equipment usage. Vehicles and equipment likely to be used during each phase of construction were input into RCNM to estimate the maximum hourly noise level ($L_{max}$) and the average hourly noise level ($L_{eq}$) at receptor locations and at various distances. $L_{max}$ is the highest instantaneous noise level during a specified time, and $L_{eq}$ is the averaged level

equivalent in energy to the time-varying noise levels during the same period. The model was run for each major construction phase/activity.

Caltrans' Standard Specifications 14-8.02 requires $L_{max}$ not to exceed 86 dBA at 50 feet from the Project limits from 9:00 p.m. to 6:00 a.m.

**a) Less Than Significant Impact**

The Project would not permanently increase ambient noise levels in the vicinity of the intersection. The Project corridor is along SR 12, a highway that creates background noise levels for nearby residents. The Project would not change highway capacity or substantially alter long-term ambient noise levels.

Construction activities, including nighttime work, would generate temporary noise. The *Noise Analysis Memorandum* (Caltrans 2022b) determined that the noisiest construction activities would be removal of sidewalks and curb ramps, which uses pavement saws and jack hammers. This activity would produce 89.6 dBA $L_{max}$ at a distance of 50 feet. The nearest residence is approximately 25 feet from Project activities, and the RCNM model predicts that noise from these activities would exceed Caltrans' 86 dBA $L_{max}$ threshold if Project Features are not employed to minimize construction noise. The following Project Features, described in Appendix B, would reduce impacts associated with construction-related noise.

- PF-AIR-2: Minimize Idling.
- PF-NOI-1: Maintain Internal Combustion Engines and Equip with Mufflers.
- PF-NOI-2: Construction Schedule.
- PF-NOI-3: Quiet Air Compressors.
- AMM-NOI-1: Sensitive Receptors and Noise Barriers.
- AMM-NOI-2: Public Outreach.

The noisiest construction activities would be scheduled during daytime hours, between 6:00 a.m. and 9:00 p.m. (PF-NOI-2: Construction Schedule), and construction noise barriers or sound aprons would be placed between noisy activities and nearby residents (AMM-NOI-1). Additionally, standard operation and maintenance practices would minimize equipment noise (PF-AIR-2, PF-NOI-1, and

PF-NOI-3). By implementing these standard construction practices, the Project would not exceed Caltrans' Standard Specifications 14-8.02, which requires $L_{max}$ not to exceed 86 dBA at 50 feet from the Project limits from 9:00 p.m. to 6:00 a.m.

Construction activities are short-term and would not result in long-term adverse effects on ambient noise levels. While most construction activities would occur during the daytime, construction noise would be experienced for short durations during the nighttime. Temporary daytime and nighttime construction noise would be reduced with the implementation of Project Features described in Appendix B. Therefore, construction-related noise impacts would be less than significant.

**b) No Impact**

Construction of the Project would not require vibratory or impact pile driving. There would be no impact from excessive groundborne vibrations.

**c) No Impact**

There are no airports or airstrips within the project vicinity. There would be no impact.

***Avoidance, Minimization and Mitigation Measures***

The following avoidance and minimization measures would further reduce impacts from noise or groundborne vibration during construction.

- AMM-NOI-1: Sensitive Receptors and Noise Barriers. Locate all stationary noise-generating construction equipment as far as practicable from noise-sensitive receptors or provide baffled housing or sound aprons to equipment when sensitive receptors adjoin or are near the construction Project area. Construct noise barriers (temporary enclosures or stockpiles of excavated material) shall be placed between noisy activities and noise-sensitive receptors or around activities with high noise levels or noisy equipment (e.g., shields can be used around pile drivers).

- AMM-NOI-2: Public Outreach. Public outreach would be required before project construction and throughout the project construction to update residents, businesses and others with upcoming activities and time frame of project. Public outreach could entail sending notices to nearby residents, notifying the city, and posting a notice on the project site.

### 3.3.14 Population and Housing

| Question | CEQA Determination |
|---|---|
| a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | No Impact |
| b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | No Impact |

The City of Santa Rosa had a 2019 population of 176,753, with 69,814 housing units with a median home value of $540,600 (U.S. Census Bureau 2021).

**a, b) No Impact**

The proposed Project would not induce population growth because it does not increase the capacity of SR 12, remove barriers to future growth, or increase population or housing growth (or demand for new housing, utilities, or public services). The Project would not induce population growth, displace housing, or displace people. Therefore, there would be no impact to population and housing.

***Avoidance, Minimization and Mitigation Measures***

The Project would not affect population and housing. No avoidance, minimization, and mitigation measures are needed.

### 3.3.15 Public Services

| Question | CEQA Determination |
|---|---|
| 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:<br>Fire protection? | No Impact |
| Police protection? | No Impact |
| Schools? | No Impact |
| Parks? | No Impact |
| Other public facilities? | No Impact |

**a) No Impact**

The proposed Project would not result in the substantial alteration of government facilities in the Project limits, such as fire and police protection, schools, parks or other public facilities, nor trigger the need for new government facilities or alter the demand for public services. There would be no impact.

***Avoidance, Minimization and Mitigation Measures***

The Project would not affect public services. No avoidance, minimization, and mitigation measures are needed.

### 3.3.16 Recreation

| Question | CEQA Determination |
|---|---|
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | No Impact |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | No Impact |

Nearby parks that provide recreational opportunities include Tanglewood Park (7.9 acres) and Oaklake Green Park (3.73 acres), which are located along the northern fork of Austin Creek, about 0.25 mile north of the intersection, as well as Howarth Memorial Park and Spring Lake Regional Park, which are large regional parks located approximately 1 mile south of the Project; these parks are not accessible from South Boas Drive (Caltrans 2021h).

**a, b) No Impact**

The Project would not directly or indirectly increase the demand of existing recreational facilities such that substantial deterioration of the facilities would occur. In addition, the Project would not require the construction of additional recreational facilities. There would be no impact.

***Avoidance, Minimization and Mitigation Measures***

The Project would not affect recreation resources. No avoidance, minimization, and mitigation measures are needed.

### 3.3.17 Transportation and Traffic

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

SR 12 links Sebastopol, Santa Rosa, the Sonoma Valley, and Napa County. It also provides an important connection to the Interstate 80 corridor, including a link for interstate trucking (SCTA 2016). SR 12 at the Boas Drive intersection is a four-lane divided highway with free-flowing traffic through the intersection. Boas Drive and South Boas Drive form the other two legs of the intersection and are two-lane local streets with stop signs as the traffic control at the intersection. In July 2021, SR 12 at the Project intersection had an average daily traffic (ADT) volume of 38,700 with 2.4% truck traffic (Caltrans 2022c). There are no existing crosswalks across SR 12 at this intersection. The posted speed limit on SR 12 in the Project area is 45 miles per hour (mph); a 25-mph school zone on SR 12 is located west of the intersection.

Parking is not permitted on SR 12 in the Project vicinity. On-street parking available on Boas Drive north of the intersection is heavily used by visitors and residents in nearby apartment complexes. South of the intersection, South Boas Drive provides more on-street parking.

There are two bus pullouts on SR 12 near the Project intersection: one along eastbound SR 12 close to the southeastern corner of the intersection, and another along westbound SR 12 close to the northwestern corner of the intersection. CityBus Route 4/4B (Rincon Valley, Mission Boulevard, Calistoga Road) uses these stops. This route provides bus service along SR 12 in the Project vicinity; the route connects riders to the Santa Rosa Transit Station with easy access to the Santa Rosa Downtown Sonoma-Marin Area Rail Transit (SMART) station. During weekdays, this route has buses every 30 minutes.

Sonoma County Transit provides regional transit services in the County. Sonoma County Transit operates bus routes 30, 30X, and 34 along SR 12 through the Project area, with connections from downtown Santa Rosa to Sonoma, California. Sonoma County Transit also uses the bus stops at the intersection.

Although SR 12 does not have bicycle facilities, bicycles are permitted to use the highway shoulders on this segment. SR 12 has sidewalks along both the eastbound and westbound directions, but no marked crosswalks for pedestrians exist at the intersection. Boas Drive has sidewalks on along both sides of the street, whereas South Boas Drive includes a sidewalk only along the eastern side of the road (adjacent to the northbound lane).

**a) Less Than Significant Impact**

The proposed Project would not conflict with programs, plans, ordinances, or policies regarding the circulation system, public transit, bicycle, or pedestrian facilities including the Circulation Element of the City of Santa Rosa General Plan (2009), Sonoma County's CTP (SCTA 2016), and Countywide Bicycle and Pedestrian Masterplan (SCTA 2014).

No long-term changes to traffic, access and parking would occur. The signalized intersection would modify traffic circulation along SR 12 by adding a new signal. Effects on traffic movement and delays would be minimized through traffic signal timing and coordination with other intersections through connection with existing interconnect conduit and fiber along SR 12. The Project would not reduce parking availability in the Project vicinity. With the Project, the two nearby bus stops and existing bus curbside pullouts would be retained at their current locations, and transit operators would continue to use the bus stops along SR 12. Pedestrian improvements (sidewalks, curb ramps, and traffic signals) would improve safety for pedestrians, bicyclists, and transit users.

During construction, there would be temporary traffic delays and lane closures at the intersection that could result in temporary effects on transportation and circulation. These short-term, intermittent lane closures, which would occur throughout construction primarily during nighttime, and would inconvenience highway users. The following Project Feature, described in Appendix B, would further reduce construction-related traffic impacts.

- PF-TRA-1: Traffic Management Plan.

Prior to construction, a detailed TMP would be prepared. The TMP would include measures to lessen the Project's travel-related impacts. These include recommendations such as no lane or shoulder closures during daytime and peak commute hours on weekdays; a minimum of one paved traffic lane always open in each direction of travel; and other items to maintain traffic connectivity. Coordination with transit agencies and emergency service providers would be included in the TMP prepared for the Project.

**b) Less Than Significant Impact**

The Project would be consistent with CEQA Guidelines Section 15064.3, subdivision b. The Project would not increase vehicular capacity or permanently alter the circulation system. It would have no permanent impact on vehicle miles traveled. Under section 15064.3, subdivision b transportation projects that have no impact on vehicle miles traveled should be presumed to cause a less than significant transportation impact.

**c) No Impact**

The proposed Project does not include any design features or construction elements that would substantially increase hazards (e.g., sharp curves or dangerous intersections). The Project would improve corner sight distance at the intersection. There would be no impact.

**d) Less Than Significant Impact**

During construction, temporary lane closures and associated traffic delays on SR 12 could result in temporary delays in emergency service response times. The TMP would identify traffic delays and alternative routes. Emergency response times are not anticipated to change during construction because the TMP would provide priority to emergency vehicles during traffic control. The TMP would provide instructions for response or evacuation in the event of an emergency. The impact would be less than significant.

***Avoidance, Minimization and Mitigation Measures***

The Project would improve traffic conditions at the intersection. No avoidance, minimization, and mitigation measures are needed.

### 3.3.18 Tribal Cultural Resources

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

| Question | CEQA Determination |
|---|---|
| a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | No Impact |
| b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | No Impact |

Caltrans initiated formal notification under Assembly Bill 52 and Section 106 of the National Historic Preservation Act with letters for each individual and/or organization on September 21, 2021. Individuals contacted include: Chairperson Patricia Hermosillo, Cloverdale Rancheria of Pomo Indians; Chairperson Scott Gabaldon, Mishewal-Wappo Tribe of Alexander Valley; Chairperson Leona Williams of the Pinoleville Pomo Nation; Chairperson Donald Duncan, Guidiville Indian Rancheria; Chairperson Beniakem Cromwell, Robinson Rancheria of Pomo Nation; Chairperson Marjorie Mejia, Lytton Rancheria; and James Rivera, Tribal Historic Preservation Officer (THPO) and Michael Rivera, Project Manage, Middletown Rancheria of Pomo. No responses were received.

Additionally, Chairperson Greg Sarris, Federated Indians of Graton Rancheria, was sent a letter via email on September 1, 2021, initiating outreach and requesting any input or concerns the tribe may have regarding the proposed Project. On September 10, 2021, THPO Buffy McQuillen responded with interest to consult. A response updating Ms. McQuillen of efforts that have been made to identify cultural resources in relation to Project area impacts and avoidance was sent on September 20, 2021. No further comments have been received. No tribal cultural resources were reported in record searches.

**a, b) No Impact**

No tribal cultural resources were reported in record searches or in consultation with Native groups and individuals. If an inadvertent discovery of potential tribal cultural resources occurs during construction, the following Project Features, described in Appendix B, would be implemented.

- PF-CUL-1: Stop Work Upon Discovery of Cultural Materials.
- PF-CUL-2: Procedures for Discovery of Human Remains.

***Avoidance, Minimization and Mitigation Measures***

The Project would not affect tribal cultural resources. No avoidance, minimization, and mitigation measures are needed.

### 3.3.19 Utilities and Service Systems

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

There are both overhead and underground utilities at the intersection, including stormwater drains, water lines, sanitary sewer, gas lines, overhead electrical, and telecommunication lines. Verification of utilities would be conducted during the design phase of the Project. Relocations of two joint utility poles and underground utilities may be required. Additionally, the Project may require that utility boxes or valve covers are adjusted to final grade.

**a, b, c, d, e) No Impact**

Although the Project would require utility relocation, those modifications would not cause significant environmental impacts. Caltrans would coordinate with utility service providers prior to construction. The following Project Features, described in Appendix B, would address utility impacts during construction.

- PF-UTIL-1: Trash Management.

- PF-UTIL-2: Notify Utility Owners of Construction Schedule to Protect Utilities.

The Project would not require new water supplies or affect existing water supplies. The proposed Project would not result in substantial demands for solid waste disposal and would comply with federal, state, and local statutes regarding solid waste. No solid waste would be generated by the Project post-construction. There would be no impact.

### *Avoidance, Minimization and Mitigation Measures*

The Project would not trigger the need for new utilities and service systems. No avoidance, minimization, and mitigation measures are needed.

### 3.3.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

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

The Project is located within a Local Responsibility Area, with the Santa Rosa Fire Department, as well as volunteer fire companies operating through the Sonoma County Fire and Emergency Services Department, providing fire suppression, rescue, and emergency services along the project corridor. The Project is outside of a State Responsibility Area and is not within a high severity fire area (California Department of Forestry and Fire Protection [CALFIRE] 2007).

**a) Less Than Significant Impact**

A Traffic Management Plan (Project Feature TRA-1 in Appendix B) would be developed during the design phase to identify traffic diversion/staging and alternative routes. Emergency response times are not anticipated to change during construction because the TMP would provide measures to ensure priority for emergency vehicles during lane closures and traffic control. The TMP would include coordination with emergency service providers and provide instructions for response and evacuation in the event of an emergency such as a wildfire. In addition, the proposed Project would not conflict with any other emergency response or evacuation plan. The impact would be less than significant.

**b, c, d) No Impact**

The Project proposes to install traffic signals to control the intersection. It would not exacerbate wildfire risk, nor would it require the installation of associated infrastructure that would exacerbate fire risk. There would be no impact.

***Avoidance, Minimization and Mitigation Measures***

The Project would not exacerbate wildlife risk or expose people to additional wildlife fire risk. No avoidance, minimization, and mitigation measures are needed.

### 3.3.21 Mandatory Findings of Significance

| Question | CEQA Determination |
|---|---|
| a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | No Impact |
| 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)? | No Impact |
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | Less Than Significant Impact |

**a) No Impact**

The proposed Project would not substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or substantially reduce the number of or restrict the range of a rare or endangered plant or animal. The Project would not eliminate important examples of the major periods of California history or prehistory. Project Features (Appendix B) would avoid or minimize potential impacts on biological and cultural resources.

**b) No Impact**

In analyzing the Project's cumulative environmental effects, the analysis proceeds as follows: (1) determine which resources would be significantly impacted by the Project; (2) determine whether there is a detrimental condition or deterioration in health of a resource within the context of impacts from past, present, and other reasonably foreseeable future actions; and (3) determine whether, collectively, the proposed Project and the foreseeable condition combine to result in a cumulative impact.

The proposed Project involves the installation of traffic signals and construction of sidewalk/curb ramps, retaining walls, and drainage improvements. The proposed Project would occur mostly within the Caltrans ROW. The Project would not convert lands to a new or different use, increase highway capacity, induce growth, or otherwise change land patterns and use. The proposed Project would not result in long-term adverse environmental effects and so would not contribute to cumulative environmental impacts. The analysis presented in this Initial Study identifies temporary, less-than-significant, construction-related impacts on aesthetics, air quality, biological resources, energy, greenhouse gas emissions, hazards/hazardous materials, hydrology/water quality, noise, transportation/traffic, and wildfire. Because the effects of the Project are construction-related, if other highway improvement projects along the SR 12 corridor (e.g., SR 12 Hooker Creek Bridge or Sonoma Creek Bridge Projects, 12 and 5 miles from the project, respectively) occur within a similar timeframe, cumulative effects may occur (e.g., traffic management).

However, Caltrans routinely coordinates with regional transportation managers and local agencies to minimize impacts in the region resulting from construction of multiple planned projects. The short duration and limited scope of the proposed Project would not contribute to cumulative environmental impacts. Cumulative impacts to these resources would be avoided with the proper implementation of Project Features (Appendix B). Therefore, the Project would have no cumulative impacts.

**c) Less Than Significant Impact**

Residences are located around the Project intersection. Intermittent night work would occur during construction. Access to residential driveways within close proximity to construction activities would be maintained at all times, and noise and air quality BMPs would be implemented to address temporary dust, noise, and traffic impacts (Appendix B). Therefore, temporary construction-related activities would not result in permanent or significant environmental impacts to human beings. This impact would be less than significant.

# Chapter 4 List of Preparers

The primary persons responsible for contributing to, preparing, and reviewing this report are listed in Table 4-1.

**Table 4-1 List of Preparers and Reviewers**

| Organization | Name | Role |
|---|---|---|
| Caltrans | Wesley Bexton | Landscape Associate, Landscape Architecture |
| Caltrans | Helen Blackmore | Branch Chief, Architectural History |
| Caltrans | Robert Blizard | Branch Chief, Biological Sciences and Permits |
| Caltrans | Melvin Dumlao | Transportation Engineer, Storm Water Design |
| Caltrans | Lindsay Vivian | Chief, Environmental Analysis |
| Caltrans | Tom Jiang | Transportation Engineer, Hydraulic Engineering |
| Caltrans | Hrishikesh Katti | Project Management, Sonoma County |
| Caltrans | Jonathan Lee | Senior Engineer, Design |
| Caltrans | Arnica MacCarthy | Branch Chief, Environmental Analysis |
| Caltrans | Shilpa Mareddy | Branch Chief, Environmental Engineering - Air Quality and Noise |
| Caltrans | Jim Murphy | Associate Right of Way Agent, Right of Way and Land Surveys |
| Caltrans | Mojgan Osooli | Branch Chief, Storm Water Design |
| Caltrans | Joaquin Pedrin | Branch Chief, Landscape Architecture |
| Caltrans | Kathleen Reilly | Branch Chief, Hydraulic Engineering |
| Caltrans | Chris Risden | Branch Chief, Geotechnical Design |
| Caltrans | Alvin Rosa-Figueroa | Associate Environmental Planner, Archaeology |
| Caltrans | Kathryn Rose | Branch Chief, Archaeology |
| Caltrans | Alicia Sanhueza | Environmental Planner, Architectural History |
| Caltrans | Fred Witteborn | Project Engineer, Design |
| Caltrans | Chris Wilson | Senior Transportation Engineer, Environmental Engineering - Hazardous Waste |
| Jacobs | Karen Dolan | GIS Analyst |
| Jacobs | Jasmin Mejia | Project Manager |
| Jacobs | Bryan Bell | Editor |
| Jacobs | Clarice Ericsson | Publishing Technician |

## Table 4-1 List of Preparers and Reviewers

| Organization | Name | Role |
|---|---|---|
| Area West Environmental | Aimee Dour-Smith | Senior Environmental Planner |
| Area West Environmental | Corinne Munger | Environmental Planner, Biologist |
| Area West Environmental | Rachel Freund | GIS Analyst |

# Chapter 5 Distribution List

The Initial Study with proposed Negative Declaration will be circulated to the following agencies and government officials:

**Agencies**

California Transportation Commission

Governor's Office of Planning and Research

Sonoma County Clerk's Office

City of Santa Rosa Public Works Department

CityBus

Sonoma County Transit

Sonoma County Transportation Authority

California Highway Patrol

Bay Area Air Quality Management District

California Department of Fish and Wildlife – Region 3

Regional Water Quality Control Board - Region 2

**Elected Officials**

U.S. Senator Dianne Feinstein

U.S. Senator Alex Padilla

U.S. Congressional Representative Mike Thompson

State Senator Mike McGuire

State Assembly Member Jim Wood

Sonoma County Supervisor (District 1) Susan Gorin

Santa Rosa City Mayor Chris Rogers

Santa Rosa City Council (District 3) Dianna MacDonald

Sheriff Mark Essick

# Chapter 6 Comments and Coordination

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation and the level of analysis required, and identify potential impacts and avoidance, minimization, and/or mitigation measures and related environmental requirements. Agency and tribal consultation and public participation for this Project have occurred through various formal and informal methods, including public notices. This chapter summarizes the results of Caltrans' efforts to fully identify, address, and resolve Project-related issues through early and continuing coordination.

## 6.1 Community Outreach

### 6.1.1 Public Involvement Process for the Draft Environmental Document

The general public was involved in the Project process through solicitation of feedback on the draft environmental document during the 32-day comment period, which began on April 21, 2022, and ended on May 23, 2022. Notifications were sent via U.S. Postal Service to adjacent landowners and nearly 600 nearby residents and businesses on April 26, 2022. A Notice of Availability was published in the Santa Rosa Press Democrat newspaper on April 22, 2022. Notification letters were mailed directly to local, state, and federal agencies and to elected officials on April 27 and April 28, 2022.

Copies of the Draft IS/ND were made available to the public at the Rincon Valley Library and electronically at the Caltrans District 4 Environmental Documents by County website: https://dot.ca.gov/caltrans-near-me/district-4/d4-popular-links/d4-environmental-docs.

A Notice of Completion was received by the State Clearinghouse on April 21, 2022. The Project was assigned State Clearinghouse No. 2022040470. The State Clearinghouse subsequently distributed copies of the Draft IS/ND to agencies for comments.

During the public circulation period, Caltrans received 12 comment submittals. Responses to those comments are included in Appendix E. The comments in the

letters have been addressed by members of the Project development team whose specialty covers the subject matter of each comment.

## 6.2 Consultation and Coordination with Public Agencies

Coordination with local agencies and tribal representatives occurred during the environmental evaluation process.

### 6.2.1 Native American Tribal Consultation

Caltrans initiated formal notification under Assembly Bill 52 and Section 106 of the National Historic Preservation Act with letters for each individual and/or organization on September 21, 2021. Individuals contacted include: Chairperson Patricia Hermosillo, Cloverdale Rancheria of Pomo Indians; Chairperson Scott Gabaldon, Mishewal-Wappo Tribe of Alexander Valley; Chairperson Leona Williams of the Pinoleville Pomo Nation; Chairperson Donald Duncan, Guidiville Indian Rancheria; Chairperson Beniakem Cromwell, Robinson Rancheria of Pomo Nation; Chairperson Marjorie Mejia, Lytton Rancheria; and James Rivera, THPO and Michael Rivera, Project Manager, Middletown Rancheria of Pomo. No responses were received.

Chairperson Greg Sarris, Federated Indians of Graton Rancheria, was sent a letter via email on September 1, 2021, initiating outreach and requesting any input or concerns the tribe may have regarding the proposed Project. On September 10, 2021, THPO Buffy McQuillen responded with interest to consult. A response updating Ms. McQuillen with regard to efforts that have been made to identify cultural resources in relation to potential Project area impacts was sent on September 20, 2021. No further comments have been received. No tribal cultural resources were reported in record searches.

### 6.2.2 Bay Area Air Quality Management District

The Project is located in the SFBAAB, which is regulated by the BAAQMD. The SFBAAB is considered to be in federal and state nonattainment for ozone and $PM_{2.5}$ and in state nonattainment for $PM_{10}$. It is in attainment or unclassified for other state and federal air quality standards.

The Project is exempt from the requirement to determine air quality conformity per 40 CFR 93.126, Table 2 Exempt Projects, which covers Highway Safety Improvement Program implementation. The Project was presented to the Metropolitan Transportation Commission Air Quality Conformity Task Force in July

2021. With input from EPA, Federal Transit Administration, FHWA, and Caltrans, the Task Force concluded that the Project is exempt from project-level conformity requirements by improving or eliminating a hazardous location or feature.

# **Appendix A** Title VI Policy Statement

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY Gavin Newsom, Governor

**DEPARTMENT OF TRANSPORTATION**
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September 2021

**NON-DISCRIMINATION POLICY STATEMENT**

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures "*No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.*"

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To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Civil Rights, at 1823 14th Street, MS-79, Sacramento, CA 95811; PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 324-8379 (TTY 711); or at Title.VI@dot.ca.gov.

Toks Omishakin
Director

*"Provide a safe and reliable transportation network that serves all people and respects the environment."*

# Appendix B Project Features and Avoidance and Minimization Measures

**PROJECT FEATURES**

| Resource Area | Project Feature Reference | Project Feature Title and Description |
|---|---|---|
| Aesthetics | Project Feature AES-1 | **Avoid Unnecessary Removal of Vegetation.** During construction, all attempts will be made to avoid impacts to all vegetation and preserve existing trees and associated root systems. Trees will be protected with temporary fencing where abutting or within work areas. Prior to considering tree removal, trees will be pruned under the supervision of a certified arborist to provide equipment access. |
| Aesthetics | Project Feature AES-2 | **Revegetate Disturbed Areas Upon Completion of Construction.** Where removal of trees and vegetation is unavoidable, disturbed areas will be replanted with climatically appropriate trees and landscape plants within Caltrans' ROW in an arrangement that is compatible with the existing street tree canopy and screening vegetation that preserves the scenic character of the Project area. Trees removed outside the Caltrans ROW may be subject to the City of Santa Rosa Tree Preservation Ordinance. Remedies for specific tree removals would be determined during design. Additionally, landscaping vegetation would be replaced with climatically appropriate planting in kind, to preserve the project location's scenic character and provide screening to adjacent areas. Irrigation damaged and/or removed as a result of the Project would be repaired/replaced. |
| Aesthetics | Project Feature AES-3 | **Replace Removed Fences in Kind**. Fences removed during construction will be replaced using materials visually appropriate and consistent with existing conditions. |
| Aesthetics | Project Feature AES-4 | **Minimize Appearance of Construction Equipment and Staging Areas**. To the extent practicable, use screened temporary construction fencing to reduce the appearance of construction areas and equipment. |
| Aesthetics | Project Feature AES-5 | **Minimize Construction Lighting**. Construction lighting will be limited to the area of work, and light trespass to adjacent residences and to the travelling public will be avoided with the use of directional lighting, shielding, and other measures as needed. |

| Resource Area | Project Feature Reference | Project Feature Title and Description |
|---|---|---|
| Aesthetics | Project Feature AES-6 | **Locate Staging Areas on Paved Surfaces.** To the extent practicable, construction equipment and materials will be staged on paved areas within Caltrans' ROW. |
| Air Quality | Project Feature AIR-1 | **Control Fugitive Dust**. Dust control measures would be included in the Water Pollution Control Plan (WPCP) and implemented to minimize construction impacts to existing communities. The plan would incorporate measures such as sprinkling, speed limits, transport of materials, and timely revegetation of disturbed areas as needed, as well as posting a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints and at the Bay Area Air Quality Management District (BAAQMD) regarding compliance with applicable regulations. Water or dust palliatives would be applied to the site and equipment as often as necessary to control fugitive dust emissions. Fugitive emissions generally must meet a "no visible dust" criterion either at the point of emissions or at the ROW line, depending on air pollution control district and air quality management district regulations and local ordinances. |
| Air Quality | Project Feature AIR-2 | **Minimize Idling.** Idling times would be minimized either by shutting off equipment when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Unnecessary nighttime idling of internal combustion engines would be avoided within 100 feet of sensitive noise receptors (e.g., residences). Clear signage would be provided for construction workers at all access points. Construction activities involving the extended idling of diesel equipment or vehicles would be prohibited. |
| Air Quality | Project Feature AIR-3 | **Maintain Construction Equipment and Vehicles.** All construction equipment and vehicles would be maintained and properly tuned in accordance with manufacturer's specifications. All equipment would be checked by a certified mechanic and determined to be running in proper condition prior to operation. |
| Air Quality | Project Feature AIR-4 | **Contractor Air Quality Compliance.** The construction contractor must comply with the Caltrans Standard Specifications in Section 14-9, which require contractor compliance with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances. |

| Resource Area | Project Feature Reference | Project Feature Title and Description |
|---|---|---|
| Biological Resources | Project Feature BIO-1 | **Avoid Entrapment of Wildlife.** To prevent inadvertent entrapment of animals during construction:<br>a) Excavated, steep-walled holes or trenches more than 1 ft. deep would be covered at the close of each working day using plywood or similar materials or provided with at least one escape ramp constructed of earth fill or wooden planks. Before such holes or trenches are filled, they must be thoroughly inspected for trapped animals. Replacement pipes, culverts, or similar structures stored in the Project area overnight would be inspected before they are subsequently moved, capped or buried.<br>b) Plastic monofilament netting or similar material would not be used. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds. |
| Biological Resources | Project Feature BIO-2 | **Conduct Preconstruction Bird Surveys and Establish Buffers.** During the nesting season (February 1 through September 30), pre-construction surveys for nesting birds would be conducted by a qualified biologist no more than 72 hours prior to the start of construction activities. If an active nest is discovered, biologists would establish an appropriate exclusion buffer around the nest (at least 300 feet for raptors and 100 feet for all other species). The area within the buffer would be avoided until the young are no longer dependent on the adults or the nest is no longer active. If a nesting special-status bird species is discovered, the biologist would notify USFWS and/or CDFW for further guidance. Partially constructed and inactive nests may be removed to prevent occupation. Nesting birds near the project footprint would be regularly monitored for signs of disturbance. To the extent feasible, tree removal would not occur during the nesting season. |
| Cultural Resources | Project Feature CUL-1 | **Stop Work upon Discovery of Cultural Resources.** If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area would be diverted until a Caltrans qualified archaeologist can assess the nature and significance of the find. |

| Resource Area | Project Feature Reference | Project Feature Title and Description |
|---|---|---|
| Cultural Resources | Project Feature CUL-2 | **Procedures for Discovery of Human Remains.** If remains are discovered during excavation, all work within 60 feet of the discovery would halt and Caltrans' Cultural Resource Studies office would be called. Caltrans' Cultural Resources Studies Office Staff would assess the remains and, if determined human, would contact the County Coroner as per Public Resources Code (PRC) Sections 5097.98, 5097.99, and 7050.5 of the California Health and Safety Code. If the Coroner determines the remains to be Native American, the Coroner will contact the Native American Heritage Commission who would then assign and notify a Most Likely Descendant. Caltrans would consult with the Most Likely Descendant on respectful treatment and reburial of the remains. Further provisions of PRC 5097.98 are to be followed as applicable. |
| Greenhouse Gas Emissions | Project Feature GHG-1 | **Waste Reduction**. If practicable, nonhazardous waste and excess material would be recycled. If recycling is not practicable, the material would be disposed of appropriately. |
| Greenhouse Gas Emissions | Project Feature GHG-2 | **Energy Reduction.** Solar sign boards would be used. |
| Hazards and Hazardous Materials | Project Feature HAZ-1 | **Asbestos and Lead-Based Paint Survey.** Existing structures that would be removed by the project would be tested for asbestos and lead-based paint by a qualified and licensed inspector prior to demolition. All asbestos-containing material or lead-based paint, if found, would be removed by a certified contractor in accordance with local, state, and federal requirements. |
| Hazards and Hazardous Materials | Project Feature HAZ-2 | **Aerially Deposited Lead Work Plan.** Caltrans would prepare a work plan for aerially deposited lead if required during the design (Plans, Specifications and Estimate [PS&E]) phase. Soil samples collected to evaluate aerially-deposited lead would be analyzed for total lead and soluble lead in accordance with Department of Toxic Substances Control’s requirements to determine appropriate actions that would ensure the protection of construction workers, future site users, and the environment, |
| Hazards and Hazardous Materials | Project Feature HAZ-3 | **Hazardous Materials Incident Contingency Plan.** Prior to construction, a hazardous materials incident contingency plan would be prepared to report, contain, and mitigate roadway spills. The plan would designate a chain of command for notification, evacuation, response, and cleanup of roadway spills. |

| Resource Area | Project Feature Reference | Project Feature Title and Description |
|---|---|---|
| Hydrology and Water Quality | Project Feature WQ-1 | **Water Pollution Control Plan.** Before any ground-disturbing activities, the Contractor shall prepare and implement a Water Pollution Control Plan (WPCP) (as defined in Caltrans' Standard Specifications Section 13) that includes erosion control measures and construction waste containment measures to ensure that waters of the state are protected during and after Project construction. The WPCP shall include site design to minimize offsite storm water runoff that might otherwise affect downstream habitat. The WPCP will incorporate standard erosion and sediment control practices required by Caltrans Construction Site Best Management Practices Manual. |
| Hydrology and Water Quality | Project Feature WQ-2 | **Construction Site Best Management Practices.** To prevent or reduce water quality impacts to the project corridor, BMPs will be deployed for sediment control, pH, and material management. BMPs will include measures for soil stabilization, sediment control, wind erosion control, tracking control, non-stormwater management, and drainage inlet protection. These BMPs will include measures such as, but not limited to:<br>• Job site management<br>• Sediment control (temporary fiber rolls, silt fences)<br>• Waste management and materials pollution control<br>• Non-stormwater management<br>• Stockpile management<br>• Tracking controls<br>• Wind erosion controls, and<br>• Drainage inlet protection. |
| Noise | Project Feature NOI-1 | **Maintain Internal Combustion Engines and Equip with Mufflers.** All internal combustion engines would be maintained properly to minimize noise generation. Equip all internal combustion engine driven equipment with manufacturer recommended intake and exhaust mufflers that are in good condition and appropriate for the equipment. |
| Noise | Project Feature NOI-2 | **Construction Schedule.** Schedule construction activities exceeding 86 dBA during the day, between 6:00 AM to 9:00 PM. Noisy operations would be scheduled to occur within the same time period to the greatest extent possible. The total noise level would not be significantly greater than the level produced if operations are performed separately. |
| Noise | Project Feature NOI-3 | **Quiet Air Compressors.** The project would utilize "quiet" air compressors and other "quiet" equipment where such technology exists. |

| Resource Area | Project Feature Reference | Project Feature Title and Description |
|---|---|---|
| Transportation and Traffic | Project Feature TRA-1 | **Traffic Management Plan.** A Traffic Management Plan (TMP) would be developed by Caltrans during the design phase to provide a safe construction zone. Lane closures are anticipated for the proposed work. The TMP would include elements such as haul routes, traffic controls to minimize speeds and congestion, flag workers, and phasing to reduce impacts to local residents as feasible and maintain access for police, fire, and medical services in the local area.<br>Temporary pedestrian and bicyclist access would be provided during construction. Prior to construction, Caltrans would notify adjacent property owners, businesses, transit operators, and local bicycle organizations regarding construction activities and access changes. In addition, Caltrans would coordinate with the local fire department and emergency response service providers prior to construction to minimize potential disruption to emergency services. |
| Utilities and Service Systems | Project Feature UTIL-1 | **Trash Management.** All food-related trash items such as wrappers, cans, bottles, and food scraps would be disposed of in closed containers and removed at least once daily from the project limits. |
| Utilities and Service Systems | Project Feature UTIL-2 | **Notify Utility Owners of Construction Schedule to Protect Utilities.** Caltrans would notify all affected utility companies, such as PG&E and Comcast of construction schedules for proposed project work so that they can relocate the gas line, telephone, cable, and overhead distribution lines prior to construction, and minimize disruption of utility service. |

**AVOIDANCE AND MINIMIZATION MEASURES**

| Resource Area | AMM Reference | Avoidance and Minimization Measure Title and Description |
|---|---|---|
| Aesthetics | AMM-AES-1 | **Aesthetically Treat Retaining Walls and Median Islands.** Retaining walls and appurtenances will be aesthetically treated to be visually appropriate to the location, and alternatives to chain link fencing will be considered for fall protection (if needed). Aesthetic treatments will be provided at median islands, splitter islands, central island, and truck aprons, compatible with the colors and textures of the highway corridor and adjacent areas. Final aesthetic treatment for walls, fall protection, medians and appurtenances will be selected during final design. |

| Resource Area | AMM Reference | Avoidance and Minimization Measure Title and Description |
|---|---|---|
| Geology and Soils | AMM-PALEO-1 | **Paleontological Evaluation Report**. Prior to construction, Caltrans would determine whether the Project area has a low or high sensitivity for paleontological resources. If Caltrans determines the Project area is sensitive for paleontological resources, a preparer that meets Caltrans requirements of a Principal Paleontologist would prepare a Paleontological Evaluation Report. The Paleontological Evaluation Report would identify measures to avoid or/and minimize impacts to paleontological resources. |
| Noise | AMM-NOI-1 | **Sensitive Receptors and Noise Barriers.** Locate all stationary noise-generating construction equipment as far as practical from noise-sensitive receptors or provide baffled housing or sound aprons to equipment when sensitive receptors adjoin or are near the construction Project area. Construct noise barriers (temporary enclosures or stockpiles of excavated material) will be located between noisy activities and noise-sensitive receptors or around activities with high noise levels or noisy equipment (e.g. shields can be used around pile drivers). |
| Noise | AMM-NOI-2 | **Public Outreach.** Public outreach would be required before project construction and throughout the project construction to update residents, businesses and others with upcoming activities and time frame of project. Public outreach could entail sending notices to nearby residents, notifying the city, and posting a notice on the project site. |

# Appendix C List of Abbreviations

| Acronym | Description |
|---|---|
| ADA | Americans with Disabilities Act |
| ADT | average daily traffic |
| AMM | avoidance and minimization measure |
| APE | area of potential effects |
| ASR | Archaeological Survey Report |
| BAAQMD | Bay Area Air Quality Management District |
| BMP | best management practice |
| CALFIRE | California Department of Forestry and Fire Protection |
| Caltrans | California Department of Transportation |
| CEQA | California Environmental Quality Act |
| CFR | Code of Federal Regulations |
| CIDH | cast in drilled hole |
| CNDDB | California Natural Diversity Database |
| CNPS | California Native Plant Society |
| $CO_2$ | carbon dioxide |
| CTP | Comprehensive Transportation Plan |
| EIR | environmental impact report |
| EPA | U.S. Environmental Protection Agency |
| FEMA | Federal Emergency Management Agency |

| Acronym | Description |
|---|---|
| FHWA | Federal Highway Administration |
| GHG | greenhouse gas |
| HPSR | Historic Property Survey Report |
| Intersection | SR 12/Boas Drive/South Boas Drive intersection |
| IS/ND | Initial Study with Negative Declaration |
| mph | miles per hour |
| OCRS | Office of Cultural Resource Studies |
| PM | post mile |
| $PM_{2.5}$ | particulate matter 2.5 microns or less |
| $PM_{10}$ | particulate matter 10 microns or less |
| PRC | Public Resources Code |
| Project | State Route 12/ Boas Drive Intersection Safety Project |
| PS&E | Plans Specifications and Estimate |
| RCEM | Road Construction Emissions Model |
| RCNM | Road Construction Noise Model |
| ROW | right of way |
| SCTA | Sonoma County Transportation Authority |
| SFBAAB | San Francisco Bay Area Air Basin |
| SHOPP | State Highway Operation and Protection Program |
| SMART | Sonoma Marin Area Rail Transit |
| SR | State Route |

| Acronym | Description |
|---|---|
| THPO | Tribal Historic Preservation Officer |
| TMP | Traffic Management Plan |
| USFWS | U.S. Fish and Wildlife Service |
| USGS | U.S. Geological Survey |
| VIA | Visual Impact Assessment |
| WPCP | Water Pollution Control Plan |

# Appendix D List of Technical Studies and References


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# **Appendix E** Responses to Comments

# Responses to Comments: Agencies

No comments were received from federal, state, or local agencies.

# Responses to Comments: Individuals

Comments were received from 12 individuals via email. The table lists the commenter and date of email receipt. Responses to these comments follows.

| Commenter | Date Received |
|---|---|
| Tatiana Murphy | April 28, 2022 |
| Joan McCue | April 29, 2022 |
| Nathan H. | April 29, 2022 |
| Brien Gooler | April 30, 2022 |
| Scott Kensinger | May 1, 2022 |
| David Cook | May 2, 2022 |
| Bobbi-Jo Nelson | May 6, 2022 |
| Linda and Stephen Olson | May 8, 2022 |
| Robert Bloom | May 8, 2022 |
| Michael Murphy | May 10, 2022 |
| Charlotte Laverty | May 10, 2022 |
| George and Connie Wadlow | May 20, 2022 |

## Comment IND-1, page 1 of 1

**From:** Tatiana A. Murphy [redacted]
**Sent:** Thursday, April 28, 2022 7:33 PM
**To:** sr12boas@DOT <sr12boas@dot.ca.gov>
**Subject:** The SR 12/Boas Drive Project

**EXTERNAL EMAIL.** Links/attachments may not be safe.

Good day,

1 My name is Tatiana Murphy, I have been a resident of the Royal Gorge Street in Santa Rosa CA 95409 for more than 6 years. This note declares that I support the project "State Route 12 Boas Drive Intersection Safety Project" and have no objections to the completion of the project. I think it will be beneficial to all residents, I first hand witnessed multiple fatal accidents in the intersection during the time I've resided here.

In fact, my mother who came to visit from overseas was very close to having an accident at the intersection, she is a senior citizen and that's because of the lack of visibility, signals and the excess speed of the upcoming traffic.

2 According to the document, The Project would install traffic signals and construct pedestrian facilities at the SR 12/Boas Drive/South Boas Drive intersection. I suggest including the consideration of adding a traffic light in the intersection.

I'm interested in assisting a meeting in case one will be held. Here's my contact information:

[redacted]

Thank you.

## Response to Comment IND-1

### Response to Comment 1:

Caltrans notes the commenter's support of the Project.

### Response to Comment 2:

The Project is proposing traffic lights at the intersection and installation of crosswalks and pedestrian safety features. The term "signalization" means installation of traffic lights.

A public meeting was not held; no other community members requested a meeting.

# Comment IND-2, page 1 of 1

**From:** Nathan [redacted]
**Sent:** Friday, April 29, 2022 8:04 AM
**To:** sr12boas@DOT <sr12boas@dot.ca.gov>
**Subject:** New Traffic Signal

**EXTERNAL EMAIL.** Links/attachments may not be safe.

Good Morning,

1 I wanted to submit my comment after receiving notification of the new traffic light installation at Highway 12 and South Boas Dr in Santa Rosa, CA. I enthusiastically support this plan and greatly appreciate the safety it will bring with it. I have been a resident of Oak Creek Apartments for the past 4 years and have seen a multitude of accidents and incidents at that intersection, due high traffic, impatience, and a lack of safe places to cross Highway 12.

Thank you again in advance for the safety this stoplight will bring to both drivers and pedestrians.

Sincerely,

Nathan H
South Boas Dr Resident

## Response to Comment IND-2

### Response to Comment 1:

Caltrans notes the commenter's support of the Project.

# Comment IND-3, page 1 of 1

From: Joan McCue [redacted]
Sent: Friday, April 29, 2022 5:03 PM
To: sr12boas@DOT <sr12boas@dot.ca.gov>
Subject: Signalization Attn: Arnica LMacCarthy

EXTERNAL EMAIL. Links/attachments may not be safe.

Dear Ms MacCarthy,

Please continue with and complete this project. We live on Royal Gorge St which parallels South Boas Drive. This intersection is very dangerous for drivers merging on to Highway 12 and for pedestrians trying to cross. Both sides of Highway 12 has a bus stop bench. People using public transit must walk some distance to cross with a light, or they run across double lanes.

1 We often hear the screeching brakes of the many near misses. Sometimes after the screech, we also hear the BOOM of the cars colliding. We also see the flowers left by the young widow whose husband was killed when his motorcycle collided with an automobile at this intersection.

I once saw her with her young son changing the flower arrangement on South Boas Dr. The young widow no longer has a husband; the boy no longer has a father. They and the many others who must merge on highway 12, those who race across four lanes to catch a bus, and many, many others need the safety of a signal at this intersection.

Sincerely,
Joan McCue
Sent from my iPad

# Response to Comment IND-3

## Response to Comment 1:

Caltrans notes the commenter's support of the Project.

# Comment IND-4, page 1 of 1

**From:** Brien Gooler [redacted]
**Sent:** Saturday, April 30, 2022 7:34 PM
**To:** sr12boas@DOT <sr12boas@dot.ca.gov>
**Subject:** State Route 12 Boas Drive Intersection Safety Project

**EXTERNAL EMAIL.** Links/attachments may not be safe.

Amica MacCarthy,

Do not install a new stop light. The current intersection is dangerous, but a signal light will not prevent poor choices from being made.

I live at 5140 Lisa Way in Santa Rosa. I'm 44 years old and I've lived in Santa Rosa my entire life. I drive through the intersection of HWY 12 and Boas at least two times per day. I agree that something needs to be done to improve driver safety. The problem is unsafe driving. The solution is not an additional stop light. Drivers in Rincon Valley are already dangerously and brazenly running red lights. I see it at least twice a month (or more...increasingly so when we had PSPS events) in various crossing at HWY 12 and Calistoga Road, Calistoga Road and Dupont Drive, and every stop light intersection along Montecito Blvd between Calistoga Road and Brush Creek Drive. I sincerely believe that the best solution would be to close the intersection off to cross traffic for Boas Drive by connecting the cement islands that divide East and West traffic on HWY 12. Then, make U-Turns legal at Calistoga Road (perhaps before the development of retail space on the North West corner) and either force drivers to perform a legal U-Turn at Calistoga or Middle Rincon, or increase exit and entry options for residents living on the South side of HWY 12 by connecting Santa Rosa Creek Drive to Calistoga Road via Firestone Place. As for pedestrians, two crossing signals currently exist at Jack London Drive and Calistoga Road offering ample choice for residents walking between home and local shops. Additional pedestrian crossing does not seem to be the safety priority.

1
2
3

Respectfully,

Brien Gooler
[redacted]

## Response to Comment IND-4

### Response to Comment 1:

Caltrans recognizes the commenter's suggestion to close off the intersection to cross traffic from Boas Drive and South Boas Drive by connecting the cement islands between east and westbound State Route (SR) 12 and making U-turns legal at Middle Rincon and Calistoga Road, as an alternative to the Project. This approach would not meet the Project purpose of improving safety for pedestrians and transit users needing to access the bus stops at the intersection. This approach would also change traffic patterns in the area, increasing travel times and necessitating additional turning movements.

When considering whether to install a new traffic signal on a state highway, Caltrans applies criteria from the California Manual on Uniform Traffic Control Devices (CA MUTCD) (California State Transportation Agency and Caltrans 2021), which provides uniform standards and specifications for all official traffic control devices in California. Before recommending the traffic signal, Caltrans completed a careful analysis of traffic operations, pedestrian and bicyclist needs, physical intersection characteristics, crash history and safety, and other factors, coupled with engineering judgment, to determine if the intersection meets the minimum conditions under which installing traffic control signals are justified. The analysis determined that installing a traffic control signal would improve the overall safety and operation of the intersection and would not seriously disrupt existing traffic flow. Caltrans determined that a traffic signal was the most appropriate solution to meet the purpose and need.

### Response to Comment 2:

The commenter recommends connecting Santa Rosa Creek Drive to Calistoga Road via Firestone Place as an alternative to the Project. While making this connection could add exit and entry options for South Boas Drive users, it would not meet the Project's purpose to improve pedestrian safety at the SR 12/Boas Drive/South Boas Drive intersection. Also, the City of Santa Rosa would have to approve a connection between these streets, which would require private property acquisitions. This is beyond the scope of the proposed Project.

### Response to Comment 3:

The commenter suggests that existing pedestrian crossing signals at Jack London Drive and Calistoga Road offer ample choice for residents walking between home and local shops. Located 0.19 mile west of Boas Drive, the SR 12/Jack London Drive intersection has a crosswalk with pedestrian warning signal. The SR 12/Calistoga Road signalized intersection with crosswalks is 0.25 mile east of the Boas Drive intersection. For bus stop users, use of the Jack London Drive or Calistoga Road crosswalks would require a 0.38- or 0.50-mile detour to cross from one side of SR 12 to the other at Boas Drive. As noted in the FHWA *Pedestrian Safety Guide for Transit Agencies* (FHWA 2008), "pedestrians typically take the most direct line possible to minimize the distance and time they must walk to reach their destination. Therefore, safe roadway crossing facilities should be located at the most direct crossing locations." Providing safe highway crossings for transit users is a Caltrans priority and a purpose of the Project.

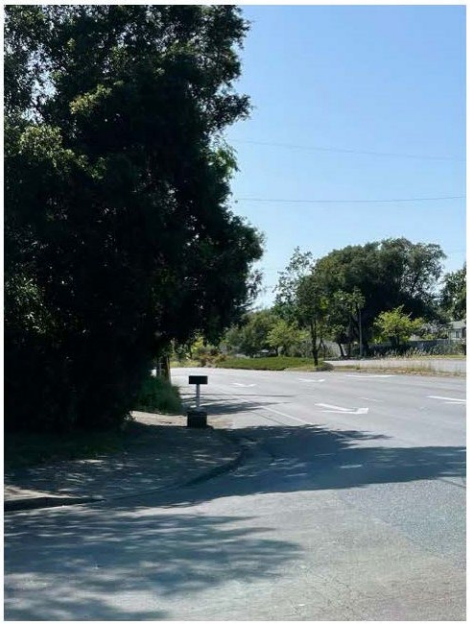
# Comment IND-5, page 1 of 1

**From:** Scott Kensinger [redacted]
**Sent:** Sunday, May 1, 2022 4:54 PM
**To:** sr12boas@DOT <sr12boas@dot.ca.gov>
**Subject:** SR 12 Boas Drive Intersection Safety Project

**EXTERNAL EMAIL.** Links/attachments may not be safe.

Arnica MacCarthy,

1 I support the addition of a traffic signal at the intersection of SR12 and Boas Drive. Turning right, and especially left, on to SR12 from South Boas Drive is dangerous because of the curvature of the road which limits the visibility of eastbound traffic. There is a utility pole and several trees which further obstruct the view. Please see my attached photos. There is a white cross at the intersection indicating someone died there, although I don't know who or the circumstances. I have personally witnessed two collisions during the past 18 months I have lived on South Boas Drive.




Scott Kensinger
206 South Boas Drive
Santa Rosa, CA 95409

[redacted]

## Response to Comment IND-5

### Response to Comment 1:

Caltrans notes the commenter's support of the Project. The Project will improve sight distance from South Boas Drive and safety for turning movements.

# Comment IND-6, page 1 of 1

**From:** david cook [redacted]
**Sent:** Monday, May 2, 2022 10:05 PM
**To:** sr12boas@DOT <sr12boas@dot.ca.gov>
**Subject:** comments

EXTERNAL EMAIL. Links/attachments may not be safe.

To whom it may concern,

While I am glad there is a study and a plan to improve the safety of the 12/Boas intersection. In my humble opinion, a "signalization" of this small intersection would cause an unnecessary additional traffic load on the already overburdened Hwy 12 route. I see that two options were considered (signalization and a roundabout), I'd like to propose a third, less invasive alternative. But first, a brief description of the heart of the traffic problem:

- The primary hazard at the 12/Boas intersection is from traffic attempting to make left-hand turns onto 12 from either north or south Boas. Because of the crest of the hill, speed of traffic, and the overgrown vegetation preventing good visibility, left-hand turns are exceedingly difficult and dangerous.

1

I'd like to propose the following as a potential less invasive traffic safety alternative:

1. Design the intersection in a way so that only right-hand turns are available as an option for traffic coming from N & S Boas. If traffic wishes to go the other way, they would turn right and make a u-turn at the next intersection (Middle Rincon or Calistoga)
2. Continue to make left turns off of 12 onto Boas available
3. Clear any center-lane vegetation at the crest of both ends of hwy 12 at the Boas intersection.

This would provide an immediate improvement in traffic safety without having to perform the larger, more expensive and overkill signalization of the intersection. While I don't have a traffic engineering background, I do live on Boas and drive on this section of the road daily.

Happy to discuss this further, thank you for listening! I also still wish there was a farmers lane/12 bypass to alleviate traffic through town, if there are any plans for something like that I would love to hear them and vote yes for them!

2

David Cook
[redacted]

## Response to Comment IND-6

### Response to Comment 1:

The commenter suggests designing the intersection to allow right-turn-only from Boas Drive and South Boas Drive onto SR 12, to allow left turns for traffic exiting SR 12 onto Boas Drive and South Boas Drive, and to clear center-lane vegetation to improve sight distance. The commenter's proposal would not meet the Project purpose of improving pedestrian and traffic safety. Under existing conditions, the approach from South Boas Drive to SR 12, looking west, does not meet sight distance standards. Center-lane vegetation is not within this line-of-sight so would not resolve this non-standard sight distance. The Project proposes to clear vegetation on the southwest corner of the intersection and construct a retaining wall to improve sight distance.

A curve correction on SR 12 would improve sight distance at this location; however, this option was considered but rejected because the roadway profile grade and horizontal curve correction would be a more complex and costly alternative and would have adverse environmental impacts from right-of-way acquisition, housing relocations, vegetation clearing, and construction-related disturbances. This option would require improvements on SR 12 well outside the current Project limits and exceeds the purpose and need for this safety improvement project.

### Response to Comment 2:

Caltrans notes the commenter's support for a Farmers Lane/SR 12 bypass to alleviate traffic through town.

# Comment IND-7, page 1 of 1

**From:** Bobbi-Jo Nelson
**To:** sr12boas@DOT
**Subject:** Intersection
**Date:** Friday, May 6, 2022 4:55:26 PM



1 Please do not put a signal at Hwy 12 at Boas Dr. There are signals at Middle Rincon and Calistoga Rd with u-turn options for those who struggle with left turns. The traffic stopping and going adds to the noise and pollution. This will have a negative impact on the citizens living in the residential neighborhood of Boas Dr.

## Response to Comment IND-7

### Response to Comment 1:

The commenter suggests that U-turn options are available at Middle Rincon and Calistoga Road as an alternative to making left turns at the SR 12/Boas Drive/South Boas Drive intersection. This approach would not meet the Project purpose of improving safety for pedestrians and transit users needing to access the bus stops at the intersection. This approach would also change traffic patterns in the area, increasing travel times and necessitating additional turning movements.

When considering whether to install a new traffic signal on a state highway, Caltrans applies criteria from the CA MUTCD (California State Transportation Agency and Caltrans 2021), which provides uniform standards and specifications for all official traffic control devices in California. Before recommending the traffic signal, Caltrans completed a careful analysis of traffic operations, pedestrian and bicyclist needs, physical intersection characteristics, crash history and safety, and other factors, coupled with engineering judgment, to determine if the intersection meets the minimum conditions under which installing traffic control signals are justified. The analysis determined that installing a traffic control signal would improve the overall safety and operation of the intersection and would not seriously disrupt existing traffic flow. Caltrans determined that a traffic signal was the most appropriate solution to meet the purpose and need.

Caltrans notes the commenter's concerns that signalization of this intersection will cause air and noise pollution as a result of the traffic stopping and starting at the proposed intersection. According to the Surface Transportation Policy Project, motor vehicles are the largest source of urban air pollution, and the EPA estimates that vehicles generate three billion pounds of air pollutants annually (FHWA 2013). The BAAQMD notes that localized carbon monoxide (CO) concentrations, known as hotspots, are often associated with heavy traffic congestion, which most frequently occur at signalized intersections of high-volume roadways (BAAQMD 2017).

The proposed Project would have minor, incremental impacts on air quality, including increases in particulate matter and CO, from vehicles accelerating and decelerating at the intersection. To minimize noise and air pollution impacts, the proposed traffic light will be integrated into the SR 12 traffic control system, allowing synchronized traffic signals. Per the FHWA "Signalized Intersections Informational Guide" (FHWA 2013), Section 8.3, Signal Coordination, states that the primary objective of signal coordination is to smooth the flow of traffic to improve mobility, safety, and fuel consumption. Coordination can also improve travel time reliability; reduce travel time, stops and delays; and improve air quality. Section 8.3.7, Socio-economic Impacts, further states that signal coordination reduces fuel consumption, noise, and air pollution by reducing the number of stops and delays. When traffic signals are retimed and maintained properly, Caltrans would see a reduction in harmful emissions (CO, nitrogen oxides, and volatile organic compounds) of up to 22 percent compared to signals that are not synchronized. The BAAQMD also recommends use of synchronized traffic signals to improve traffic flow and minimize traffic congestion to mitigate for local CO impacts (BAAQMD 2017).

# Comment IND-8, page 1 of 1

**From:** Linda & Stephen Olson [redacted]
**Sent:** Sunday, May 8, 2022 11:53 AM
**To:** sr12boas@DOT <sr12boas@dot.ca.gov>
**Subject:** traffic signal at Boas and rt 12 in Santa Rosa

EXTERNAL EMAIL. Links/attachments may not be safe.

I was so pleased to hear about the prospect of installing a light/signal at the intersection of Boas and route 12 in Santa Rosa. I live on Royal Gorge Street and my only possible entry to route 12 is at this location. I do this several times a day, most often heading towards downtown Santa Rosa, which means making a left hand turn onto route 12 which is so dangerous and stressful. The visibility in that direction is poor as well, due to a curve in the road. 1

When we bought our house 18 years ago, I told my husband that the main negative to the purchase was the difficulty of getting out onto busy route 12.

With much appreciation,

Linda Olson
[redacted]

## Response to Comment IND-8

### Response to Comment 1:

Caltrans notes the commenter's support of the Project. The Project will improve sight distance from South Boas Drive and safety for overall turning movements.

# Comment IND-9, page 1 of 1

**From:** Robert Bloom
**To:** sr12boas@DOT
**Subject:** SR12
**Date:** Sunday, May 8, 2022 11:03:44 AM

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EXTERNAL EMAIL. Links/attachments may not be safe.

1 This intersection desperately needs whatever will reduce the risks to vehicles and pedestrians. It is dangerous.
Thank you,
Robert Bloom

# Response to Comment IND-9

## Response to Comment 1:

Caltrans notes the commenter's support of the Project.

# Comment IND-10, page 1 of 1

**From:** MICHAEL MURPHY [redacted]
**Sent:** Tuesday, May 10, 2022 11:02 AM
**To:** sr12boas@DOT <sr12boas@dot.ca.gov>
**Subject:** Hwy 12 S Boas Stop Light

EXTERNAL EMAIL. Links/attachments may not be safe.

I'm a resident at [redacted] S Boas Drive, in Santa Rosa. I received a postcard about a proposed stoplight at the intersection of Hwy 12 and South and North Boas Drive. I'm all in favor of this, as this is one of the worst intersections in Sonoma County.

I have lived here for over 4 years and there have been numerous car accidents. Before I moved in, a bicyclist was killed at the intersection. In one car accident a car trying to cross from N Boas drive to go southbound on Hwy 12, hit a car in the intersection, went through a fence and then a carport and hit a mailbox in the complex. It was very fortunate that no one was killed. In another accident a car hit another car and ran into the telephone pole.I have witnessed school children trying to cross the street and almost get hit. There is a bad blind spot on southbound Hwy 12. It makes it very hard to go left over the highway to go northbound. The speeds on Hwy 12 are an average of 70 miles an hour plus. It is very dangerous and there should have been a stoplight installed years ago. There needs to be a crosswalk installed as many people try to cross. The nearest cross walk is a block away. 1

I'm in full favor of the stoplight and I look forward to Caltrans approving it.

Sincerely,
Michael S. Murphy

## Response to Comment IND-10

### Response to Comment 1:

Caltrans notes the commenter's support of the Project. Crosswalks will be installed on three of the four legs of this intersection as part of this Project.

# Comment IND-11, page 1 of 1

**From:** Charlotte Laverty [redacted]
**Sent:** Tuesday, May 10, 2022 8:33 PM
**To:** sr12boas@DOT <sr12boas@dot.ca.gov>
**Subject:** Traffic Signal at Boas Drive and Highway 12 Santa Rosa, CA

EXTERNAL EMAIL. Links/attachments may not be safe.

1 I am very opposed to the prospect of another traffic light on busy Hwy 12. I have resided in this eastern area of Santa Rosa for many years and I drive on Boas Drive daily. The most recent stop light, installed at Acacia Lane and Hwy 12, backs up significant traffic to accommodate one car making a left turn - or the car merges making a right turn but the signal is activated leaving cars idling both east and west. A signal at Boas Drive will be another Acacia. If a motorist is uncomfortable with turning left, this area has lights at Calistoga Rd and Middle Rincon Rd that offer drivers easy U turns. I have found that 90% of the drivers driving south on Boas Drive turn right onto Hwy 12. Most of these drivers, myself included, drive to Calistoga Rd or Middle Rincon to turn left. I trust this study will look at the impact of hundreds of cars spewing exhaust as they stop at another signal on this highway. Also note this area has been impacted by wildfires and evacuations have been stalled due to the many traffic signals that already exist in this area.
Thank you for reading my response and for offering this opportunity to express my views.
Charlotte Laverty

## Response to Comment IND-11

### Response to Comment 11:

Caltrans notes the commenter's concerns about signalization of this intersection. The commenter suggests that U-turn options are available at Middle Rincon and Calistoga Road as an alternative to making left turns at the SR 12/Boas Drive/South Boas Drive intersection. This approach would not meet the Project purpose of improving pedestrian and traffic safety at this intersection. Because there is currently a sign prohibiting U-turns at the Calistoga Road intersection, this approach would also change traffic patterns in the area, slightly increase travel times and necessitate additional turning movements for those drivers.

When considering whether to install a new traffic signal on a state highway, Caltrans applies criteria from the CA MUTCD (California State Transportation Agency and Caltrans 2021), which provides uniform standards and specifications for all official traffic control devices in California. Before recommending the traffic signal, Caltrans completed a careful analysis of traffic operations, pedestrian and bicyclist needs, physical intersection characteristics, crash history and safety, and other factors, coupled with engineering judgment, to determine if the intersection meets the minimum conditions under which installing traffic control signals are justified. The analysis determined that installing a traffic control signal would improve the overall safety and operation of the intersection and would not seriously disrupt existing traffic flow. Caltrans determined that a traffic signal was the most appropriate solution to meet the purpose and need.

Caltrans notes the commenter's concerns that signalization of this intersection will cause air pollution as a result of the traffic stopping and starting. To minimize localized air pollution impacts, the proposed traffic light will be integrated into the SR 12 traffic control system, allowing synchronized traffic signals, which can improve travel time reliability; reduce travel time, stops, and delays; and improve air quality. According to the Surface Transportation Policy Project, motor vehicles are the largest source of urban air pollution, and the EPA estimates that vehicles generate three billion pounds of air pollutants annually (FHWA 2013). The BAAQMD notes that localized carbon monoxide concentrations, known as hotspots, are often associated with heavy traffic congestion, which most frequently occur at signalized intersections of high-volume roadways (BAAQMD 2017).

The proposed Project would have minor, incremental impacts on air quality, including increases in particulate matter and CO, from vehicles accelerating and decelerating at the intersection. To minimize noise and air pollution impacts, the proposed traffic light will be integrated into the SR 12 traffic control system, allowing synchronized traffic signals. Per the FHWA "Signalized Intersections Informational Guide" (FHWA 2013), Section 8.3, Signal Coordination, states that the primary objective of signal coordination is to smooth the flow of traffic to improve mobility, safety, and fuel consumption. Coordination can also improve travel time reliability; reduce travel time, stops and delays; and improve air quality. Section 8.3.7, Socio-economic Impacts, further states that signal coordination reduces fuel consumption, noise, and air pollution by reducing the number of stops and delays. When traffic signals are retimed and maintained properly, Caltrans

would see a reduction in harmful emissions (CO, nitrogen oxides, and volatile organic compounds) of up to 22 percent compared to signals that are not synchronized. The BAAQMD also recommends use of synchronized traffic signals to improve traffic flow and minimize traffic congestion to mitigate for local CO impacts (BAAQMD 2017).

The commenter also states that a new traffic signal would exacerbate delays during emergency evacuations. As noted by the City of Santa Rosa on their Emergency and Preparedness information webpage (City of Santa Rosa 2022), until the October 2017 wildfires, Santa Rosa residents had not experienced many evacuations. The 2017 wildfires moved quickly with little advance warning time into the City limits and caused the evacuation of an estimated 100,000 residents countywide in a matter of hours, causing traffic backlog. The City notes that there are systems in place now that were not in place in October 2017, that help provide earlier advance warning of an outside threat to our community as well as coordinated evacuation protocols. Additionally, Caltrans released a memorandum titled Evacuation Route Design Guidance – Design Information Bulletin 93 in December 2020, which recognizes the need for the state highway system to serve in an emergency capacity (Caltrans 2020). Design recommendations for evacuation routes have been considered in the development of the Project. In case of emergency evacuation, Caltrans will assist in implementing the local emergency implementation plan, in this case the City of Santa Rosa's Emergency Operations Plan, and in general, California Highway Patrol takes over traffic control to direct traffic through signalized intersections.

A Traffic Management Plan (TMP) will be developed and implemented during construction, as indicated in Chapter 3 on page 3-25 of the IS/ND, with coordination from the county, city, and local resident input. The TMP will identify traffic delays and alternative routes during construction. Emergency response times are not anticipated to change during construction because the TMP will provide priority to emergency vehicles during traffic control. The TMP will provide instructions for response or evacuation in the event of an emergency. In addition, this Project would not conflict with the City of Santa Rosa Emergency Operation Plan (City of Santa Rosa 2017) any other emergency response or evacuation plan.

## Comment IND-12, page 1 of 1

**From:** Connie Wadlow [redacted]
**Sent:** Friday, May 20, 2022 6:02 PM
**To:** sr12boas@DOT <sr12boas@dot.ca.gov>
**Subject:** Signal at State Route 12/Boas Drive/South Boas Drive in Santa Rosa, Sonoma Co

EXTERNAL EMAIL. Links/attachments may not be safe.

1 We are very pleased that a signal is planned for our intersection. Very much needed since it is quite difficult to turn onto Hwy 12 in either direction. Looking forward to the work beginning.

Thank you,

George and Connie Wadlow
[redacted]

# Response to Comment IND-12

## Response to Comment 1:

Caltrans notes the commenter's support of the Project.