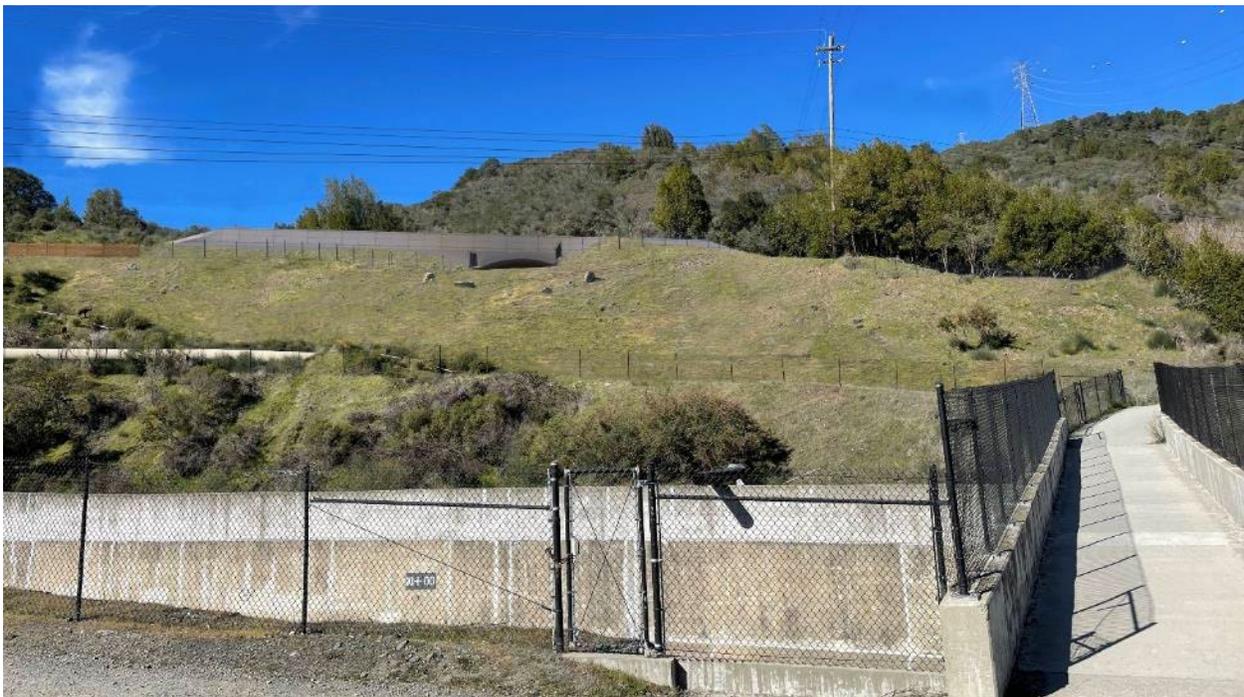


Highway 17 Wildlife and Regional Trail Crossings and Trail Connections Project

SANTA CLARA COUNTY, CALIFORNIA
DISTRICT 04-SCL-17 (PM 4.1/5.8)
EA 04-2K580/EFIS 0416000453

Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment



Prepared by
**the State of California, Department of Transportation
and the Midpeninsula Regional Open Space District**

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated May 27, 2022, and executed by FHWA and Caltrans.



February 2024

General Information about This Document

What's in this document:

The California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration (FHWA), has prepared this Initial Study/Environmental Assessment (IS/EA), which examines the potential environmental impacts of the alternatives being considered for the proposed project located in Los Gatos and unincorporated Santa Clara County, California. Caltrans is the lead agency under the National Environmental Policy Act (NEPA). The Midpeninsula Regional Open Space District (Midpen) is the lead agency under the California Environmental Quality Act (CEQA). The Santa Clara Valley Transportation Authority (VTA) is Midpen's project delivery partner and will implement the project during detailed design and construction.

The document tells you why the project is being proposed, what alternatives have been considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

What you should do:

- Please read this Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment for the Highway 17 Wildlife and Regional Trail Crossings and Trail Connections Project (document).
- The document may be downloaded at the following website:
<https://dot.ca.gov/caltrans-near-me/district-4/d4-popular-links/d4-environmental-docs>.
- Printed copies of this document and the related technical studies are available for review at Midpeninsula Regional Open Space District Administrative Office, 5050 El Camino Real, Los Altos, CA 94022, from 8:30 AM to 5:00 PM, Monday through Friday (except holidays). The documents are also available for review at Los Gatos Library, 100 Villa Avenue, Los Gatos, CA 95030.
- Attend the public meeting. A virtual public meeting will be held via Zoom on Thursday, March 7, 2024, at 6:00 PM for community members to provide public comments on the document. Visit openspace.org/hwy17 for instructions on attending or contact Jared Hart, Senior Planner, Midpeninsula Regional Open Space District, 5050 El Camino Real, Los Altos, CA 94022; (650) 625-6535 (Voice); or Hwy17@openspace.org (e-mail).
- We'd like to hear what you think. If you have any comments about the proposed project or document, please attend the public meeting and/or send your written comments via postal mail or email to Midpen by the deadline.
- Send comments via postal mail to:
Jared Hart
Senior Planner

Midpeninsula Regional Open Space District
5050 El Camino Real, Los Altos, CA 94022

- Send comments via email to: Hwy17@openspace.org.
- Be sure to send comments by the deadline: Friday, March 22, 2024.

What happens next:

After comments are received from the public and reviewing agencies, Caltrans, as assigned by the FHWA, may: (1) give environmental approval to the proposed project, (2) do additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is obtained, Caltrans, Midpen, and/or VTA could design and construct all or part of the project.

Alternative Formats:

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 Midpen, Attn: Jared Hart, Senior Planner, Midpeninsula Regional Open Space District, 5050 El Camino Real, Los Altos, CA 94022; (650) 625-6535 (Voice), or use the California Relay Service 1 (800) 735-2929 (TTY to Voice), 1 (800) 735-2922 (Voice to TTY), 1 (800) 855-3000 (Spanish TTY to Voice and Voice to TTY), 1-800-854-7784 (Spanish and English Speech-to-Speech) or 711.

Construct one wildlife undercrossing of State Route 17, one recreational trail overcrossing, and other trail connections in the Town of Los Gatos and unincorporated Santa Clara County (post mile 4.1 to post mile 5.8)

Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment

Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 USC 4332(2)(C)

THE STATE OF CALIFORNIA
Department of Transportation
and
Midpeninsula Regional Open Space District

Participating Agencies: United States Army Corps of Engineers and United States Fish and Wildlife Service

Responsible Agencies: California Department of Fish and Wildlife, California Transportation Commission, and San Francisco Bay Regional Water Quality Control Board



Dina A. El-Tawansy
District Director
California Department of Transportation
NEPA Lead Agency

1/31/2024
Date



Ana María Ruiz
General Manager
Midpeninsula Regional Open Space District
CEQA Lead Agency

1/8/2024
Date

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Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The Midpeninsula Regional Open Space District (Midpen), in cooperation with the California Department of Transportation (Caltrans) and the Santa Clara Valley Transportation Authority (VTA), proposes to construct a wildlife undercrossing and a separate regional multi-use trail overcrossing of State Route (SR) 17 near Lexington Reservoir, south of the Town of Los Gatos in Santa Clara County. The Highway 17 Wildlife and Regional Trail Crossings and Trail Connections Project (project) would include new trails adjacent to the overcrossing and in other locations throughout the project area. The project area is along SR 17 from the Bear Creek Road overcrossing in unincorporated Santa Clara County (post mile [PM] 4.1) to 0.7 mile south of the Main Street overcrossing in Los Gatos (PM 5.8).

DRAFT Determination

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is Midpen's intent to adopt an MND for this project. This does not mean that Midpen's decision regarding the project is final. This MND is subject to change based on comments received by interested agencies and the public.

Midpen has prepared an Initial Study for this project and, pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

- The proposed project would have no effect on agriculture and forestry resources, mineral resources, and public services.
- In addition, the proposed project would have less than significant effects on aesthetics, air quality, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, recreation, transportation, Tribal Cultural Resources, utilities and service systems, and wildfire.

- With implementation of mitigation measures MM-BIO-01 (Mitigation for Wetlands and Waters) and MM-BIO-02 (Mitigation for California Red-Legged Frog), the proposed project would have less than significant effects to biological resources.

Ana María Ruiz
General Manager
Midpeninsula Regional Open Space District

Date

Summary

The Midpeninsula Regional Open Space District (Midpen), in cooperation with the California Department of Transportation (Caltrans) and the Santa Clara Valley Transportation Authority (VTA), proposes to construct a wildlife undercrossing and a separate regional multi-use trail overcrossing of State Route (SR) 17 near Lexington Reservoir, south of the Town of Los Gatos in Santa Clara County. The Highway 17 Wildlife and Regional Trail Crossings and Trail Connections Project (project) would include new trails adjacent to the overcrossing and in other locations throughout the project area. The project area is along SR 17 from the Bear Creek Road overcrossing in unincorporated Santa Clara County (post mile [PM] 4.1) to 0.7 mile south of the Main Street overcrossing in Los Gatos (PM 5.8).

Caltrans owns and operates SR 17. Caltrans, as assigned by the Federal Highway Administration (FHWA), is the lead agency under the National Environmental Policy Act (NEPA). Midpen is the lead agency under the California Environmental Quality Act (CEQA) and the project sponsor. VTA is Midpen's project delivery partner and will implement the project during detailed design and construction.

Project Location

SR 17 is a major north-south transportation corridor connecting Interstate 280 in San Jose with SR 1 in Santa Cruz. The project area is south of the Town of Los Gatos. In the project area, SR 17 crosses over Lexington Reservoir on a raised embankment. The project includes regional trail connections in Lexington Reservoir County Park and El Sereno, St. Joseph's Hill, and Sierra Azul Open Space Preserves.

Purpose and Need

The purpose of the project is to improve wildlife passage, habitat connectivity, and regional trail connections in the vicinity of SR 17 in the project area.

The project is needed to address wildlife mortality and motorist safety from animal-vehicle collisions on SR 17 in the project area, to maintain healthy wildlife populations by improving habitat connectivity, and to provide more efficient non-automotive recreational access across SR 17, including to regional multi-use trails.

Proposed Project

The proposed project includes the following primary components:

1. A wildlife undercrossing of SR 17 with wildlife directional fencing, wildlife escape ramps, electrified mats, and sound walls.
2. Two alternatives for a regional trail overcrossing, only one of which would be constructed. Each overcrossing would consist of a bridge over SR 17 and trail

connections to existing or proposed trails that would be partially within the Caltrans right-of-way (ROW).

3. New or improved existing trail segments that are outside of the Caltrans ROW.

The wildlife undercrossing would provide mountain lions, deer, and other animals with connectivity between, and access to, thousands of acres of habitat that SR 17 divides. The project would include wildlife fencing to direct animals to the undercrossing and deter them from entering the highway. One-way wildlife escape ramps constructed along the fencing would allow animals that unexpectedly enter the highway the opportunity to escape. Together, the undercrossing, fencing, and escape ramps would help to channel wildlife away from the roadway of SR 17 and reduce the potential for conflicts with motorists.

The multi-use trail overcrossing would provide efficient non-automotive recreation access across a 2.2-mile segment of SR 17 where none exists. The overcrossing and proposed additional trail segments would connect multiple parks and preserves and close gaps in local, regional, and national trail systems.

The alternatives are the Build Alternative with Southern Overcrossing, the Build Alternative with Northern Overcrossing, and the No Build Alternative. The project will ultimately construct one wildlife undercrossing with directional fencing as well as one regional trail overcrossing with connecting trails that best satisfy the project's purpose and need while avoiding or minimizing environmental impacts. Additional details are provided in Section 1.4.

This project contains a number of standardized measures, called project features, that are employed on most, if not all, Caltrans projects in accordance with standard specifications, state and federal laws, and anticipated standard environmental permit conditions. Project features were not developed in response to any specific environmental impact resulting from the proposed project. Standardized project measures for Midpen projects are included where applicable. These features are discussed in Section 1.4.6.

Project Impacts

Table S-1 summarizes the effects of the build alternatives in comparison with the No Build Alternative. The proposed avoidance and/or minimization measures (AMMs) and mitigation measures (MMs) to reduce the effects of the build alternatives are also presented. A complete description of potential effects and recommended measures is provided in Chapters 2 and 3.

Table S-1: Summary of Potential Impacts from Alternatives

Affected Resource	Build Alternative with Southern Overcrossing	Build Alternative with Northern Overcrossing	No Build Alternative	Avoidance, Minimization, and/or Mitigation Measures
Existing and Future Land Use	No impact.	No impact.	No impact.	None.
Consistency with State, Regional, and Local Plans and Programs	Less Than Significant Impact. This alternative would be generally consistent with applicable plans and programs.	Less Than Significant Impact. Same as Build Alternative with Southern Overcrossing.	The No Build Alternative would not directly conflict with applicable plans and programs, but it would not meet the goals of several plans, including for wildlife connectivity and trail system improvements.	None.
Coastal Zone	No impact.	No impact.	No impact.	None.
Wild and Scenic Rivers	No impact.	No impact.	No impact.	None.
Parks and Recreational Facilities	Less Than Significant Impact. Temporary closure of one section of the Los Gatos Creek Trail for construction equipment and vehicle access to east side of wildlife undercrossing area may be required, a <i>de minimis</i> use under Section 4(f). Recreationists would be subject to periodic sights and sounds of construction. No other Section 4(f) uses would occur. Standard project features would reduce the potential for short-term, temporary impacts to trail users and park visitors.	Less Than Significant Impact. Same as Build Alternative with Southern Overcrossing.	No impact.	None. Caltrans will seek concurrence from Santa Clara County Parks on the Section 4(f) finding. Additional measures may be added in coordination with County Parks.
Farmlands/ Timberlands	No impact.	No impact.	No impact.	None.

Affected Resource	Build Alternative with Southern Overcrossing	Build Alternative with Northern Overcrossing	No Build Alternative	Avoidance, Minimization, and/or Mitigation Measures
Growth	No impact.	No impact.	No impact.	None.
Community Character and Cohesion	No impact.	No impact.	No impact.	None.
Relocations and Real Property Acquisition	Less Than Significant Impact. Temporary construction easements, maintenance easements, and utility easements would be required. Access rights or potential partial acquisitions from multiple public and private landowners would be needed for regional trail connections.	Less Than Significant Impact. Access to, or full acquisition of, one private residential property would be required for this alternative. Other impacts would be the same as the Build Alternative with Southern Overcrossing.	No impact.	None. All easements, access agreements, and property acquisitions would be determined and compensated as part of property owner negotiations during the detailed design phase.
Environmental Justice/ Equity	No impact.	No impact.	No impact.	None.
Utilities and Emergency Services	Less Than Significant Impact. Five overhead utility poles would have to be replaced, and a fiber optic line would have to be temporarily relocated. No disruption to electrical power or water service is anticipated. Emergency service access would be maintained during construction.	Less Than Significant Impact. Same as Build Alternative with Southern Overcrossing, except four overhead utility poles would have to be replaced.	No impact.	None.

Affected Resource	Build Alternative with Southern Overcrossing	Build Alternative with Northern Overcrossing	No Build Alternative	Avoidance, Minimization, and/or Mitigation Measures
<p>Traffic and Transportation/ Pedestrian and Bicycle Facilities</p>	<p>Less Than Significant Impact. No long-term changes in traffic operations or capacity would occur. The project would reduce the potential for wildlife-vehicle collisions. Construction would require lane closures and a single nighttime full-highway closure. Construction could result in temporary, short-term delays along sections of Alma Bridge Road, Montevina Road, Black Road, Bear Creek Road, Limekiln Canyon Road and temporary closure of a section of the Los Gatos Creek Trail. Standard project features would address traffic disruptions from project construction for motorists, bicyclists, and pedestrians.</p>	<p>Less Than Significant Impact. Same as Build Alternative with Southern Overcrossing.</p>	<p>No improvements would be made for trail access across SR 17 or recreational trails. The No Build Alternative would also maintain the barrier for wildlife movement, and there would be no change in the potential for wildlife-vehicle collisions on SR 17.</p>	<p>None.</p>

Affected Resource	Build Alternative with Southern Overcrossing	Build Alternative with Northern Overcrossing	No Build Alternative	Avoidance, Minimization, and/or Mitigation Measures
Visual/Aesthetics	<p>Less Than Significant Impact. The project area landscape is varied, and includes developed areas including SR 17, water treatment facilities and infrastructure, park facilities, and pockets of single-family homes. This alternative would alter the visual character and quality of the project area through construction of a new trail overcrossing and connecting trails, a wildlife undercrossing, new and improved existing regional trail connections, and supporting infrastructure (wildlife directional fencing, wildlife escape ramps, sound walls, and retaining walls). The trail overcrossing and connecting trails would be closer to nearby residents than the Build Alternative with Northern Overcrossing and would therefore result in moderate-high visual impacts, although views would be shielded by hills and vegetation west of SR 17. Overall, the project components would result in a moderate visual impact.</p>	<p>Less Than Significant Impact. The trail overcrossing and connecting trails would be in a different location than the Build Alternative with Southern Overcrossing and would result in moderate visual impacts. One residence would have a view of the overcrossing and connecting trails. Otherwise, impacts would be the same as with the Build Alternative with Southern Overcrossing (overall moderate).</p>	<p>No impact.</p>	<p>AMM-VIS-01: Aesthetic Treatment of Trail Overcrossing.</p> <p>AMM-VIS-02: Aesthetic Treatment of Sound and Retaining Walls.</p> <p>AMM-VIS-03: Aesthetic Treatment of Wildlife Escape Ramps</p>

Affected Resource	Build Alternative with Southern Overcrossing	Build Alternative with Northern Overcrossing	No Build Alternative	Avoidance, Minimization, and/or Mitigation Measures
Cultural Resources and Tribal Cultural Resources	Less Than Significant Impact. A historic-era archaeological site will be designated as an Environmentally Sensitive Area (ESA) and excluded from project activities. Subsurface construction activities have the potential to affect previously undiscovered unique Tribal Cultural Resources.	Less Than Significant Impact. Same as Build Alternative with Southern Overcrossing.	No impact.	<p>AMM-CUL-01: Implement Environmentally Sensitive Area Action Plan.</p> <p>AMM-TCR-01: Construction Training.</p> <p>AMM-TCR-02: Tribal Consultation for Previously Undiscovered Tribal Cultural Resources.</p>
Hydrology and Floodplain	Less Than Significant Impact. This alternative would add 1.34 acres of new impervious surface but would not affect flows or flooding in the project limits. Both alternatives would create approximately 1.9 acres of disturbed soil area and approximately 0.05 acre of impervious area in the floodplain. The project would not result in a significant floodplain encroachment or adverse effects on natural and beneficial floodplain values.	Less Than Significant Impact. Impacts would be the same as with the Build Alternative with Southern Overcrossing, except this alternative would add 0.95 acre of new impervious surface (compared to 1.34 acres for the Build Alternative with Southern Overcrossing).	No impact.	None.

Affected Resource	Build Alternative with Southern Overcrossing	Build Alternative with Northern Overcrossing	No Build Alternative	Avoidance, Minimization, and/or Mitigation Measures
Water Quality and Storm Water Runoff	Less Than Significant Impact. The addition of 1.34 acres of new impervious surface is not expected to result in changes to existing drainage patterns, runoff sources, or pollution loads.	Less Than Significant Impact. Impacts would be the same as with the Build Alternative with Southern Overcrossing, except this alternative would add 0.95 acre of new impervious surface (compared to 1.34 acres for the Build Alternative with Southern Overcrossing).	No impact.	None.
Geology, Soils, Seismicity and Topography	Less Than Significant Impact. No project facilities would be built within liquefaction zones. The project would be designed to account for potential landsliding, and standard measures would be implemented to reduce erosional impacts during construction activities, such as stabilization of graded areas with appropriate erosion control device and use of rock slope protection.	Less Than Significant Impact. Same as Build Alternative with Southern Overcrossing.	The No Build Alternative would be subject to the same geological hazards identified for both alternatives.	None.

Affected Resource	Build Alternative with Southern Overcrossing	Build Alternative with Northern Overcrossing	No Build Alternative	Avoidance, Minimization, and/or Mitigation Measures
Paleontology	Less Than Significant Impact. Some sections of new trails or improved existing trails/roads, fencing, wildlife escape ramps, electrified mats, and gates would be constructed in geological units that are considered to have high sensitivity for paleontological resources.	Less Than Significant Impact. Impacts would be the same as with the Build Alternative with Southern Overcrossing, except that the Northern Overcrossing bridge would also involve construction in a geological unit that is considered to have high sensitivity for paleontological resources.	No impact.	AMM-PAL-1. Paleontological Mitigation Plan.
Hazardous Waste and Materials	Less Than Significant Impact. Construction could disturb aerially deposited lead in shallow soils along SR 17 from historical vehicle emissions. There is also a potential for naturally occurring asbestos, contaminated fill, and herbicides in soil to be encountered during construction. No long-term impacts would occur.	Less Than Significant Impact. Same as Build Alternative with Southern Overcrossing.	No impact.	None.
Air Quality	Less Than Significant Impact. The project would not affect long-term air quality or exceed applicable thresholds during construction.	Less Than Significant Impact. Same as Build Alternative with Southern Overcrossing.	No impact.	None.

Affected Resource	Build Alternative with Southern Overcrossing	Build Alternative with Northern Overcrossing	No Build Alternative	Avoidance, Minimization, and/or Mitigation Measures
Noise and Vibration	Less Than Significant Impact. The project would not increase traffic noise levels compared to the No Build Alternative or existing conditions. In some locations, temporary construction activities could exceed Town of Los Gatos thresholds, although the exceedances would be for short durations and would not be substantial.	Less Than Significant Impact. Same as Build Alternative with Southern Overcrossing.	No impact.	AMM-NOI-1. Noise Controls Outside of the Caltrans ROW.
Energy	No impact.	No impact.	No impact.	None.
Natural Communities: Sensitive Natural Communities	Less Than Significant Impact. This alternative would temporarily affect 0.046 acre of brittle leaf-woolly leaf manzanita chaparral, 3.845 acres of California bay forest and woodland, and 0.108 acre of California buckeye groves. It would permanently affect 0.02 acre of brittle leaf-woolly leaf manzanita chaparral, 0.632 acres of California bay forest and woodland, and 0.004 acres of California buckeye groves.	Less Than Significant Impact. Same as Build Alternative with Southern Overcrossing, except impacts to California bay forest and woodland would be slightly greater (3.984 acres of temporary impacts and 0.639 acre of permanent impacts).	No impact.	AMM-BIO-01: Preconstruction Biological Survey.

Affected Resource	Build Alternative with Southern Overcrossing	Build Alternative with Northern Overcrossing	No Build Alternative	Avoidance, Minimization, and/or Mitigation Measures
Natural Communities: Trees	Less Than Significant Impact. This alternative could impact approximately 182 trees, including 10 riparian trees. Tree protection and replacement will be provided as described in Section 1.4.4.7.	Less Than Significant Impact. This alternative could impact approximately 165 trees, including 10 riparian trees. Tree protection and replacement will be provided as described in Section 1.4.4.7.	No impact.	None.
Natural Communities: Migratory Corridors and Habitat Fragmentation	Less Than Significant Impact. The wildlife undercrossing would connect thousands of acres of habitat that are currently fragmented by SR 17. Together with fencing, escape ramps, and electrified mats, the undercrossing would help to reduce wildlife-vehicle collisions.	Less Than Significant Impact. Same as Build Alternative with Southern Overcrossing	The No Build Alternative would maintain the barrier for wildlife movement, and SR 17 would continue to experience wildlife-vehicle collisions.	None.
Natural Communities: Fish Passage	No impact.	No impact.	No impact.	None.

Affected Resource	Build Alternative with Southern Overcrossing	Build Alternative with Northern Overcrossing	No Build Alternative	Avoidance, Minimization, and/or Mitigation Measures
Wetlands and Other Waters	Less Than Significant with Mitigation Incorporated. Approximately 0.205 acre of temporary impacts (0.018 acre of wetlands and 0.187 acre of other waters of the U.S.) would occur from project construction. This alternative would permanently impact 0.01 acre of other waters of the U.S.; no permanent impacts to wetlands would occur.	Less Than Significant with Mitigation Incorporated. Approximately 0.203 acre of temporary impacts (0.018 acre of wetlands and 0.185 acre of other waters of the U.S.) would occur from project construction. This alternative would permanently impact 0.009 acre of other waters of the U.S.; no permanent impacts to wetlands would occur.	No impact.	AMM-BIO-01 (see above). AMM-BIO-04: Wetland Protection. MM-BIO-01: Mitigation for Wetlands and Waters.
Plant Species	Less Than Significant Impact. Approximately 25 stems of Loma Prieta hoita within a 0.005-acre area could be temporarily impacted by regional trail construction. If feasible, the trail will be relocated to avoid temporary impacts to this plant.	Less Than Significant Impact. Same as Build Alternative with Southern Overcrossing.	No impact.	AMM-BIO-01 (see above). AMM-BIO-05: Special-Status Plant Avoidance. AMM-BIO-06: Special-Status Plant Monitoring.

Affected Resource	Build Alternative with Southern Overcrossing	Build Alternative with Northern Overcrossing	No Build Alternative	Avoidance, Minimization, and/or Mitigation Measures
Animal Species	<p>Less Than Significant Impact. This alternative would have temporary and permanent impacts on habitat for special-status animal species: mountain lion, bald eagle, golden eagle, white-tailed kite, San Francisco dusky-footed woodrat, American badger, pallid bat, California giant salamander, Santa Cruz black salamander, and western pond turtle.¹</p> <p>Temporary impacts include habitat avoidance by local wildlife due to ground disturbance and presence of construction equipment, noise, and temporary nighttime lighting. The wildlife undercrossing, trail overcrossing, and other project components would permanently displace some natural land cover that provides habitat for these species. Once completed, the wildlife undercrossing would benefit terrestrial animal species by providing safe passage across SR 17 in an area known to have a high incidence of roadkill.</p>	<p>Less Than Significant Impact. Same as Build Alternative with Southern Overcrossing.</p>	<p>No impact.</p>	<p>AMM-BIO-01 and AMM-BIO-04 (see above).</p> <p>AMM-BIO-02: Wildlife Species Relocation.</p> <p>AMM-BIO-03: Nesting Bird Protection.</p> <p>AMM-BIO-07: Bat Protection.</p> <p>AMM-BIO-08 through AMM-BIO-10 (see below).</p> <p>AMM-BIO-11: Preconstruction Surveys for San Francisco Dusky-Footed Woodrat.</p> <p>AMM-BIO-12: Potential Trapping and Relocation for San Francisco Dusky-Footed Woodrat.</p> <p>AMM-BIO-13. Preconstruction Surveys for Western Pond Turtle.</p>

Affected Resource	Build Alternative with Southern Overcrossing	Build Alternative with Northern Overcrossing	No Build Alternative	Avoidance, Minimization, and/or Mitigation Measures
Threatened and Endangered Species	<p>Less Than Significant with Mitigation Incorporated. This alternative would impact non-breeding aquatic dispersal habitat and upland habitat for California red-legged frog. Construction would result in 0.157 acre of temporary and 0.004 acre of permanent impacts on aquatic habitat and 25.763 acres of temporary and 3.628 acres of permanent impacts on upland habitat.</p> <p>This alternative may affect, and is likely to adversely, affect California red-legged frog.</p>	<p>Less Than Significant with Mitigation Incorporated. Same as Build Alternative with Southern Overcrossing, except construction would result in 24.144 acres of temporary and 3.205 acres of permanent impacts on upland habitat.</p>	No impact.	<p>AMM-BIO-01, AMM-BIO-2, and AMM-BIO-04 (see above).</p> <p>AMM-BIO-08: California Red-Legged Frog Preconstruction Surveys.</p> <p>AMM-BIO-09: California Red-Legged Frog Monitoring Protocols.</p> <p>AMM-BIO-10: California Red-Legged Frog Habitat Work Window.</p> <p>MM-BIO-02: Mitigation for California Red-Legged Frog.</p>
Invasive Species	<p>Less Than Significant Impact. Project construction has the potential to result in the introduction or spread of invasive plant species, which would be addressed by standard project features.</p>	<p>Less Than Significant Impact. Same as Build Alternative with Southern Overcrossing.</p>	No impact.	None.
Cumulative Impacts	No impact.	No impact.	No impact.	None.
Greenhouse Gases	<p>Less Than Significant Impact. The project would not result in a long-term increase in greenhouse gas emissions or exceed applicable thresholds during construction.</p>	<p>Less Than Significant Impact. Same as Build Alternative with Southern Overcrossing.</p>	No impact.	None.

Affected Resource	Build Alternative with Southern Overcrossing	Build Alternative with Northern Overcrossing	No Build Alternative	Avoidance, Minimization, and/or Mitigation Measures
Wildfire	Less Than Significant Impact. The project would not impair implementation of an emergency response or emergency evacuation plan, exacerbate wildfire risks or expose project occupants to pollutants from a wildfire or the uncontrolled spread of a wildfire, increase wildland fire risk through installation or maintenance of associated infrastructure, or result in downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes. All construction activities would follow state and federal fire regulations.	Less Than Significant Impact. Same as Build Alternative with Southern Overcrossing.	No impact.	None.

Note:

1. On October 3, 2023, the USFWS published a notice of proposed rulemaking to designate the northwestern pond turtle and southwestern pond turtle as threatened species under the Federal Endangered Species Act (FESA; 88 Federal Register 68370–68399). The comment period on the proposed rulemaking ends on December 4, 2023.

The project will require consultation with the USFWS under Section 7 of the FESA, including for western pond turtle, as described in Section 2.4.5.

Final Decision Making Process

After the public circulation period for this environmental document, all comments will be considered, and the Project Development Team will select a preferred alternative and make the final determination of the project's effect on the environment. Under CEQA, if no unmitigable significant adverse impacts are identified, the Midpen Board of Directors will consider approval of a Mitigated ND and Mitigation Monitoring and Reporting Plan (MMRP).

Similarly, if Caltrans, as assigned by FHWA, determines the NEPA action does not significantly impact the environment, Caltrans will issue a Finding of No Significant Impact (FONSI).

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Chapter 1 Proposed Project

1.1 INTRODUCTION

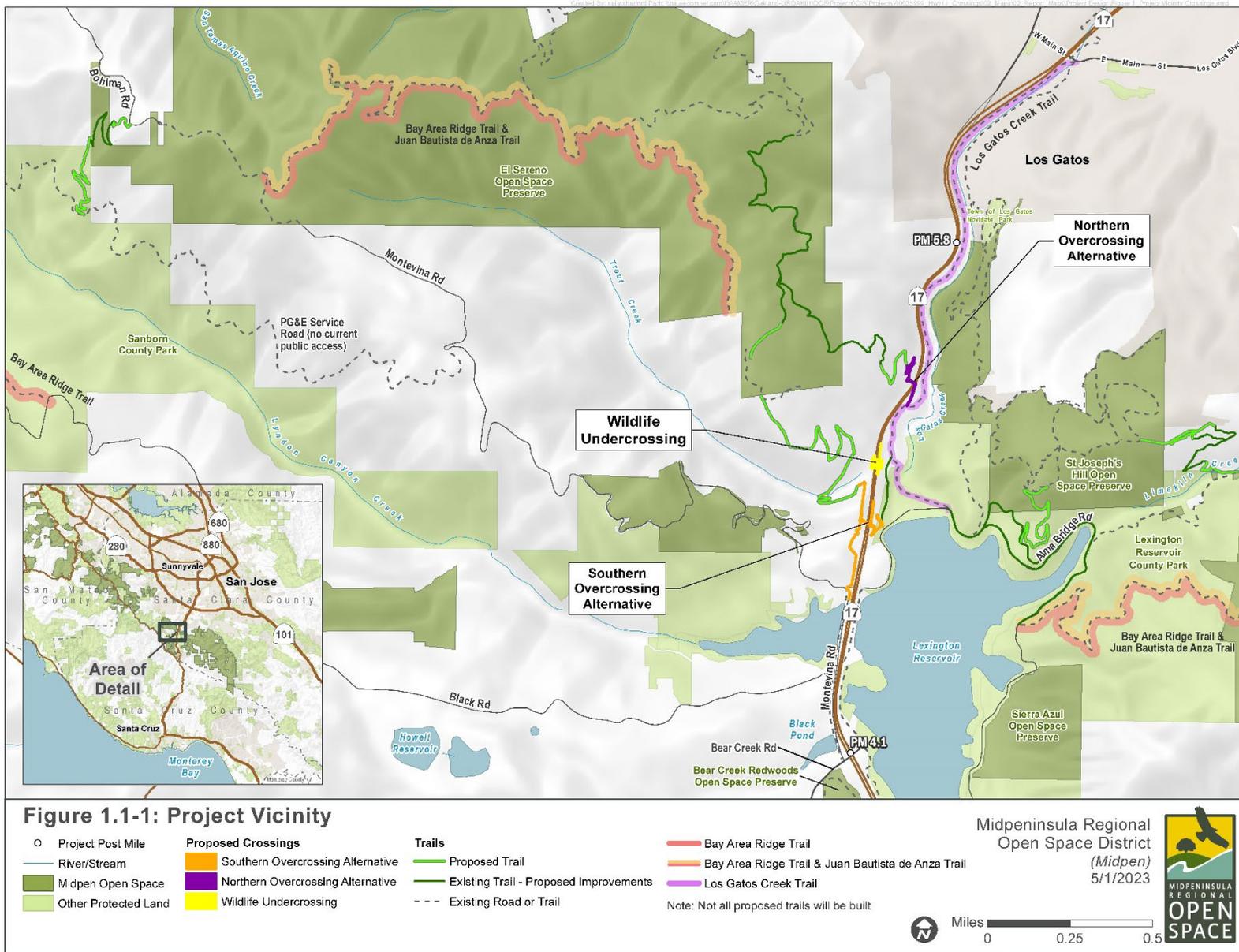
The Midpeninsula Regional Open Space District (Midpen), in cooperation with the California Department of Transportation (Caltrans) and the Santa Clara Valley Transportation Authority (VTA), proposes to construct a wildlife undercrossing and a separate regional multi-use trail overcrossing of State Route (SR) 17 near Lexington Reservoir, south of the Town of Los Gatos in Santa Clara County (Figure 1.1-1). The Highway 17 Wildlife and Regional Trail Crossings and Trail Connections Project (project) would include new trails adjacent to the overcrossing and in other locations throughout the project area.

The wildlife undercrossing would provide mountain lions, deer, and other animals with connectivity between, and access to, thousands of acres of habitat that SR 17 divides. The project would include wildlife fencing to direct animals to the undercrossing and deter them from entering the highway. One-way wildlife escape structures such as ramps constructed along the fencing would allow animals that unexpectedly enter the highway the opportunity to escape. Together, the undercrossing, fencing, and escape ramps would help to channel wildlife away from the roadway of SR 17 and reduce the potential for conflicts with motorists.

The multi-use trail overcrossing would provide efficient non-automotive recreation access across a 2.2-mile segment of SR 17 where none exists. The overcrossing and proposed additional trail segments would connect multiple parks and preserves and close gaps in local, regional, and national trail systems.

Figure 1.1-1 shows the proposed project area, which extends along SR 17 from the Bear Creek Road overcrossing in unincorporated Santa Clara County in the south to 0.7 mile south of the Main Street overcrossing in Los Gatos in the north. The project's post mile (PM) limits are PM 4.1 to 5.8.

Caltrans owns and operates SR 17. Caltrans, as assigned by the Federal Highway Administration (FHWA), is also the lead agency under the National Environmental Policy Act (NEPA). Midpen is the lead agency under the California Environmental Quality Act (CEQA) and the project sponsor. VTA is Midpen's project delivery partner and will implement the project during detailed design and construction.



While the District strives to use the best available digital data, these data do not represent a legal survey and are merely a graphic illustration of geographic features.

Figure 1.1-1: Project Vicinity

Highway 17 Wildlife and Regional Trail Crossings and Trail Connections Project
Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment

1.2 BACKGROUND

1.2.1 Location and Route Description

The project area is south of the Town of Los Gatos and to the east straddles Lexington Reservoir County Park, which is operated by Santa Clara County Parks (County Parks). Lexington Reservoir is owned and managed by the Santa Clara Valley Water District (Valley Water), which supplies water to customers in Santa Clara Valley including San Jose Water Company (San Jose Water). San Jose Water has facilities both east and west of SR 17, including along Trout Creek, a tributary of Los Gatos Creek.

SR 17 is a major north-south transportation corridor connecting Interstate 280 (I-280) in San Jose with SR 1 in Santa Cruz. The highway crosses mountainous, forested, and chaparral scrub terrain in rural Santa Clara and Santa Cruz counties. SR 17 serves interregional and regional travel, including recreational and commute traffic and goods movement. The highway has four lanes within the project limits, two northbound and two southbound, which are separated by a concrete median barrier. In the project area, SR 17 crosses over Lexington Reservoir on a raised embankment.

Walking on SR 17 in the project area is not prohibited (Caltrans 2022). However, the lack of shoulders and the extremely steep slopes in most locations along both sides of the road do not provide a safe or comfortable environment for walking or bicycling. The Los Gatos Creek Trail, which is just east of the northbound lanes of SR 17, is the primary north-south route in the project area for non-automotive travel. The trail extends approximately 9.3 miles from Lexington Reservoir in the south to Meridian Avenue in San Jose in the north (City of San Jose 2022).

1.2.2 History

Midpen is an independent special district that was formed in 1972 by San Mateo and Santa Clara county voters to allocate a portion of property tax proceeds to develop a regional greenbelt system on the San Francisco Peninsula. Midpen works with local, regional, and national trail groups and partners with other agencies and organizations to implement trail connections. An important Midpen initiative is to support completion of the Bay Area Ridge Trail (Ridge Trail), envisioned as a continuous 550-mile trail for hikers, mountain bicyclists, and equestrians along the ridgelines overlooking San Francisco Bay.

In 2008, Midpen began funding studies that examine wildlife use in the Lexington Reservoir area due to numerous documented fatalities of mountain lions (also known as pumas), deer, and smaller animals on SR 17. SR 17 divides thousands of acres of open space in the Santa Cruz Mountains, limiting the ability of wildlife to find food, mates, and habitat. Habitat connectivity is important for the health of species like mountain lions and will become even more important with the unpredictable future consequences

of climate change (Midpen 2019). Key state plans such as the California State Wildlife Action Plan (California Department of Fish and Wildlife [CDFW] 2015) and the Safeguarding California Plan (California Natural Resource Agency 2018) emphasize connectivity as a critical goal for wildlife management and climate resilience.

In June 2014, Midpen voters approved Measure AA, which provides \$300 million in general obligation bond funding for Midpen to continue land acquisition, environmental restoration, and public access projects for the next 30 years. Priority investments of Measure AA funding were documented in Midpen's Open Space Vision Plan (Midpen 2014), which included developing a wildlife crossing and a regional multi-use trail crossing of SR 17 near Lexington Reservoir.

Following the passage of Measure AA, Midpen embarked on a two-stage study of alternatives for potential combined or separate wildlife and trail crossings of SR 17. In 2016, Midpen published the Preliminary Alternatives Report, which identified and evaluated four crossing locations and configurations (Midpen 2016). Following consultation with the public, stakeholders, and project partners, Midpen completed a Revised Alternatives Report in 2019 that identified eight crossing locations and configurations for further study (Midpen 2019).

The crossing alternatives were developed, refined, and evaluated based on several criteria and input from stakeholders and the community. The wildlife crossing should be close to an identified wildlife corridor, provide connectivity to habitat, be exposed to minimal human activity, and have dimensions and sightlines that support wildlife and special-status species use. For the trail crossing and connections, criteria included accommodating the full range of potential regional trail users, providing direct connection to existing regional trails and feasible new trails, providing a safe and enjoyable trail, and allowing emergency and maintenance vehicle access. Other general feasibility criteria focused on constructability; access and right-of-way (ROW); potential impacts to highway traffic, water and dam facilities, and the environment; trail user experience; ability to meet Caltrans design standards; and public support.

1.2.3 Programming

The project is included in the Metropolitan Transportation Commission's (MTC's) Bay Area Regional Transportation Plan (RTP), Plan Bay Area 2050 (Association of Bay Area Governments [ABAG] and MTC 2021a; RTP ID No. 21-T08-060). The project is in the 2023 Transportation Improvement Program (TIP), which was adopted by the MTC on September 28, 2022 (MTC 2022; TIP ID No. SCL210028). The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) approved the 2023 TIP on December 16, 2022.

1.2.4 NEPA Assignment

California participated in the “Surface Transportation Project Delivery Pilot Program” (Pilot Program) pursuant to 23 United States Code (USC) 327, for more than five years, beginning July 1, 2007, and ending September 30, 2012. The Moving Ahead for Progress in the 21st Century Act (MAP-21; Public Law 112-141), signed by President Obama on July 6, 2012, amended 23 USC 327 to establish a permanent Surface Transportation Project Delivery Program. As a result, Caltrans entered into a Memorandum of Understanding pursuant to 23 USC 327 (NEPA Assignment MOU) with FHWA. The NEPA Assignment MOU became effective October 1, 2012, and was renewed on May 27, 2022, for a term of ten years. In summary, Caltrans continues to assume FHWA responsibilities under NEPA and other federal environmental laws in the same manner as was assigned under the Pilot Program, with minor changes. With NEPA Assignment, FHWA assigned and Caltrans assumed all of the United States Department of Transportation (USDOT) Secretary's responsibilities under NEPA. This assignment includes projects on the State Highway System and Local Assistance Projects off of the State Highway System within the State of California, except for certain categorical exclusions that FHWA assigned to Caltrans under the 23 USC 326 Categorical Exclusion Assignment MOU, projects excluded by definition, and specific project exclusions.

1.3 PURPOSE AND NEED

1.3.1 Purpose

The purpose of the project is to improve wildlife passage, habitat connectivity, and regional trail connections in the vicinity of SR 17 in the project area.

1.3.2 Need

The project is needed to address wildlife mortality and motorist safety from animal-vehicle collisions on SR 17 in the project area, to maintain healthy wildlife populations by improving habitat connectivity, and to provide more efficient non-automotive recreational access across SR 17, including to regional multi-use trails.

Numerous roadkill incidents have been documented on SR 17 near Lexington Reservoir, including by the Santa Cruz Puma Project and Pathways for Wildlife.¹ Roadkill data shows the “hotspot”—an area with consistent wildlife-vehicle collisions—on SR 17 extends from the Los Gatos town limits south to the CAL FIRE Alma Helitack Station in the vicinity of Trout Creek Canyon, a distance of approximately 2.4 miles (1.2 miles on either side of Trout Creek). Between 2000 and 2017, a total of 266 wildlife-vehicle

¹ The Puma Project is a partnership between University of California, Santa Cruz (UCSC) and CDFW that tracks and collects data on mountain lions to study the effects of habitat fragmentation on their behavior and movement. Pathways for Wildlife is a research organization specializing in identifying, monitoring, and implementing connectivity designs for wildlife movement.

collisions occurred in this hotspot area (Midpen 2019). In addition to causing wildlife mortality, these collisions present a hazard for drivers on this heavily traveled mountain highway.

Roadkill in the hotspot area primarily consists of deer and smaller animals, but on average, at least one mountain lion is killed each year on SR 17 near Lexington Reservoir (Midpen 2019). As mountain lions require large ranges, they have naturally low densities, rendering them sensitive to population losses due to vehicle collisions, subject to habitat fragmentation from roads and other development, and susceptible to extirpation. Connecting large areas of wildlands is critical to preserving healthy wildlife populations by allowing mountain lions and other animals to safely move between habitats; seek food, shelter, mates, and territory; and maintain genetic diversity (Penrod et al. 2013).

SR 17 also presents a barrier for humans in the project vicinity. No road or recreational trail crossings of SR 17 exist between Main Street near downtown Los Gatos and Bear Creek Road, more than 2.2 miles to the south. The ultimate configuration of the Bear Creek Road interchange was intended to include a pedestrian crossing of SR 17 at Montevina Road/Alma Bridge Road to the north, to facilitate a future regional trail connection (Caltrans and FHWA 1993). The pedestrian crossing was never built, but as part of the interchange construction in the late 1990s, two recreational trails were provided to facilitate the future trail crossing. These trails, which are now part of Lexington Reservoir County Park, parallel the east side of SR 17 along Lexington Reservoir and the west side of Montevina Road between Bear Creek Road and Montevina Road/Alma Bridge Road. A pedestrian crossing of SR 17 at Montevina Road/Alma Bridge Road was considered as part of the proposed project but not advanced, as discussed further in Section 1.9.1.3.

The project vicinity also contains five other publicly owned recreation and open space areas, including Sanborn County Park, and Bear Creek Redwoods, El Sereno, St. Joseph's Hill, and Sierra Azul Open Space Preserves (OSPs). A multi-use trail crossing of SR 17 and additional trail segments are needed to improve connections and provide more efficient travel to trails within the four public OSPs and two county parks, and close gaps in regional and national trail systems by contributing to the completion of approximately 50 continuous miles of the Bay Area Ridge Trail (Ridge Trail) and 22 continuous miles of the Juan Bautista de Anza National Historic Trail (Anza Trail).

In addition to Midpen's Open Space Vision Plan (Midpen 2014), the following regional and master plans identify the need for a pedestrian and/or bicycle connection across SR 17 and other trail improvements in the project area:

- The Santa Clara Countywide Bicycle Plan identifies a SR 17 crossing near Lexington Reservoir County Park as needed to fix an "across barrier connection," a problem spot where improvements are needed to close gaps in the bicycle network (VTA 2018).

- The Caltrans District 4 Pedestrian Plan shows that local public and partner engagement identified the need for a pedestrian crossing of SR 17 in the same area (Caltrans 2022).
- The Santa Clara County Countywide Trails Master Plan Update (County of Santa Clara 1995) identified a need for a pedestrian/bicycle/equestrian trail across SR 17 to allow an east-west connection of the Ridge Trail and Anza Trail in the project area. In addition, the Countywide Trails Master Plan identified a southerly extension of the Los Gatos Creek Trail connection from its current terminus at Lexington Reservoir along Alma Bridge Road in the project area to ultimately connect with the Ridge Trail (the Upper Los Gatos Creek Trail; Santa Clara County Parks 2015).
- The Town of Los Gatos Bicycle and Pedestrian Master Plan includes surface improvement of the 1.8-mile Los Gatos Creek Trail segment between Main Street and Lexington Reservoir as a near-term project to enhance safety, support access to key destinations and trails, improve existing infrastructure, and increase bike activity (Town of Los Gatos 2020).

An SR 17 crossing near Lexington Reservoir County Park would implement goals of the plans listed above and support local and regional travel on foot, bicycle, or horseback.

1.3.3 Independent Utility and Logical Termini

FHWA regulations (23 Code of Federal Regulations [CFR] 771.111 [f]) require that the project:

1. Connect logical termini and be of sufficient length to address environmental matters on a broad scope.
2. Have independent utility or independent significance.
3. Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

Logical termini are defined as (1) rational end points for a transportation improvement, and (2) rational end points for a review of the environmental impacts. Independent utility, or independent significance, is defined as being a usable and reasonable expenditure even if no additional transportation improvements in the area are made.

1.3.3.1 Independent Utility

The project has independent utility because no additional transportation improvements would be needed to satisfy the purpose and need.

The proposed undercrossing would allow wildlife to access vital habitat in the open space areas to the west and east of SR 17. The project includes wildlife fencing to direct animals away from the highway and toward the wildlife undercrossing, as well as wildlife escape ramps at intervals along the fencing to allow animals to escape from the highway corridor. These measures to discourage wildlife from crossing on the roadway would also improve safety for motorists on SR 17.

In addition, the recreational trail overcrossing and trail connections would provide people with access to existing regional trails as well as new trails, contribute to the completion of the Ridge Trail and Anza Trail, and support non-automotive recreational access across and around SR 17.

Therefore, the project is a usable and reasonable expenditure even if no additional transportation improvements in the area are made.

1.3.3.2 Logical Termini

The project has logical termini because the project limits encompass an integrated set of components that address the purpose and need.

The placement of the proposed wildlife undercrossing was determined based on several years of study and analysis. In 2012, Midpen hired Pathways for Wildlife to assess existing wildlife crossing opportunities and constraints in the project area. Pathways for Wildlife compiled data on the location of road-related wildlife fatalities and cross-highway mountain lion movements using UCSC telemetry data for radio-collared pumas. The study included camera surveys to collect wildlife movement data at four existing culverts in the Lexington Reservoir area. In 2014, Pathways for Wildlife, in coordination with Midpen, the Santa Cruz Land Trust, and the Peninsula Open Space Trust, expanded its assessment of roadkill hot spots to the entire SR 17 corridor in Santa Clara and Santa Cruz counties. The resulting reports identified hotspot locations, limitations of existing culverts along SR 17, and best locations for wildlife crossing structures in both Santa Clara and Santa Cruz counties. Trout Creek Canyon, the location of the proposed wildlife undercrossing, was identified as the best location on SR 17 in Santa Clara County to improve for wildlife movement (Midpen 2019).

In addition, the project study area fully encompasses the directional fencing that would guide wildlife to the undercrossing, as well as the maximum future extent of directional fencing (Section 1.4.1.2). The study area along SR 17 corresponds to the maximum fencing plan developed in coordination with Pathways for Wildlife and other wildlife specialists based on roadkill data and directional fencing guidelines (Midpen 2019).

Both overcrossing alternatives would connect logical termini in the form of existing trails such as the Los Gatos Creek Trail and amenities at Lexington Reservoir County Park such as parking, picnic tables, and restrooms. The project also includes new trail

segments to close east-west gaps in the Ridge Trail and Anza Trail and to facilitate connections among other dedicated public lands in the project vicinity.

Therefore, project limits encompass a sufficient area to address environmental matters on a broad scope.

1.4 PROJECT DESCRIPTION

The proposed project includes the following primary components:

1. A wildlife undercrossing of SR 17 with wildlife directional fencing, wildlife escape ramps, electrified mats, and sound walls.
2. Two alternatives for a regional trail overcrossing, only one of which would be constructed. Each overcrossing would consist of a bridge over SR 17 and trail connections to existing or proposed trails that would be partially within the Caltrans ROW.
3. New or improved existing trail segments that are outside of the Caltrans ROW.

The components are shown in Figures 1.4-1 and 1.4-2 and described further below.

The alternatives are the **Build Alternative with Southern Overcrossing**, the **Build Alternative with Northern Overcrossing**, and the **No Build Alternative**. The project will ultimately construct one wildlife undercrossing with directional fencing as well as one regional trail overcrossing with connecting trails that best satisfy the project's purpose and need while avoiding or minimizing environmental impacts.

The timing and sequencing of work would depend on available construction funding and the ability to secure property easements, access rights, and potential acquisitions. If project construction is not fully funded or if the right-of-way arrangements described further in Section 1.4.4.2 are still in progress, construction could be phased, with the wildlife undercrossing and associated features being constructed first, followed by the regional trail overcrossing and trail connections.

A shared wildlife and trail crossing was considered but is not proposed because of the potential for human presence and artificial lighting to deter wildlife use of the crossing, rendering it ineffective. See Section 1.9.1.2 for more information on the benefits of separate crossings.



Figure 1.4-1: Project Layout (Page 1)



While the District strives to use the best available digital data, these data do not represent a legal survey and are merely a graphic illustration of geographic features.

Figure 1.4-1: Project Layout (Page 2)



Figure 1.4-1: Project Layout (Page 3)



Figure 1.4-1: Project Layout (Page 4)

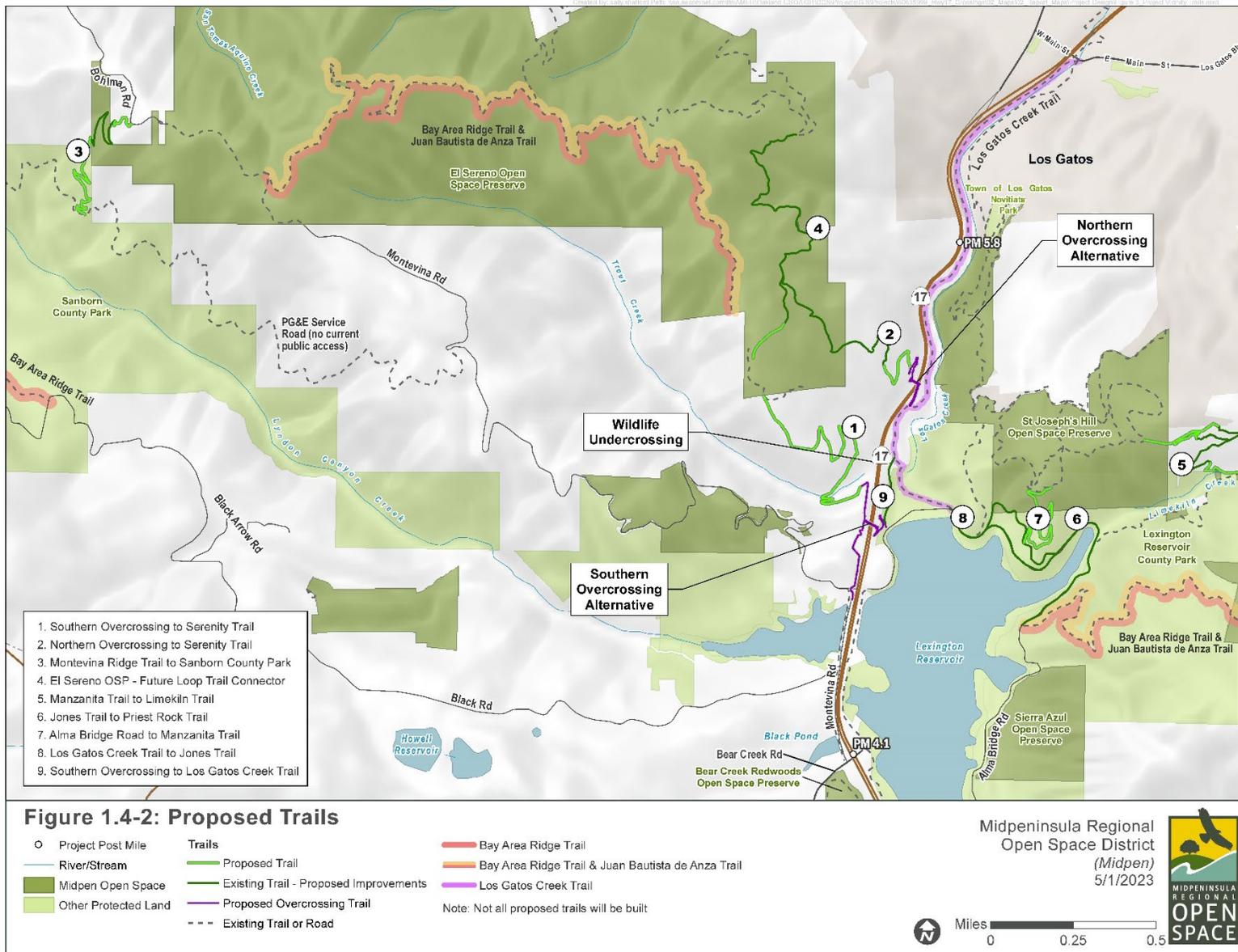


Figure 1.4-2: Proposed Trails

Highway 17 Wildlife and Regional Trail Crossings and Trail Connections Project
Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment

1.4.1 Wildlife Undercrossing and Directional Fencing

1.4.1.1 Wildlife Undercrossing

Trout Creek, a tributary of Los Gatos Creek, crosses SR 17 at PM 5.075 in a 333-foot-long, 4-foot by 4-foot concrete box culvert. The existing culvert will remain in place and will not be modified; therefore it can continue to successfully convey water from Trout Creek under and across SR 17. The proposed wildlife undercrossing would be south of and higher in elevation than the existing culvert, would not convey water, and is approximately 0.25 mile northeast of Lexington Reservoir (Figure 1.4-1, page 3).

The undercrossing alignment would connect the Trout Creek canyon and large watershed west of SR 17 with the Los Gatos Creek canyon (just north of the Lexington Reservoir spillway) and other open space lands east of SR 17.

The undercrossing would be a concrete arched culvert or single-span, concrete slab unit bridge. The undercrossing would have an open bottom or a structural concrete bottom covered in compacted dirt and small rocks. The earthen bottom surface of the crossing will allow for game trails to be established. Because the existing Trout Creek culvert will remain in place, the new wildlife undercrossing will remain dry, allowing it to be used by wildlife year-round. The undercrossing dimensions are shown in Table 1.4-1, and views of similar structures are shown in Figures 1.4-3 and 1.4-4.

Table 1.4-1: Wildlife Undercrossing Dimensions

Structure Name	Span	Rise	Length	Comments
Wildlife Undercrossing (culvert)	36 ft, 0 in	9 ft, 0 in to 12 ft, 0 in	90 ft, 0 in	Wingwall Length: West = 20 ft, 11 in East = 39 ft, 9 in
Wildlife Undercrossing (slab unit bridge)	40 ft, 0 in	12 ft, 0 in	90 ft, 0 in	Wingwall length West = 19 ft, 10 in East = 38 ft, 3 in



Figure 1.4-3: Example of a precast arch wildlife undercrossing with wingwalls and directional fencing, at U.S. Highway 160 in southern Colorado (Muller Engineering Company 2022)



Figure 1.4-4: Simulated view of a concrete slab unit bridge, facing west toward the wildlife undercrossing and Trout Creek, below northbound SR 17 (Midpen 2019)

The western opening of the undercrossing would be on a slope above Trout Creek on the west side of SR 17. The eastern opening would be on an embankment above a San Jose Water pipeline and the Lexington Reservoir spillway on the east side of SR 17. Each side of the undercrossing would have wingwalls that would conform to the new slopes on the northern and southern sides of the undercrossing. Additionally, sound walls on top of concrete barriers would be constructed along the northbound and southbound shoulders of SR 17 above the undercrossing and extending to the north and south (discussed further in Section 1.4.1.3).

The eastern opening of the undercrossing would be near a large level area and San Jose Water access/service roads that would facilitate construction and maintenance access. Approximately 200 feet of the existing San Jose Water pipeline on the east side of SR 17, downslope of the crossing, would be partially or fully buried by using surplus soils from the undercrossing excavation, undergrounding a portion of the pipeline, or using imported soil to facilitate wildlife passage. Burying the pipeline or depositing soils on its uphill and downhill sides would help animals to cross over the 42-inch-diameter pipe.

The entire footprint of the undercrossing would be in Caltrans ROW, although construction and maintenance access would involve lands and facilities of San Jose Water and Valley Water and would require approvals or agreements with those agencies.

1.4.1.2 Wildlife Fencing and Escape Ramps

Wildlife directional fencing would be placed along both sides of SR 17 to direct wildlife away from the highway and toward the wildlife undercrossing. The wildlife fencing is anticipated to consist of 12-foot-high chain-link (or similar) segments with vertical posts placed approximately every 10 feet. The segments may extend up to approximately 2 feet below the finished grade to prevent animals from burrowing underneath the fence and entering the roadway. The bottom 2-3 feet of fencing above the ground surface may have tighter mesh (or similar) panels to prevent passage by small animals including herpetofauna (amphibians and reptiles). The top of the fencing would typically have three rows of two-strand barbed wire mounted diagonally on metal extension arms to prevent animals from climbing or leaping over the fence and entering the roadway. The wildlife fencing would have gates to allow passage by vehicles or trail users where necessary. Depending on location, the wildlife fencing may connect with or replace existing fencing along SR 17.

In the few locations where driveways or access roads intersect fenced areas, electrified mats may be installed in the pavement to deter animals from using the driveway or road to access the highway. When crossed, the mats issue a deterrent shock that does not harm medium to large sized animals, people, or vehicles. If deemed necessary to protect smaller animals, including amphibians and reptiles, small animal/herpetofauna crossings under driveways or access roads may be included in conjunction with

electrified mats to allow safe passage for small animals. The crossings could be in the form of small culverts, cattle grates, or purpose-built passage structures with grated tops that allow for entry of light and moisture.

Wildlife escape ramps—one-way ramp structures made of earthen berms, wood, or metal—would be placed at intervals along the fencing to allow animals that unexpectedly enter the highway to escape from the fenced area. The ramps would be spaced approximately 500 feet apart but spacing would vary based on steepness of topography and other siting constraints.

Photographs showing examples of wildlife fencing and a wildlife escape ramp are provided in Figures 1.4-5 and 1.4-6.

The precise placement and design of the wildlife fencing and escape ramps would be refined during detailed design.

There may be the potential need to extend the length of the proposed wildlife fencing and add additional wildlife escape ramps and electrified mats farther to the north and south of the project area, to ensure effectiveness of the wildlife crossing. The locations would be determined based on post-construction effectiveness monitoring and the availability of funding but could extend from approximately 0.7 mile south of the Bear Creek Road interchange in the south (PM 3.4) to approximately 0.2 mile south of the Main Street overcrossing in the north (PM 6.3). The additional fencing, wildlife escape ramps, and electrified mats are not included in the project design or post mile limits, but would be considered as a future project phase, if needed, and require separate environmental review.

1.4.1.3 Sound Walls

Masonry sound walls on top of concrete barriers are proposed along the northbound and southbound shoulders of SR 17 in the vicinity of the wildlife undercrossing (see Figure 1.4-1, page 3). The walls would shield views and noise from highway traffic for animals approaching and exiting the undercrossing. The walls would cross above each end of the undercrossing and extend up to 230 feet along northbound SR 17 and 190 feet along southbound SR 17. The walls atop barriers would have a total maximum height of 8 feet and would taper down in height near each end. The walls would also have aesthetic treatment such as color and texture. Specific aesthetic treatments would be determined during detailed design. A photograph showing an example of a sound wall is provided in Figure 1.4-7.



Figure 1.4-5: Example of wildlife fencing along SR 241 in Orange County, CA (McFall et al. 2015)



Figure 1.4-6: Example of a wildlife escape ramp (FHWA 2011). The height, color, and materials used for this project may differ



Figure 1.4-7: Example of a masonry sound wall on top of a concrete barrier, El Portal Drive, San Pablo, CA (AECOM 2020). The height, color, and materials used for this project may differ

1.4.2 Trail Overcrossings

There are two alternatives for the trail overcrossing: a Southern Overcrossing and a Northern Overcrossing. One trail overcrossing alternative would be selected as part of the project. Both trail overcrossing alternatives would function as multi-use trails for pedestrians, bicyclists, equestrians, and potentially dogs on leash. Aesthetic treatments such as decorative fencing and color and texture for concrete elements would be included on the overcrossing and associated retaining walls. Specific aesthetic treatments would be determined during detailed design.

Each trail overcrossing alternative includes new multi-use trails for pedestrians, bicyclists, and equestrians to connect to existing or proposed trails. The trails that would be constructed will depend on the trail overcrossing alternative selected. New trails would meet or exceed United States Department of Agriculture Forest Service (USFS) National Design Parameters, Trail Class 3 (hiker/pedestrian, non-wilderness double lane), the design standard that is most similar to existing trails in the project area. The trail alignments shown in Figure 1.4-1 will be refined during detailed design following the selection of an overcrossing alternative.

The trails would generally range in width from 4 to 6 feet, have typical grades of up to 8 percent, and have uniform dirt or aggregate surfaces to the maximum extent feasible. Due to steep terrain in some areas both east and west of SR 17, trail grades could be 12 percent or greater, and retaining walls and/or grading could be needed. Additional site features, such as guardrails, may be included along trails on steep terrain within the Caltrans ROW, and gates in the fencing may be included to control access.

1.4.2.1 Southern Overcrossing

Southern Overcrossing Bridge

The Southern Overcrossing bridge would be a single-span, precast concrete girder bridge on abutments and would cross SR 17 approximately 0.2 mile north of Alma Bridge Road (Figure 1.4-1, page 2). The crossing would connect a level earthen bench area west of SR 17 with a landing area to the east. The eastern landing would be directly north of San Jose Water facilities adjacent to Lexington Reservoir and west of Alma Bridge Road. At each end of the bridge, adjacent rest areas would be provided for users to enjoy views, rest, or let others pass. Seating, equestrian mounting blocks, and interpretive signs may be included.

The dimensions of the Southern Overcrossing bridge are shown in Table 1.4-2.

Table 1.4-2: Southern Overcrossing Bridge Dimensions

Structure Name	No. of Spans	Width	Length
Southern Overcrossing Bridge	1	16 ft, 0 in	150 ft, 0 in

The overcrossing would require two retaining walls, shown in Figure 1.4-1, page 2. On the west side of SR 17, a retaining wall of approximately 265 feet in length and up to 10 feet in height would be constructed along the western edge of the north-south trail connection. On the east side of SR 17, a retaining wall of approximately 260 feet in length and up to 14 feet in height would be constructed along the shoulder of northbound SR 17. Retaining walls would include aesthetic treatments such as texture and color to maintain visual consistency with natural features along SR 17 in the project area.

The entire footprint area for the Southern Overcrossing bridge is within Caltrans ROW. However, construction and ongoing access to the Southern Overcrossing would require access agreements and/or easements onto lands and facilities of San Jose Water and Valley Water.

Southern Overcrossing Trail Connections

The Southern Overcrossing is not directly adjacent to existing trails, but nearby trail connections are available on both sides of SR 17. The Build Alternative with Southern Overcrossing would include the following new trails that would be partially within the Caltrans ROW.

- West of SR 17: A new trail would be constructed to connect the Southern Overcrossing with Montevina Road and an existing Lexington Reservoir County Park trail along Montevina Road. The trail would follow the lower part of the steep hillside along southbound SR 17. North of the overcrossing, this alternative

would construct a new trail to a proposed regional trail connection with the Serenity Trail in El Sereno OSP (Trail No. 1 in Figure 1.4-2; also see Section 1.4.3). The closest parking to the Southern Overcrossing would be on the north side of Black Road where it intersects with Montevina Road.

- East of SR 17: A new trail would connect the Southern Overcrossing with Lexington Reservoir County Park. A new trail connection along the Lexington Reservoir spillway road would connect the Southern Overcrossing to the Los Gatos Creek Trail (Trail No. 9 in Figure 1.4-2; also see Section 1.4.3). This connection would allow trail users to avoid automotive and truck traffic on Alma Bridge Road, which lacks shoulders in many locations. From there, trail users can continue to the Los Gatos Creek Trail (0.2 mile), the County Park’s Lexington Reservoir parking lot near James J. Lenihan Dam (Lenihan Dam) (0.3 mile), the Jones Trail (0.4 mile) and St. Joseph’s Hill OSP, and other trail connections to the east. The closest parking would be at the County Park’s Lexington Reservoir parking lot near Lenihan Dam and where parking is allowed along certain sections of Alma Bridge Road.

1.4.2.2 Northern Overcrossing

Northern Overcrossing Bridge

The Northern Overcrossing bridge would be a six-span concrete bridge on abutments and columns. The bridge would cross SR 17 approximately 0.4 mile north of Lenihan Dam and connect steep slopes west of SR 17 with an existing service road and California Highway Patrol (CHP) turnout with northbound highway access on the east side of SR 17 (Figure 1.4-1, page 3). The eastern approach would connect the bridge with the Los Gatos Creek Trail. The approach ramp would allow for continued use of the service road. As with the Southern Overcrossing bridge, adjacent rest areas would be provided at each end of the bridge for users to enjoy views, rest, or let others pass. Seating, equestrian mounting blocks, and interpretative signs may be included.

The dimensions of the Northern Overcrossing bridge are shown in Table 1.4-3. The eastern approach ramp between the bridge and ground level would be on approximately six support columns and an abutment with a retaining wall of approximately 205 feet in length and a maximum of 14 feet in height.

Table 1.4-3: Northern Overcrossing Bridge Dimensions

Structure Name	Spans	Width	Length
Northern Overcrossing Bridge	6	16 ft, 0 in	293 ft, 2.5 in

The entire footprint area for the Northern Overcrossing bridge is within Caltrans ROW. Construction and ongoing access would require easements onto lands and facilities of Valley Water and private property.

Northern Overcrossing Trail Connections

The Northern Overcrossing would provide trail access to proposed new trails on the west side of SR 17 and the Los Gatos Creek Trail on the east side. The Build Alternative with Northern Overcrossing would include the following new trails that would be partially within the Caltrans ROW.

- West of SR 17: A roughly 'S' shaped trail would be constructed to connect the Northern Overcrossing with a flat bench that is currently on private property. The private property contains recreational vehicles, water tanks, informal trails, and road cuts that would be used as part of the trail connections from the Northern Overcrossing to existing trails in the El Sereno OSP (discussed further in Section 1.4.3, below). Improved or new trail connections are proposed as part of this project alternative and public access rights would need to be secured. No formal parking for the Northern Overcrossing would be available west of SR 17.
- East of SR 17: The Northern Overcrossing would provide direct access to the Los Gatos Creek Trail. The closest parking would be at the County Park's Lexington Reservoir parking lot near Lenihan Dam and where parking is allowed along certain sections of Alma Bridge Road. The service road along northbound SR 17 would not be available for public parking.

1.4.3 Regional Trail Connections

The project includes new or improved existing trail segments that are outside of the Caltrans ROW. The proposed trail segments would function as multi-use trails for pedestrians, bicyclists, equestrians, and potentially dogs on leash. Unlike the trails included in the Build Alternative with Southern Overcrossing and Build Alternative with Northern Overcrossing, work on these trails would be phased and prioritized based on the availability of funding and the ability to secure access rights from multiple public and private landowners. One trail overcrossing alternative would be selected as part of the project, as described in Section 1.4.2. To ensure connections between the Los Gatos Creek Trail and El Sereno OSP, one of the first regional trail segments to be constructed would connect with the preferred alternative for the trail overcrossing (Trail Nos. 1 and 9 for the Build Alternative with Southern Overcrossing, or Trail No. 2 for the Build Alternative with Northern Overcrossing).

Potential new or improved existing trail connections are described in Table 1.4-4 and shown in Figure 1.4-2. The numbering of trails does not represent order of priority.

Table 1.4-4: Proposed Regional Trail Connections Outside of the Caltrans ROW

Trail No.	Trail Name	Description	Approximate Length (miles)
1	Southern Overcrossing to Serenity Trail (Build Alternative with Southern Overcrossing Only)	Connects the western side of the Southern Overcrossing to the Serenity Trail ^{1,2} in El Sereno OSP	1.15
2	Northern Overcrossing to Serenity Trail (Build Alternative with Northern Overcrossing Only)	Connects the western side of the Northern Overcrossing to the Serenity Trail ^{1,2} in El Sereno OSP	0.86
3	Montevina Ridge Trail to Sanborn County Park	Connects the Montevina Ridge Trail in El Sereno OSP to the John Nicholas Trail ¹ in Sanborn County Park	0.92
4	El Sereno OSP - Future Loop Trail	Connects the Aquinas Trail ^{1,2} to the Serenity Trail ^{1,2} to form a future loop in El Sereno OSP	1.16
5	Manzanita Trail to Limekiln Trail	Connects the Manzanita Trail in St. Joseph's Hill OSP to the Limekiln Trail in Sierra Azul OSP	0.98
6	Jones Trail to Priest Rock Trail	Connects the Jones Trail in St. Joseph's Hill OSP to the Priest Rock Trail ^{1,2} along Alma Bridge Road	0.94
7	Alma Bridge Road to Manzanita Trail	Connects two different locations on Alma Bridge Road in Lexington Reservoir County Park (one near the parking lot on the north side of the reservoir and one farther east) to the Manzanita Trail in St. Joseph's Hill OSP	1.06
8	Los Gatos Creek Trail to Jones Trail	Connects the Los Gatos Creek Trail in Lexington Reservoir County Park to the Jones Trail in St. Joseph's Hill OSP along Alma Bridge Road	0.11
9	Southern Overcrossing to Los Gatos Creek Trail (Build Alternative with Southern Overcrossing Only)	Connects the east side of the Southern Overcrossing to the Los Gatos Creek Trail in Lexington Reservoir County Park	0.21

Notes:

1. Part of the Bay Area Ridge Trail.
2. Part of the Bay Area Ridge Trail and the Juan Bautista de Anza National Historic Trail.

The construction of these new trail segments would help to close east-west gaps in the Ridge Trail and Anza Trail and facilitate connections among other dedicated public lands in the project vicinity. The Ridge Trail and Anza Trail both encompass a series of existing trails that cross multiple land ownerships. In the project vicinity, existing Ridge Trail segments include the Aquinas Trail and Serenity Trail in El Sereno OSP, the John Nicholas Trail in Sanborn County Park, and the Priest Rock Trail in Lexington Reservoir County Park and Sierra Azul OSP. The Aquinas Trail and Serenity Trail in El Sereno OSP and the Priest Rock Trail are also segments of the Anza Trail.

Not all proposed trail segments would be required or therefore constructed; Trail Nos. 1, 2, and 9 are associated with the overcrossing alternatives, and only one would be constructed to achieve the regional trail connection. The final selection will be based on final decisions for the trail bridge crossing and other considerations. Additionally, Trail Nos. 5 and 6 both connect St. Joseph's Hill OSP to Sierra Azul OSP. If Trail No. 5 is constructed, Trail No. 6 would not be necessary and therefore not built, and the Ridge Trail and Anza Trail would be rerouted to the Limekiln Trail in Sierra Azul OSP to connect to St. Joseph's Hill OSP. A final selection of this connection is pending further review of site conditions and constructability considerations. The full range of trail connection possibilities is included in this environmental review to ensure that all possible trail connections are analyzed.

New or improved existing regional trail connections would generally range in width from 4 to 6 feet, have typical grades of up to 8 percent, and have uniform dirt surfaces to the maximum extent feasible. Like the new trails that connect with the Southern Overcrossing and Northern Overcrossing bridges (Section 1.4.2), these trails would meet or exceed USFS National Design Parameters, Trail Class 3, the design standard that is most similar to existing trails in the project area.

Due to steep terrain in some areas both east and west of SR 17, trail grades may be 12 percent or greater, and retaining walls and/or grading could be needed. Trail surfaces may be uneven with rocks, ruts, and roots. In particular, the existing Ridge Trail and Anza Trail both currently follow high-elevation routes and have sections with grades exceeding 20 percent. The Bay Area Ridge Trail Council, which administers the Ridge Trail, promotes trail alignments that are as close as possible to the main ridge of the mountains and hills that ring San Francisco Bay. The National Park Service staff responsible for the Anza Trail program strive to retrace the historic route but prefer trail alignments that have views to the Bay (Midpen 2019 Appendix A), which in the project area are only available at high elevations. Therefore, proposed trails that connect to Ridge Trail or Anza Trail segments (such as Trail Nos. 1-4 and 6 in Table 1.4-4) may require grades far steeper than 12 percent to reach these alignments.

Trail users seeking a less strenuous open space experience are encouraged to explore trails at several other Midpen preserves that may accommodate wheelchairs, strollers, and walkers.²

² More information is available at: <https://www.openspace.org/where-to-go/what-to-do/easy-access-opportunities>.

1.4.4 Design Features of the Build Alternatives

The project would also include the following components.

1.4.4.1 Roadway Work

The project would not change the number of lanes, speed limit, or intersection controls on SR 17 or local roads in the project area. The proposed wildlife undercrossing, trail overcrossing, and directional fencing construction would require modifications to the following: short sections of inside and outside shoulders and pavement, guardrails, and barriers; connections to driveways, side streets, and turnouts; and existing roadway signs.

1.4.4.2 Right-of-Way

The proposed project would require temporary construction, maintenance, and utility easements; access rights or easements; and potential property acquisition from private property owners as well as agencies that have jurisdiction over lands within or adjacent to the project area, including County Parks, Valley Water, San Jose Water, County of Santa Clara Roads and Airports Department, and the Town of Los Gatos. For the Build Alternative with Northern Overcrossing, the trail connection on the west side of SR 17 would connect with a flat bench that is currently on private property, requiring an easement or acquisition. For the Build Alternative with Southern Overcrossing, the trail connection on the west side of SR 17, south of the overcrossing, would cross a drainage area that is currently on property owned by San Jose Water, requiring an easement.

The regional trail connections described in Section 1.4.3 would also require the ability to secure access rights from multiple public and private landowners.

The wildlife undercrossing, wildlife directional fencing, wildlife escape ramps, both trail overcrossing alternatives, seating, equestrian mounting blocks, signage, and interpretive elements would be within the Caltrans ROW. The trail segments that connect the overcrossing alternatives with existing or proposed regional trails would be partially within the Caltrans ROW, as shown in Figure 1.4-1.

1.4.4.3 Utilities

Existing utilities in the project area include overhead Pacific Gas and Electric Company (PG&E) electrical and Frontier communication lines and cell towers, water pipes, and facilities associated with Lexington Reservoir and Lenihan Dam. Both build alternatives would require replacement of existing overhead utility poles as well as proposed fiber optic lines that would be installed before construction of this project to avoid disrupting the utility service.

The project would accommodate the relocation of an existing 12-inch San Jose Water pipeline that crosses SR 17 near Trout Creek and that is proposed to be replaced due to its age and proximity to the proposed construction area. The pipeline relocation is a separate project, and neither the relocation nor the proposed project requires the other to be completed to have independent utility. However, potential construction impacts from the pipeline relocation would be within the anticipated area of disturbance for this project and therefore are assumed as part of the project impacts discussed in Chapters 2 and 3. If the pipeline relocation takes place after completion of the proposed project construction and post-construction restoration in that area, additional environmental analysis may be required.

No reservoir or dam facilities would be affected by the project. However, Valley Water is in the planning stages of a separate project to increase the capacity of the existing reservoir spillway. Midpen, VTA, and Caltrans will continue coordination with Valley Water as both projects proceed.

1.4.4.4 Drainage/Storm Water Treatment

Drainage features in the project area include the Ravine Creek and Trout Creek culverts, other unnamed culverts and drainages, and roadway drainage facilities that outlet to Lexington Reservoir or Los Gatos Creek.

Work in the Caltrans ROW will require use of stormwater Best Management Practices (BMPs) that are designed to prevent debris and pollutants from entering creeks and waterways during the construction and postconstruction phases. The specific BMPs to be used during construction will be included in the mandatory Stormwater Pollution Prevention Plan (SWPPP), which will be prepared by the Contractor as required by the California State Water Resources Control Board. The following are typical temporary BMPs for this type of project:

- Temporary barriers such as sandbags or hay bales will be used to prevent debris/pollutants/invasive plant seeds from entering the creeks.
- No debris, soil, silt, sand, bark, slash, sawdust, cement, concrete, washings, petroleum products, or other material shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into the creeks.
- In-channel work will be restricted to the dry season (April 15 – October 15).

Additional standard water quality measures are included in Section 1.4.6 (PF-WQ-01 through PF-WQ-03).

1.4.4.5 Design Exceptions

Caltrans establishes and supports the consistent application of highway design standards to ensure optimal safety for the traveling public and those who work to

construct, operate, and maintain the State Highway System. Design exceptions are necessary when the proposed design deviates from the standard design features presented in the Caltrans Highway Design Manual.

The project would document existing nonstandard design features in the corridor. Exceptions to design standards are anticipated to be necessary for both existing conditions and for the project because of the mountainous terrain; environmental and geotechnical constraints in the project area; and the presence of Lexington Reservoir, associated water conveyance infrastructure, and other utilities directly adjacent to SR 17.

1.4.4.6 Construction Timing and Duration

Construction of the Build Alternative with Southern Overcrossing or the Build Alternative with Northern Overcrossing is expected to start as soon as early 2027 and take two construction seasons. The actual timing and sequencing of work would depend on available construction funding and the ability to secure property easements, access rights, and potential acquisitions. If project construction is not fully funded or if the right-of-way arrangements described in Section 1.4.4.2 are still in progress, construction could be phased, with the wildlife undercrossing and associated features being constructed first, followed by the regional trail overcrossing and trail connections.

Lane and full highway closures will be required for construction of the wildlife undercrossing and trail overcrossing, as described further below. Full highway closures would be limited to the greatest extent possible, with alternate travel routes provided for motorists during the closures (see further details of anticipated closures below). Emergency access would be maintained at all times.

The following sections provide additional detail about the construction of the major project elements.

Wildlife Undercrossing

Construction of the wildlife undercrossing would take approximately 60 working days and is anticipated to require five stages. During construction, the shoulders of SR 17 would be temporarily reduced or eliminated, and the speed limit would be reduced through the construction area. In the first stage, temporary pavement would be installed along northbound SR 17 to accommodate the shifting of traffic lanes that will occur in subsequent stages while sections of the undercrossing are constructed. This stage would take place during weeknights after peak hours and would require temporary closure of one lane in each direction. The remaining stages would be constructed during weekdays and/or nights and would not require lane closures. In the final stage, the temporary pavement along northbound SR 17 would be removed.

Construction would require the use of excavators and drill rigs. Grading in the form of cuts would be needed on both sides of SR 17 to accommodate construction and

recontour the area around the undercrossing after construction. The need for dewatering Trout Creek is not anticipated, as the undercrossing elevation would be above the creek flowline; however, a temporary work platform may be needed to support equipment and minimize creek intrusion.

If needed, detour routes would be developed during detailed design. Equipment staging areas would be set up behind K-rail.

Existing property owner access would be maintained throughout project construction, although single-night closures may be needed.

Trail Overcrossing

Construction of the Northern Overcrossing would take approximately 150 working days, and construction of the Southern Overcrossing would take approximately 130 working days. Construction would involve the use of excavators, drill rigs, and a crane. The columns (bents) for structures would be constructed behind temporary concrete barriers (K-rail) outside the shoulder areas and would not affect traffic. However, for both overcrossing alternatives, a single nighttime full-highway closure would be required to install the precast girder that would support the bridge structure. The duration of the temporary nighttime closure is anticipated to be approximately six hours. Alternate travel routes would be provided for motorists as part of the Transportation Management Plan, which is described further in Section 1.4.6 (PF-TR-01). Potential detour routes between SR 17 in Los Gatos and SR 1 in Santa Cruz during the short-term full-highway closure are anticipated to include SR 9 and SR 35 in the west, and the combined routes of SR 85, US 101, and SR 152 in the east. The Transportation Management Plan would include several measures to notify local jurisdictions, agencies, neighbors, and the public of road closures and detours and to minimize construction-related delays (Section 1.4.6, PF-TR-01).

Construction of the Northern Overcrossing Alternative or Southern Overcrossing Alternative trails would involve the use of excavators, compactors, and material haulers. The connecting trails would take approximately 100 working days to construct. The trails could be constructed concurrent with or separate from the trail overcrossing.

Regional Trails

Midpen construction staff, County Parks construction staff, and/or contractors would build trails outside the Caltrans ROW using hand tools and small trail construction equipment, including mini-excavators and dozers with approximately 4-foot-wide tracks and larger excavators and dozers with approximately 6- to 8-foot-wide tracks. The size of the equipment would depend on topography and available space. Construction vehicle access and staging could require partial or short-term closures of existing trailheads, trailhead parking areas, or trail segments in Lexington Reservoir County Park, El Sereno OSP, St. Joseph's Hill OSP, and Sierra Azul OSP. As described in Section 1.4.3, trail construction would be phased and prioritized based on the availability of

funding and the ability to secure access rights from multiple public and private landowners. Depending on funding, trail construction could begin prior to or at the same time as construction of the Build Alternative with Northern Overcrossing or the Build Alternative with Southern Overcrossing, or as a future phase of this project. Construction of regional trails outside of the Caltrans ROW would take place intermittently over approximately 5 years.

Trail construction could result in temporary, short-term access delays for vehicles entering and exiting Vulcan Materials Company on Limekiln Canyon Road. No highway lane closures are anticipated for trail construction work.

1.4.4.7 Post-Construction Vegetation Planting and Land Restoration

The project would require tree removal in the Caltrans ROW. Replacement planting and revegetation planting in the Caltrans ROW will be provided in accordance with the standard measures described in Section 1.4.6. Temporarily disturbed areas will be restored to pre-construction conditions within one year of disturbance.

To support local wildland fire resiliency efforts (such as the recently completed SR 17 fuel break), removed non-native trees and plants are not required to be replaced or replanted unless needed to provide slope stability, screening or for other purposes. In those instances, removed trees or plants will be replaced with native vegetation. Replacement trees would be low water use and selected from a list of fire-resistant species that are appropriate for the project area.

Required mitigation planting for native trees in sensitive natural communities will be conducted on-site in accordance with the project's permit requirements, which will be determined during detailed design. The final number of trees to be planted will be determined based on the actual number of tree removals, using replacement ratios set by regulatory agency permits in conjunction with recommendations from local fire agencies, which are equal to or greater than Caltrans standards. If sufficient space is not available to accommodate all required mitigation planting, tree mitigation will also be satisfied through off-site tree planting or other compensatory mitigation under a separate contract funded by Midpen and/or VTA. The off-site mitigation planting plan will be approved in advance in accordance with regulatory agency permit requirements.

Tree avoidance would be prioritized in the construction of improved or new regional trails outside of the Caltrans ROW. Trees outside of the Caltrans ROW that need to be trimmed or removed would comply with Santa Clara County or Town of Los Gatos ordinances as appropriate. Removal of trees or other plantings outside of the Caltrans ROW will be addressed as part of property owner negotiations during the detailed design phase.

1.4.4.8 Post-Construction Effectiveness Monitoring

Monitoring and adaptive management is an important component of all wildlife crossing projects. Developing and implementing a monitoring and adaptive management plan will allow the project team to evaluate the effectiveness of the wildlife crossing, recommend adaptive measures to increase effectiveness, and inform future wildlife crossing projects.

A variety of methods can be used to monitor the effectiveness of wildlife crossings, including infrared cameras, track beds, radiotelemetry of wildlife, genetic tracking, and roadkill studies. Following construction, a monitoring study based on available science and best management practices, lasting a minimum of 5 years, will be conducted by Midpen and Caltrans and their partners using one or a combination of these monitoring methods. The data will be compared to the extensive pre-construction data gathered by Midpen and Caltrans on the number and distribution of collisions between wildlife and motor vehicles that take place on SR 17 between Los Gatos and the Lexington Reservoir as well as from regional mountain lion tracking projects, such as the Santa Cruz Puma Project. The post-construction monitoring study will take into account the importance of long-term studies (15-20 years) required to determine population-level benefits for wide-ranging species such as mountain lions and will consider phasing, cycling, and use of existing and/or future partnerships with state agencies, universities, nongovernmental organizations, and other research organizations.

1.4.5 Use and Management Plan

In accordance with Midpen Board of Directors Policy 4.01, Midpen will prepare a Use and Management (U&M) Plan for the project. Midpen maintains a U&M plan for each of its preserves and updates plans to reflect changes to the preserve such as the acquisition of new lands, and resource and site management needs or improvements that include new parking areas or trails. The updates serve to resolve U&M issues and address the progress of implementing existing plans.

A comprehensive U&M plan will be prepared for the project instead of updating the existing U&M plans for the three preserves where project improvements are proposed (El Sereno, St. Joseph's Hill, and Sierra Azul OSPs). The comprehensive U&M plan will describe existing conditions in the project area, identify long-term operations and maintenance needs for the project, and list subsequent actions related to management of environmental resources and public access infrastructure within the project boundary. The comprehensive U&M plan is subject to public review and approval by the Midpen Board of Directors.

1.4.6 Project Features

This project contains a number of standardized project measures that are employed on most, if not all, Caltrans projects in accordance with standard specifications, state and

federal laws, and anticipated standard environmental permit conditions, and were not developed in response to any specific environmental impact resulting from the proposed project. Standardized project measures for Midpen projects are included where applicable.

Project features are separate from avoidance and/or minimization measures (AMMs) or mitigation measures (MMs), which directly relate to the impacts resulting from the proposed project. AMMs, MMs, and other measures are discussed separately in each environmental section.

A summary of these project features is presented in Table 1.4-5.

Table 1.4-5: Other Project Features

Resource	Feature No.	Description
Traffic and Transportation/ Pedestrian and Bicycle Facilities	PF-TR-01. Transportation Management Plan	<p>During the final design phase, a Transportation Management Plan (TMP) will be prepared in accordance with Caltrans requirements and guidelines to minimize the construction related delays and inconvenience for travelers and recreational users in the project area. The TMP will address the potential traffic impacts as they relate to staged construction, detours, and other traffic handling concerns associated with construction of the proposed project. The TMP will include:</p> <ul style="list-style-type: none"> • Distribution of press releases and other documents as necessary to notify local jurisdictions, agencies, neighbors, and the public of upcoming road closures and detours; • Coordination with CHP and local law enforcement on contingency plans; • Use of portable Changeable Message Signs, CHP Construction Zone Enhanced Enforcement Program, and Freeway Service Patrol where possible to minimize delays. <p>Access will be maintained for emergency response vehicles.</p>
Visual and Aesthetics	PF-VIS-01. Vegetation Preservation	<p>Minimize the removal of native vegetation, including groundcover, shrubs, and mature trees to the maximum extent feasible. Protect trees and existing vegetation outside of the clearing and grubbing limits from the contractor’s operations, equipment, and materials storage. High-visibility temporary fencing will be placed around vegetation to be protected before roadway work begins. No trenching or materials storage will occur within tree driplines.</p>

Resource	Feature No.	Description
Visual and Aesthetics	PF-VIS-02. Replacement Planting	Replacement highway planting and irrigation along with a plant establishment period will be provided for mature trees and vegetation that are damaged and/or removed by the project in accordance with Caltrans Replacement Highway Planting Policy and where safety and maintenance requirements can be met. Replacement planting and the plant establishment period shall be funded from the parent roadway contract and must be under construction within two years of acceptance of the highway contract that damaged or removed the existing planting.
Visual and Aesthetics	PF-VIS-03. Erosion Control	After construction, all areas of disturbed soil within the project limits resulting from construction activities including contractor access, staging, and trenching operations would be treated with appropriate certified weed-free erosion control measures (such as decompaction, mulch, hydroseed, and fiber rolls). All areas of disturbed soil will be reseeded using native grasses and forbs.
Visual and Aesthetics	PF-VIS-04. Construction Staging	Except as detailed in the Contract Plans, construction staging would not occur outside of paved areas. Staging or equipment storage in unpaved areas will provide soil decompaction and erosion control once use of the area is complete.
Visual and Aesthetics	PF-VIS-05. Construction Waste	During construction operations, unsightly materials and equipment in staging areas would be placed where they are less visible and/or covered where possible.
Visual and Aesthetics	PF-VIS-06. Construction Lighting	Construction lighting would be directed toward the immediate vicinity of active work to avoid light trespass through directional lighting, shielding, and other measures as needed.
Cultural Resources	PF-CUL-01. Protocol for Cultural Resource Discoveries	<p>During project construction, if previously unidentified cultural resources are unearthed, all earth-moving activity within and around the immediate discovery area will be halted until a qualified archaeologist can assess the nature and significance of the find.</p> <p>If remains are discovered during excavation, all work within 60 feet of the discovery will halt and Caltrans' Office of Cultural Resource Studies (OCRS) will be called. Caltrans OCRS staff will assess the remains and, if determined human, will contact the County Coroner as per California Public Resources Code (PRC) Sections 5097.98, 5097.99, and Section 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 will assign a</p>

Resource	Feature No.	Description
		Most Likely Descendant. Caltrans will consult with the Most Likely Descendant on treatment and reburial of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.
Hydrology and Water Quality	PF-WQ-01. Temporary Water Quality Best Management Practices (BMPs)	<p>The contractor will adhere to the instructions, protocols, and specifications outlined in the most current Caltrans Construction Site Best Management Practices Manual and Caltrans Standard Specifications. At a minimum, protective measures will include the following:</p> <ul style="list-style-type: none"> • The discharging of pollutants from vehicle and equipment cleaning into storm drains or watercourses will be disallowed. • Storing or servicing vehicles and construction equipment, including fueling, cleaning and maintenance, will be performed at least 50 feet from aquatic habitat unless separated by a topographic or drainage barrier. • Equipment will be maintained to prevent the leakage of vehicle fluids such as gasoline, oils, or solvents, and a spill response plan will be developed. Hazardous materials such as fuels, oils, or solvents, will be stored in sealable containers in a designated location that is at least 50 feet from aquatic habitats. • Concrete wastes and water from curing operations will be collected and disposed of in appropriate washouts at least 50 feet from watercourses. • Temporary stockpiles will be covered. • Coir rolls or straw wattles will be installed along or at the base of slopes during construction to capture sediment. • Graded areas will be protected from erosion using a combination of silt fences, fiber rolls, and erosion control netting (jute or coir), as appropriate.
Hydrology and Water Quality	PF-WQ-02. Permanent Water Quality and Stormwater Treatment	The project design will include permanent BMPs to avoid the potential for project-related stormwater discharges to substantially alter drainage patterns, violate water quality standards, or substantially degrade water quality. Permanent BMPs would include design pollution prevention and treatment strategies such as drainage culvert end devices, in which devices such as flared-end sections, tees, and rock slope protection are placed at culvert outlets to dissipate and disperse runoff.

Resource	Feature No.	Description
Hydrology and Water Quality	PF-WQ-03. Erosion Control and Water Quality for Trail Construction	Trail work outside of the Caltrans ROW will comply with Midpen's design specifications for roads and trails, which identify erosion control and water quality BMPs, including: <ul style="list-style-type: none"> • Minimization of erosion and sedimentation during construction • Elimination of pollution of storm runoff by chemicals and materials used in the construction process • Mulching of exposed mineral soils outside the trail running surface greater than 50 square feet.
Geology and Soils	PF-GEO-01. Geotech Investigations	Additional geotechnical investigations will be performed during final design for any proposed new earthwork or new structure within the project limits, including retaining walls, embankments, bridges, and sound walls. The investigation will address geologic hazards, including ground shaking, liquefaction, cracking, differential compaction, settlement, expansive or corrosive soils, shrink-swell potential, and scour.
Geology and Soils	PF-GEO-02. Seismic Standards	Caltrans' design and construction guidelines incorporate engineering standards that address seismic risks. Project elements will be designed and constructed to meet seismic design requirements for ground shaking and ground motions, as determined for the project vicinity and site conditions.
Geology and Soils	PF-GEO-03. Paleontological Resources	The project's construction contract will include the 2018 Caltrans Standard Specification 14-7.03, which provides for stopping work within a 60-foot radius, securing the area, notifying the resident engineer, and performing further investigation if paleontological resources are encountered during project construction.
Hazards and Hazardous Materials	PF-HAZ-01. Hazardous Materials	The long-term use of the existing roadway facility provides the opportunity for contaminated soils and groundwater to be encountered during project construction. During the final project design phase, a Preliminary Site Investigation will be performed in accordance with current Caltrans guidance to investigate hazardous materials concerns related to soil, groundwater, and building materials within the project limits and will include required measures for managing hazardous materials encountered during project construction. These measures will be incorporated in the final project design and would address the potential adverse effects to human health and the environment (if any) that could result from the disturbance of hazardous materials

Resource	Feature No.	Description
		<p>in order to protect human health and the environment.</p> <p>Anticipated measures include the following as outlined in Caltrans Standard Specifications Section 13-4, Job Site Management and Section 14-11, Hazardous Waste and Contamination:</p> <ul style="list-style-type: none"> • Soils contaminated with aurally deposited lead (ADL) exceeding California hazardous waste thresholds will be managed in accordance with the Department of Toxic Substances Control's 2016 Soil Management Agreement for Aerially Deposited Lead Contaminated Soils and Caltrans Standard Special Provision 14-11.08, Regulated Material Containing Aerially Deposited Lead. • Lead compliance plans for ADL contaminated soils and pavement markings containing lead will be prepared in accordance with the Caltrans Standard Special Provisions and implemented by the project construction contractor(s) to ensure compliance with the California Occupational Safety and Health Administration (Cal/OSHA) worker safety regulations. • Job site perimeter air monitoring will be required when the project work disturbs regulated lead contaminated soils. Air monitoring program requirements will be defined in Standard Special Provision 14-11.08 (Regulated Material Containing Aerially Deposited Lead), Section 14-11.08F (Air Monitoring). • Before any excavation work begins, the contractor will be required to submit a plan for excavating, loading, and transporting contaminated soils, for review and acceptance by the state's resident engineer, as stated in Standard Special Provision 14-11.08, Regulated Material Containing Aerially Deposited Lead, subsection D(3).
Air Quality	PF-AIR-01. Construction Specifications	<p>The project's construction contract will include the 2018 Caltrans Standard Specifications 7-1.02C and 14-9.02. Caltrans Standard Specification 7-1.02C requires contractors to certify that they are aware of and will comply with all California Air Resources Board emissions reduction regulations. Caltrans Standard Specification 14-9.02 requires all work to be performed in accordance with air pollution control rules, regulations, ordinances, and statutes, including those provided in Government Code</p>

Resource	Feature No.	Description
		<p>Section 11017 (California Public Contract Code Section 10231).</p> <p>In addition, the following measures will be included in the construction contract to minimize construction impacts to nearby residences and businesses:</p> <ul style="list-style-type: none"> • Regular vehicle and equipment maintenance; • BMPs to maintain engines and minimize idling of construction equipment to minimize tailpipe emissions; and • Dust control measures, including use of water sprays or other non-toxic dust control methods on unpaved roadways, minimizing vehicle speed while traveling on unpaved surfaces, covering soil stockpiles when practical, and minimizing work during periods of high winds.
Noise	PF-NOI-01. Construction Noise	<p>The Caltrans 2018 Standard Specifications, Section 14-8.02, requires that the Maximum Sound Level not exceed 86 A-weighted decibels at 50 feet from the job site, from 9:00 p.m. to 6:00 a.m. Construction noise control measures would be required of the contractor. These include control measures for equipment and operating hours such as:</p> <ul style="list-style-type: none"> • All construction equipment shall conform to Section 14-8.02, Noise Control, of the latest Standard Specifications. • Noise-generating construction activities shall be restricted to between 7:00 a.m. and 7:00 p.m. on weekdays, with no construction occurring on weekends or holidays (both State and Federal). If work is necessary outside these hours, Caltrans shall require the contractor to implement a construction noise monitoring program and provide additional noise controls where practical and feasible. • All internal-combustion-engine-driven equipment shall be equipped with manufacturer-recommended intake and exhaust mufflers that are in good condition and appropriate for the equipment. • Unnecessary idling of internal combustion engines within 100 feet of residences shall be strictly prohibited. • Noise-generating equipment shall be kept as far as practical from sensitive receptors

Resource	Feature No.	Description
		<p>when sensitive receptors adjoin or are near the construction project area.</p> <ul style="list-style-type: none"> • "Quiet" air compressors and other "quiet" equipment shall be used where such technology exists.
Biological Resources	PF-BIO-01. Environmentally Sensitive Area Delineation	<p>All proposed construction will be limited to the project footprint. Environmentally Sensitive Areas (ESAs) will include areas that support wetlands, waters, and/or habitats including Sensitive Natural Communities, that potentially support listed species and that have been specifically identified as areas to be avoided during construction. ESAs, including wetlands and habitats suitable for sensitive species, will be shown on the project plans. The bid solicitation package special provisions will specify acceptable fencing and/or flagging material and prohibited construction-related activities in these areas. Before construction in or near ESAs, a qualified biologist will delineate them in the field using signage, flagging, fencing, or other site markers as appropriate. The fencing will be removed only when all construction equipment is removed from the site. Contractor encroachment into ESAs will be restricted (including the staging and operation of heavy equipment or the casting of excavation materials).</p>
Biological	PF-BIO-02. Wildlife Exclusion Fencing (WEF) and/or Flagging	<p>Before ground-disturbing activities commence, high-visibility WEF, or a similar type of fencing designed to exclude amphibians and small mammals, will be installed along ESA boundaries to protect special-status animal species and to keep them from entering the project footprint. Maintenance of the fencing and/or flagging shall happen regularly and as requested by the qualified biologist in coordination with the Resident Engineer. Repair and maintenance costs for the fence shall be a bid item in the project contract.</p>
Biological	PF-BIO-03. Site Restoration	<p>All temporarily disturbed areas and staging areas will be cleaned up and recontoured to original grade or designed contours to the maximum extent feasible. All construction-related materials will be removed after construction, site cleanup, and restoration activities are complete. Temporarily impacted areas where non-native vegetation was removed will be revegetated with Santa Cruz Mountain Region native species (preferred) or sterile regreen within one growing season of completion of project activities.</p>
Biological	PF-BIO-04. Post-Construction Planting and Restoration	<p>The project would require tree removal within the Caltrans ROW and on adjacent properties. Removal of trees or other plantings outside the Caltrans ROW</p>

Resource	Feature No.	Description
		<p>will be addressed as part of property owner negotiations during the detailed design phase. Replacement planting within the Caltrans ROW will be provided in accordance with standard Caltrans measures, including the following.</p> <ul style="list-style-type: none"> • To support local wildland fire resiliency efforts (such as the recently completed SR 17 fuel break), removed non-native trees and plants are not required to be replaced or replanted unless needed to provide slope stability, screening, or for other purposes. In those instances, removed trees or plants will be replaced with native vegetation. • Replacement roadway planting and irrigation, along with a minimum 1-year plant establishment period, will be provided in all areas of roadway planting removal consistent with the corridor’s designated State Scenic Highway status and where safety and maintenance requirements can be met. Replacement planting with a minimum 1-year plant establishment period shall be funded from the parent roadway contract and must be under construction within 2 years of acceptance of the roadway contract that damaged or removed the existing native plants. • Required mitigation planting for native trees in sensitive natural communities will be conducted on-site in accordance with the project’s permit requirements, which will be determined during detailed design. The final number of trees to be planted will be determined based on the actual number of tree removals, using replacement ratios set by regulatory agency permits in conjunction with recommendations from local fire agencies, which are equal to or greater than Caltrans standards. If sufficient space is not available to accommodate all required mitigation planting, tree mitigation will also be satisfied through off-site tree planting or other compensatory mitigation under a separate contract funded by Midpen. The off-site mitigation planting plan will be approved in advance in accordance with regulatory agency permit requirements. • After construction, soil areas disturbed from construction activities will be treated with appropriate weed-free erosion control measures, such as hydroseed mixtures with native and/or regionally appropriate species. Temporarily disturbed areas will be restored to their preconstruction conditions within 1 year of disturbance.

Resource	Feature No.	Description
		<ul style="list-style-type: none"> • The removal of native groundcover, shrubs, and mature trees will be minimized to the maximum extent feasible. Existing native vegetation will be protected outside the clearing and grubbing limits from contractor operations, equipment, and materials storage. No trenching or materials storage will occur within tree driplines. • Vegetation to be preserved will be protected with high-visibility markers such as temporary fencing or flagging before construction begins.
Biological	PF-BIO-05. Agency-Approved Biologist(s)	Before initiation of construction, the qualifications of the biological monitor(s) will be submitted to the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW), as appropriate for the respective jurisdictions, for approval. Such approved biologists are hereafter referred to as the agency-approved biologist(s).
Biological	PF-BIO-06. Worker Environmental Awareness Training	Before the onset of construction and within 3 days of any new worker arrival, the qualified biologist, or their designee, will conduct Worker Environmental Awareness Training for all personnel on the project site. At a minimum, the training will include a description of the federally listed and state-listed species and their habitats; the potential occurrence of these species within the project area; an explanation of the status of these species and protection under the Federal Endangered Species Act (FESA), California Endangered Species Act (CESA), and all other federal, state, and local regulatory requirements; the measures to be implemented to conserve listed species and their habitats as they relate to the work site; and boundaries within which construction may occur. A fact sheet conveying this information will be prepared and distributed to all construction crews and project personnel entering the project footprint. On completion of the program, personnel will sign a form stating that they attended the program and understand all the AMMs and implications of the FESA, CESA, and all other federal, state, and local regulatory requirements.
Biological	PF-BIO-07. Biological Monitoring	The qualified biologist(s) will be on-site during initial ground-disturbing activities to conduct biological monitoring. The qualified biologist(s) will keep copies of applicable permits in their possession when on-site. Initial ground-disturbing activities shall be conducted during daylight hours only. Vegetation removal activities will be conducted during daylight hours only.

Resource	Feature No.	Description
		Before any initial ground-disturbing activity, the qualified biologist(s) will conduct work site surveys for the presence of special-status plant and animal species no less than 48 hours before the start of work.
Biological	PF-BIO-08. Stop Work Authority	Through the Resident Engineer or their designee, the qualified biologist(s) shall have the authority to stop project activities that may result in the unauthorized take of special status species or if they determine that any permit requirements are not fully implemented. If the qualified biologist(s) exercises this authority, the appropriate resource regulatory agencies shall be notified by telephone and email within one (1) working day.
Biological	PF-BIO-09. Staging Areas	Vehicle and equipment staging will be restricted to the areas reviewed, analyzed, and considered during the environmental review process.
Biological	PF-BIO-10. Construction Site Best Management	The following site restrictions will be implemented to avoid or minimize potential effects on listed species and their habitats, pursuant to Caltrans Standard Specifications and Special Provisions. Speed Limit. Vehicles will not exceed 15 miles per hour in the project footprint, to reduce dust and excessive soil disturbance. Trash Control. Food and food-related trash items will be secured in sealed trash containers and removed from the site at the end of each day. Pets. Pets will be prohibited from entering the project limits during construction. Firearms. Firearms will be prohibited within the project limits, except for those carried by authorized security personnel or local, state, or federal law enforcement officials.
Biological	PF-BIO-11. Tree Protection	Only trees that require removal will be removed. Whenever possible, trees will be trimmed rather than removed. Retained trees will be safeguarded during construction through the following measures: <ul style="list-style-type: none"> • Protected trees will be fenced around the drip line to limit construction impacts on the root zone. • No construction equipment, vehicles, or materials will be stored, parked, or staged within the tree dripline. Work will not be performed within the dripline of the remaining trees without consultation with the qualified biologist(s). If trees are damaged during construction and become unhealthy or die, the damaged tree(s) will be removed and replaced.
Biological	PF-BIO-12. Invasive Plant Control	Within the Caltrans ROW, noxious weeds will be controlled at the project construction site in accordance with Caltrans Highway Design Manual Topic 110.5, "Control of Noxious Weeds – Exotic

Resource	Feature No.	Description
		<p>and Invasive Species” and Executive Order (EO) 13112 (Invasive Species) and by methods approved by a Caltrans landscape architect or vegetation control specialist.</p> <p>To minimize the spread of non-native invasive plants (NNIPs), any borrow material, erosion-control material (i.e., fiber rolls), and seed mixtures for erosion control will meet the following Caltrans (2018) specifications as they relate to NNIP species, including:</p> <ul style="list-style-type: none"> • Fiber roll must be a premanufactured and roll-filled with rice or wheat straw, wood excelsior, or coconut fiber. Fiber roll must be covered with biodegradable jute, sisal, or coir fiber netting secured tightly at each end. Fiber rolls must be certified to be free of prohibited noxious weeds (those Rated “A” by California Department of Food and Agriculture [CDFA]). • Imported topsoil must be free from deleterious substances such as litter, refuse, toxic waste, stones larger than 1 inch in size, coarse sand, heavy or stiff clay, brush, sticks, grasses, roots, noxious weed seed, weeds, pathogens, and other substances detrimental to plant, animal, and human health. • Seed must not contain any prohibited noxious weed seed, or more than 1.0 percent total weed seed by weight. • All equipment brought into work areas will be free of soil and plant matter. <p>In work areas where CDFA-listed noxious weeds or California Invasive Plant Council Moderate- or High-Rated NNIP species occur in fruit or flower and may spread seed because of the project, these NNIP species will be removed to an approved off-site disposal location.</p>
Biological	PF-BIO-13. Erosion Control Matting	Plastic monofilament netting or similar material will not be used. Acceptable substitutes would include coconut coir matting or tackifying hydroseeding compounds. Erosion control matting should be certified weed-free.
Biological	PF-BIO-14. Light restrictions	Construction personnel will turn portable tower lights on no more than 30 minutes before the beginning of civil twilight, and off no more than 30 minutes after the end of civil sunrise. Portable tower lights will have directional shields attached to them, and personnel will only direct lights downward and toward active construction and staging areas. Lighting per portable tower light will not exceed 2,000 lumens.

Resource	Feature No.	Description
Biological	PF-BIO-15. Wildlife Entrapment Prevention	<p>To prevent inadvertent entrapment of special-status animal species during construction, excavated steep-walled holes or trenches more than 1 foot deep will be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earthen fill or wooden planks at an angle of no more than 30 degrees. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals. If at any time a trapped animal is discovered, the qualified biologist(s) will be contacted, and they or their designee will immediately place escape ramps or other appropriate structures to allow the animal to escape, or USFWS and/or CDFW will be contacted by telephone for guidance as appropriate.</p> <p>All construction pipes, culverts, or similar structures less than 12 inches in diameter will be closed, capped, or covered upon entry to the project site. All similar structures greater than 12 inches must be inspected before they are subsequently moved, capped and/or buried. If a special-status species is discovered inside a pipe, the individual shall be allowed to leave of its own volition.</p>
Wildfire	PF-WF-01. Project Features for Minimizing Fire Risks	<p>BMPs would be incorporated, such as clearing vegetation from the work area, prohibiting the use of highly flammable chemicals, following locally changing meteorological conditions, and maintaining awareness of the possibility of increased fire danger during the time work is in progress.</p>

1.5 TRANSPORTATION SYSTEM MANAGEMENT, TRANSPORTATION DEMAND MANAGEMENT, AND MASS TRANSIT ALTERNATIVES

Transportation System Management (TSM) strategies increase the efficiency of existing facilities and are actions that increase the number of vehicle trips a facility can carry without increasing the number of through lanes. Transportation Demand Management (TDM) focuses on regional means of reducing the number of vehicle trips and vehicle miles traveled as well as increasing vehicle occupancy. Mass transit alternatives are to be considered for all proposed major highway projects in urban areas with populations of over 200,000.

TSM, TDM, and mass transit alternatives were not analyzed because they were determined not to be relevant to the purpose of this project. The proposed project would not restrict the consideration of separate options or projects for TSM, TDM, and/or mass transit in the project limits.

1.6 ESTIMATED PROJECT COST AND FUNDING

The current preliminary total cost estimate, including the support cost for the project, is approximately \$43.0 million for the Build Alternative with Southern Overcrossing and approximately \$38.4 million for the Build Alternative with Northern Overcrossing. The estimated total current project funding is \$37.55 million. The project currently has \$7 million in state funding, \$1.05 million in private funding, and \$0.5 million in federal funding. Midpen anticipates providing approximately \$14 million in Midpen Measure AA bond funds for construction costs, in addition to securing \$15 million in additional external grant funding from local, state, federal and private sources.

1.7 NO BUILD ALTERNATIVE

With the No Build Alternative, the existing configuration of SR 17 and culverts and trails in the project area would remain. Routine maintenance and vegetation management in the Caltrans ROW would continue. The wildlife undercrossing, trail overcrossing, and additional trail segments associated with the trail overcrossing to connect the multiple parks and preserves and close gaps in local, regional, and national trail systems would not be constructed.

1.8 FINAL DECISION MAKING PROCESS

Caltrans, Midpen, and VTA staff comprise the Project Development Team (PDT) for the proposed project. The PDT has met regularly to review the project status, address issues as they arise, share information and feedback, and coordinate on overall direction throughout the project development process. PDT meetings began in August

2020 and will continue to be held through the remainder of the environmental and project approval process. PDT staff represent a wide range of expertise, including design, environmental, ROW, and project management.

After the public circulation period for this environmental document, all comments will be considered, and the PDT will select a preferred alternative and make the final determination of the project's effect on the environment. Under CEQA, if no unmitigable significant adverse impacts are identified, the Midpen Board of Directors will consider approval of a Mitigated ND and Mitigation Monitoring and Reporting Plan (MMRP).

Similarly, if Caltrans, as assigned by FHWA, determines the NEPA action does not significantly impact the environment, Caltrans will issue a Finding of No Significant Impact (FONSI).

1.9 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER DISCUSSION

The following alternatives were considered and analyzed during the project initiation phase and early stages of the project approval and environmental document (PA&ED) phase.

1.9.1 PSR-PDS Alternatives

Five alternative crossing locations and eight configurations were considered in the Caltrans 2020 Project Study Report-Project Development Support (PSR-PDS; Caltrans 2020a). The alternatives were as follows:

1. A wildlife undercrossing near the existing Ravine Culvert, PM 5.1
2. A wildlife undercrossing near the existing Trout Creek Culvert, PM 5
3. A combined wildlife and trail overcrossing near the existing San Jose Water tanks and treatment facilities, PM 4.8
- 3A. A trail overcrossing near the existing San Jose Water tanks and treatment facilities, PM 4.8
4. A combined wildlife and trail undercrossing between Montevina Road and Alma Bridge Road, PM 4.6
- 4A. A trail undercrossing between Montevina Road and Alma Bridge Road, PM 4.6
5. A combined wildlife and trail overcrossing at a service road on-ramp, PM 5.25
- 5A. A trail overcrossing at a service road on-ramp, PM 5.25

Alternatives 2, 3a, and 5a have been advanced for consideration in this environmental document. The Build Alternative with Southern Overcrossing includes PSR-PDS Alternatives 2 and 3a, and the Build Alternative with Northern Overcrossing includes PSR-PDS Alternatives 2 and 5a. The other alternatives listed above and shown in Figure 1.9-1 were ultimately rejected and withdrawn from further study. An explanation of these other alternatives is provided below following the map.

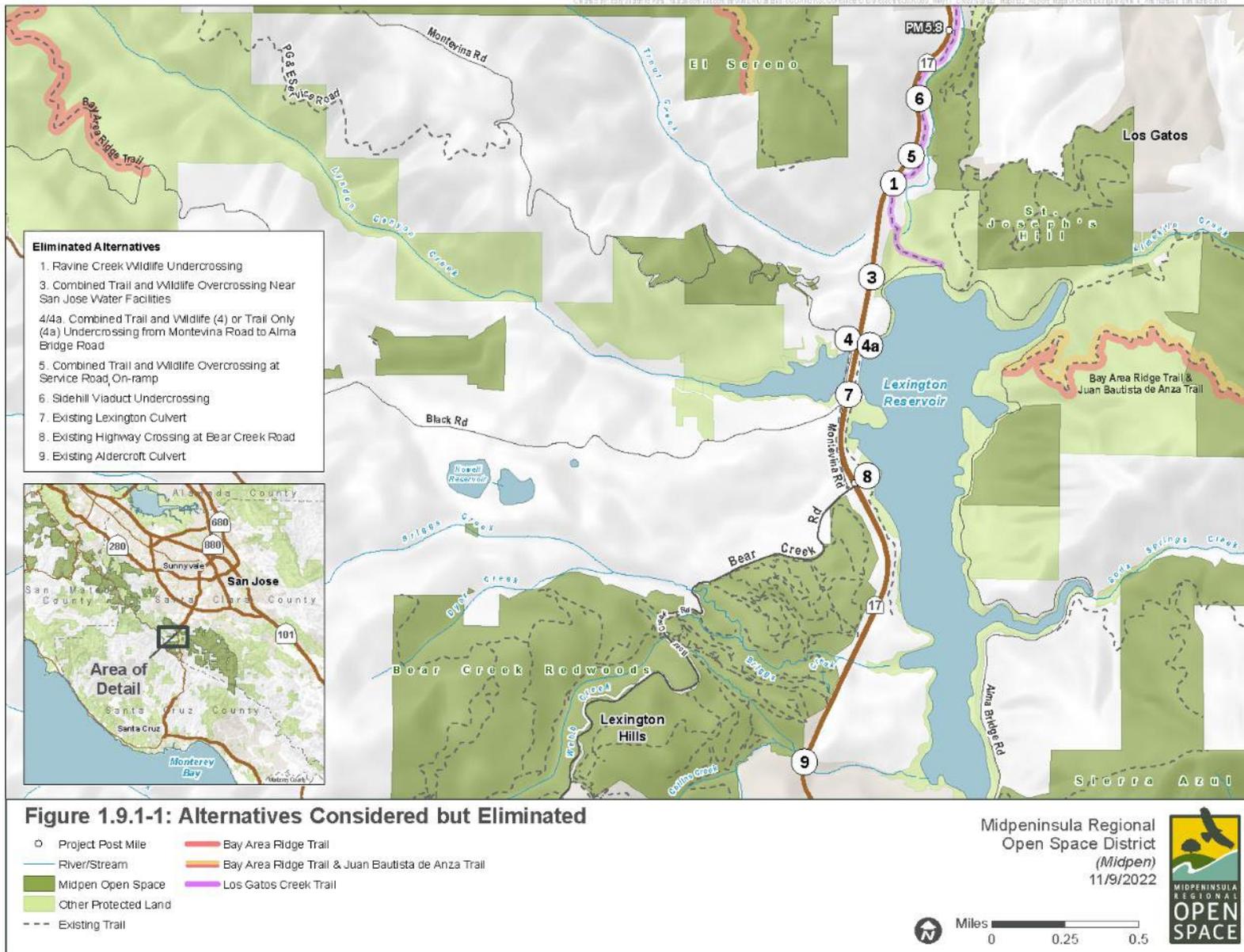


Figure 1.9-1: Alternatives Considered but Eliminated

Highway 17 Wildlife and Regional Trail Crossings and Trail Connections Project
Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment

1.9.1.1 PSR-PDS Alternative 1

PSR-PDS Alternative 1 was a wildlife undercrossing near the existing Ravine Creek culvert. Preliminary topographic data used during the PSR-PDS phase showed adequate slopes on the west side of SR 17 to accommodate a crossing with the 12 feet of vertical clearance necessary for use by the target species (mountain lion and deer). This target crossing height is based on recommendations from wildlife crossing researchers (Midpen 2019, Appendix A) and FHWA guidance (FHWA 2011). However, more detailed topographic data collected during the PA&ED phase indicated there is actually insufficient depth on the west side of SR 17 to accommodate the vertical clearance needed for the wildlife undercrossing.

Additional grading of the western slope and shifting the crossing location were also considered but deemed infeasible. Extensive grading would be required on the west side of SR 17 to achieve sufficient height for the undercrossing. The cut slope in this area is approximately 500 feet high, and grading would create extensive ground disturbance and associated environmental impacts. The excavation could affect the geological stability of the western slope, creating potential public safety issues. Additional grading would also have prohibitively high construction costs.

Shifting Alternative 1 to the north could provide approximately 5 feet of additional depth to accommodate the needed 12 feet of vertical clearance for the wildlife undercrossing. However, this location would place the wildlife undercrossing at the flow line of Ravine Creek, causing it to function as a drainage culvert. Stormwater movement through and/or flooding of the new undercrossing would render Alternative 1 ineffective for use as a wildlife crossing. In addition, it would cause stormwater to discharge onto the Los Gatos Creek Trail, which runs parallel to and just below northbound SR 17.

Due to these factors, this alternative was determined to be infeasible, and would not meet the purpose and need of the project.

1.9.1.2 PSR-PDS Alternatives 3 (separate from Alternate 3a) and 5

PSR-PDS Alternative 3 proposed a combined trail and wildlife crossing in the location of the current trail-only Southern Overcrossing. PSR-PDS Alternative 5 proposed a combined trail and wildlife crossing in the location of the current trail-only Northern Overcrossing.

While feasible, crossings that are shared by wildlife and humans have different objectives: one to facilitate use by wildlife and the other to facilitate use by regional trail users. Analysis completed for the Revised Alternatives Report (Midpen 2019) concluded that two separate wildlife and trail crossing structures are preferable to a single shared crossing to “provide the most opportunity for unimpaired wildlife passage across the landscape with limited human interaction.” Public feedback indicated that separate crossings are preferred as they are perceived to be safer and more effective.

Recent research shows that mountain lions flee when exposed to human voices (Smith, Suraci, and Clinchy et al., 2017), indicating that a crossing structure shared with recreational trail users may deter wildlife use. Additionally, artificial lighting required on a structure designed for use by humans can cause individual wildlife to leave an illuminated area for a darker refuge, deterring wildlife use of a shared structure even when humans are not present (due to the presence of artificial lighting at night) (Midpen 2019).

Finally, the cost for two separate structures was found to be comparable to the cost for a single shared crossing. Having separate crossings was also supported by project partners, including CDFW, Bay Area Ridge Trail Council, County Parks, VTA, and the public, based on extensive agency review and public input.

1.9.1.3 PSR-PDS Alternative 4/4a

PSR-PDS Alternative 4 proposed a combined trail and wildlife undercrossing between Montevina Road and Alma Bridge Road, and PSR-PDS Alternative 4a proposed a trail-only undercrossing at the same location. Alternatives 4/4a presented substantial drainage challenges due to the need for either a drain and culvert on the west side of the crossing or lowering of the trail and berm on the east side of the crossing to allow westerly drainage into Lexington Reservoir. Additionally, Alternatives 4/4a required the longest trail connections to link the crossing to the surrounding trail network, and the most complex trails to design and build. A crossing in this location would require substantial modifications to Alma Bridge Road, including a cantilevered section of trail suspended over the Lexington Reservoir and a bridge crossing the spillway of Lenihan Dam. Valley Water indicated that alternatives that require construction along the reservoir shoreline, crossing the spillway, and/or construction on the dam may impact reservoir operations, maintenance, water quality, and dam and spillway improvements. Alternatives 4/4a were not advanced due to the drainage, trail connections, and lack of partner support issues associated with a crossing in this location. Finally, a combined trail and wildlife crossing would have the same disadvantages for wildlife use described for PSR-PDS Alternatives 3 and 5 above.

1.9.2 Other Alternatives

The Revised Alternatives Report (Midpen 2019) also discussed four additional alternatives that were rejected and not advanced for consideration in the PSR-PDS. These alternatives are in addition to those listed in Section 1.9.1.

1.9.2.1 Alternative 6: Sidehill Viaduct Undercrossing

Proposed by a member of the public at a 2016 workshop, Alternative 6 would construct an undercrossing at the existing sidehill viaduct along northbound SR 17. The viaduct is an approximately 100-foot-long structure that cantilevers out along the steep hill,

supporting and carrying most of the highway width. The viaduct is north of the proposed Northern Overcrossing and is immediately adjacent to a major San Jose Water pipeline and the Los Gatos Creek Trail. The alternative was determined infeasible because of extreme construction access and design constraints, and potential impacts on the viaduct supports. Caltrans found that this alternative would have fatal flaws, defined as “a non-standard design that cannot be approved, or having operational or safety concerns that are unacceptable.” San Jose Water also noted that construction in this area could limit access to critical water infrastructure, and potentially require casing if the viaduct water pipe needed to be buried.

1.9.2.2 Alternative 7: Existing Lexington Culvert

The existing 10-foot-diameter Lexington culvert located near Black Road could be improved to serve small wildlife. However, this alternative was eliminated early in the process due to the hydrologic conditions of the culvert, and because it is too small to serve the needs of larger animal species (mountain lion and deer). The culvert is not suitable for use as either a year-round trail crossing or a new undercrossing because it functions as a cross drain and carries high water flow between the main body and western arm of Lexington Reservoir. Additionally, the location of this alternative is well south of the desired crossing area for both target wildlife species and existing trail connections. Due to these factors, this alternative was determined to be infeasible, and would not meet the purpose and need of the project.

1.9.2.3 Alternative 8: Existing Highway Crossing at Bear Creek Road

The Bear Creek Road interchange along SR 17, which is approximately at the southern PM limits of the proposed project, was constructed in the late 1990s. The interchange includes an overcrossing bridge that connects to northbound and southbound SR 17, Montevina Road to the west, and Old Santa Cruz Highway to the east. The overcrossing has three 12-foot vehicular lanes (two eastbound and one westbound) with 4-foot striped shoulders on each side. The north side of the overcrossing has an 8-foot sidewalk with a 44-inch-high concrete barrier topped by a 6-foot-high mesh fence. The south side of the overcrossing has no sidewalk.

The Bear Creek Road existing overcrossing was determined to be unsuitable as a wildlife crossing because it has too much pavement and vehicle traffic to attract or accommodate wildlife. The location of the overcrossing was also determined to be too far south to serve as an east-west Ridge Trail connection, an important need of the proposed project. As the overcrossing would not be an effective wildlife crossing or Ridge Trail connection, and other feasible trail crossing options exist, this alternative was determined to not meet the purpose and need of the project.

However, improvements to pedestrian, bicycle, and equestrian facilities at the interchange are planned as part of another Midpen project. The Northeast Trailhead Crossing Project would construct a new multi-use trail connection between Bear Creek

Redwoods OSP and Bear Creek Road just west of Montevina Road and the southbound off-ramp; a staircase between the trail and Bear Creek Road; and curb ramps, additional and modified crosswalks, and modified intersection and roadway striping and signage throughout the interchange area. As such, improvements to the Bear Creek Road interchange area are assumed as part of the No Build Alternative.

1.9.2.4 Alternative 9: Existing Aldercroft Culvert

The existing Aldercroft Creek culvert is located approximately 1 mile south of the Bear Creek Road overcrossing. The arched concrete culvert is up to approximately 11 feet wide at the flared ends by 11.5 feet tall and approximately 100 feet long. With improvements, this culvert could support small- to medium-sized wildlife, but the culvert's primary purpose is for drainage, and it is subject to inundation during wet periods. Due to its narrow dimensions and concrete bottom, it would not facilitate routine crossing by the target wildlife (mountain lions and deer). Additionally, the site is approximately 2 miles south of the roadkill hotspot, and thus fails to meet a crucial project objective in providing crossing opportunities. This alternative was determined to not meet the purpose and need of the project.

1.9.3 PA&ED Southern Overcrossing Trail Option

Early in PA&ED, two trail alignment options were considered to connect the Southern Overcrossing with Montevina Road. Both trail options would provide access to an existing Lexington Reservoir County Park trail along the west side of Montevina Road, neighborhoods to the west of SR 17, and Bear Creek Redwoods OSP via Bear Creek Road.

West of the Southern Overcrossing, both options would head south through a forested area and emerge onto a mostly grassland-covered slope or bench. Option 1 (now part of the Build Alternative with Southern Overcrossing) would traverse the steep slope west of southbound SR 17 in a generally straight line (see Figure 1.9-2, brown lines). Option 2 was explored to take advantage of a flat bench area above and farther west of southbound SR 17 than Option 1, to provide trail users with greater separation from sights and sounds of highway traffic. Due to steep slopes, the trail would require multiple switchbacks in order to ascend to and descend from the flat area (see Figure 1.9-2, red lines). Without the switchbacks, the trail would be too steep for most trail users, particularly those on bikes and horseback.



Figure 1.9-2: Southern Overcrossing Option 2 (Eliminated)

- Project Layout**
- Southern Overcrossing Alternative Bridge
 - Southern Overcrossing Alternative Trail
 - ▲ Retaining Wall
 - Lookout/Queueing Area
 - Option 2 (Eliminated)
 - Caltrans Right of Way

Midpeninsula Regional
Open Space District
(Midpen)
9/13/2023



While the District strives to use the best available digital data, these data do not represent a legal survey and are merely a graphic illustration of geographic features.

Figure 1.9-2: Southern Overcrossing Option 2 (Eliminated)
Highway 17 Wildlife and Regional Trail Crossings and Trail Connections Project
Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment

While Option 2 would offer trail users with overall greater separation from SR 17 than Option 1, Option 2 would have several disadvantages. The multiple switchbacks would require numerous retaining walls and substantially more earthwork than Option 1. The sharp turns on the Option 2 switchbacks could reduce visibility for trail users and contribute to conflicts among pedestrians, cyclists, and equestrians. Placing the trail and retaining walls along steep slopes would result in additional construction and ongoing maintenance costs that Option 1 would not require.

Option 2 would also result in more environmental impacts than Option 1. The Option 2 switchbacks would add visual clutter on the hillside above Montevina Road, which the Option 1 alignment would avoid. Since Option 2 would be higher in elevation than the Option 1 trail, it would be visible to a greater number of homes as well as to travelers on northbound SR 17, Montevina Road (particularly in the northbound direction), El Corto Lane, the eastern terminus of Black Road, and the western terminus of Alma Bridge Road. The larger footprint of Option 2 would require additional right-of-way acquisition or easement from Santa Clara County and result in more permanent and temporary impacts to riparian habitat and Waters of the U.S. and State than Option 1.

For these reasons, Option 2 was determined to be infeasible, and would not meet the purpose and need of the project.

1.10 PERMITS AND APPROVALS NEEDED

If the project is approved as part of the process described in Section 1.8, the permits and approvals shown in Table 1-10.1 would be required for project construction. In addition, agreements may be needed with Midpen, Caltrans, VTA, Valley Water, San Jose Water, County Parks, the Santa Clara County Road and Airports Department, and private property owners.

Table 1.10-1: Permits and Approvals Needed

Agency	Permit, Authorization, or Agreement	Timing and Status
U.S. Army Corps of Engineers (USACE)	Concurrence on delineation of waters of the U.S.; Section 404 permit for placement of fill within waters of the U.S.	<ul style="list-style-type: none"> • The Aquatic Resource Delineation will be submitted to USACE for concurrence before the project design phase. • A permit application will be submitted during the project design phase.
United States Fish and Wildlife Service (USFWS)	Biological Opinion	<ul style="list-style-type: none"> • A Biological Assessment will be submitted to the USFWS before the project design phase.
California Department of Fish and Wildlife (CDFW)	Section 1602 Lake and Streambed Alteration Agreement	<ul style="list-style-type: none"> • A permit application will be submitted during the project design phase.

Agency	Permit, Authorization, or Agreement	Timing and Status
San Francisco Bay Regional Water Quality Control Board (RWQCB)	Waste discharge requirements (WDRs) under the Porter Cologne Water Quality Control Act; National Pollutant Discharge Elimination System (NPDES) approval for work greater than one acre	<ul style="list-style-type: none"> • A joint "Application for 401 Water Quality Certification" and/or "Report of Waste Discharge" will be submitted during the project design phase. • An NPDES permit application will be submitted during the project design phase. • A Notice of Intent and SWPPP will be prepared/submitted before construction.

Chapter 2 Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

2.1 TOPICS CONSIDERED BUT DETERMINED NOT TO BE RELEVANT

As part of the scoping and environmental analysis carried out for the project, the environmental issues described in Table 2.1-1 were considered but no adverse impacts were identified. As a result, there is no further discussion about these issues in this document.

Table 2.1-1: Resource Topics Dismissed from Analysis

Resource	Rationale for Dismissal
Coastal Zone	The project is not located within the coastal zone or Bay Conservation and Development Commission jurisdiction; therefore, no coastal zone areas would be affected.
Wild and Scenic Rivers	No wild and scenic rivers are located in or adjacent to the project area; therefore, no wild and scenic rivers would be affected.
Farmlands/Timberlands	The project area does not contain any lands designated as Important Farmland (i.e., Prime Farmland, Unique Farmland, or Farmland of Statewide Importance) (California Department of Conservation 2018). There are no Williamson Act contracts associated with the project area (Santa Clara County 2022a). The project area includes areas zoned as HS-Hillsides, in which agriculture, wood cutting, and commercial timber harvest land uses are permitted on lands dedicated as permanent private open space (Santa Clara County 2022b). However, neither build alternative would affect known agricultural uses. Outdoor recreation, such as the regional trail component of the project, is a permitted land use for the HS-Hillsides zoning designation.
Community Character and Cohesion	The project would not change existing community boundaries, physically divide an established community, or affect population, housing, or the regional or local economy.
Growth	The project would improve connectivity for local and regional trails, but would not include infrastructure that would support or encourage future development or intensification. Additionally, much of the project area is designated as open space, precluding future development or intensification.

Resource	Rationale for Dismissal
Environmental Justice	<p>U.S. Census Bureau data was used to determine if there are minority or low-income populations in the project area. As suggested by the Council on Environmental Quality, communities requiring consideration as potential environmental justice communities of concern are defined as U.S. Census Block Groups meeting either of the following criteria:</p> <ul style="list-style-type: none"> • The Census Tract Block Group contained 50 percent or more minority or low-income population; or • The percentage of minority or low-income population in any Census Tract Block Group was more than 10 percentage points greater than the average in the city and/or county in which the Census Tract Block Group is located. <p>The following five U.S. Census Block Groups were studied for the project:</p> <ul style="list-style-type: none"> • Census Tract 5070.02, Block Group 2 • Census Tract 5070.03, Block Group 1 and 2 • Census Tract 5118, Block Groups 1 and 3 <p>No minority or low-income populations that would be adversely affected by the proposed project have been identified as determined above. Therefore, this project is not subject to the provisions of Executive Order 12898.</p>
Equity	<p>Executive Order 13985 (January 20, 2021) "Advancing Racial Equity and Support for Underserved Communities Through the Federal Government," introduced statutory requirements for equity analysis in project development. The term "equity" means the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities.</p> <p>In addition to the U.S. Census data that was analyzed for Environmental Justice, the California Office of Environmental Health Hazard Assessment's CalEnviroScreen 4.0 tool was used to identify potential underserved communities (OEHHA 2021). No underserved communities were identified in or adjacent to the project area. Additionally, the project would provide new trail infrastructure that would equitably benefit all members of the surrounding community.</p>
Mineral Resources	<p>One quarry is in operation to the east of the project area: the Vulcan Materials Company Lexington Quarry at 18500 Limekiln Canyon Road, Los Gatos, CA 95033. The quarry is used to produce construction aggregate materials including gravel and stone. The closest proposed project feature (the Manzanita Trail to Limekiln Trail, Trail No. 5) would be approximately 0.4 mile west of the quarry. No project features would be within designated mineral resource zones (California Department of Conservation 1987, 1996).</p>
Energy	<p>The project would not increase motor vehicle capacity or result in operational direct energy usage (i.e., energy used by vehicles burning fossil fuels). The project would require a one-time direct expenditure of energy for construction, typical for any infrastructure project. Energy consumption during construction would be conserved and minimized to the maximum extent feasible. The construction contractor would have a financial disincentive to use excess fuel, and emissions regulations (Title 13, Section 2485 of California Code of Regulations [CCR]) limit the idling time of diesel construction equipment to five minutes.</p>

2.2 HUMAN ENVIRONMENT

2.2.1 Existing and Future Land Use

2.2.1.1 Affected Environment

Existing Land Use

The proposed project would be constructed within the Caltrans ROW along SR 17 and areas within the jurisdictions of the Town of Los Gatos and unincorporated Santa Clara County. Figure 2.2.1-1 below shows the jurisdictional boundaries, also known as spheres of influence, for the Town of Los Gatos and the County of Santa Clara.

Existing land uses in the project area include transportation (the Caltrans ROW and local roads), open space/recreational, residential, and utility services (water supply and management). A quarry and some agricultural uses, including a vineyard, are also in the project vicinity.

The Los Gatos General Plan Land Use Element designates the area of the project that lies within Los Gatos as open space and hillside residential (Town of Los Gatos 2022a). Open space areas are discussed further in Section 2.2.3. Hillside residential areas are identified as having no more than one dwelling unit per acre.

According to the Santa Clara County General Plan Land Use Map for unincorporated lands, areas of the project that lie within unincorporated Santa Clara County fall within three types of resource conservation areas – hillsides, existing regional parks, and other public open lands (Santa Clara County Planning and Development Department 2023a). Resource conservation areas are delineated as such in order to separate them from urban areas and protect important natural resources. Hillside areas generally have a residential density of one dwelling unit per 160 acres, although “clustered” residences can have an average of one dwelling unit per 20 acres. Other public open lands are owned by various public agencies for open space purposes other than public parks and general recreational use (Santa Clara County 1994).

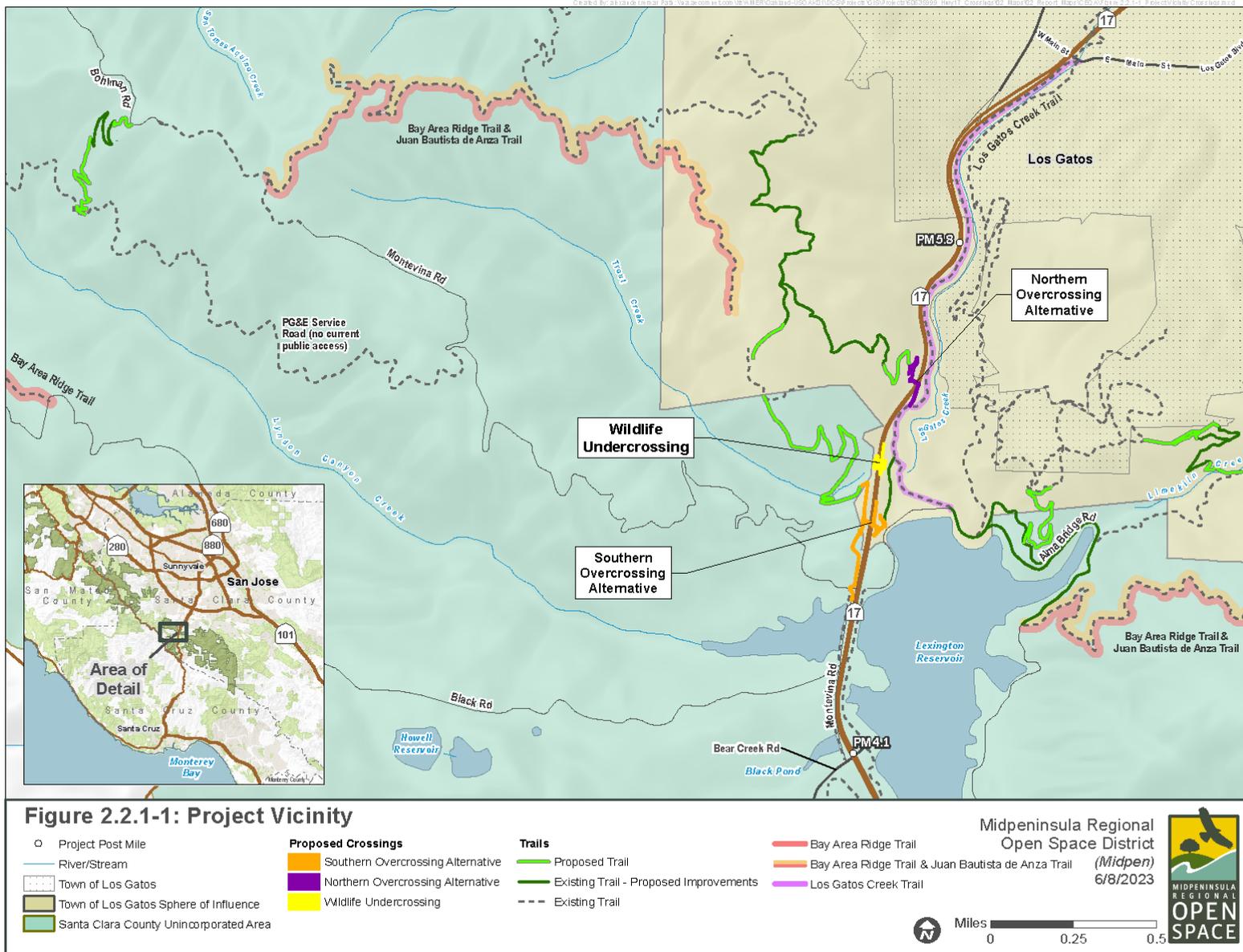


Figure 2.2.1-1: Spheres of Influence in the Project Vicinity

Development Trends and Future Land Use

Outside of the Caltrans ROW, land uses in the project area restrict commercial, residential, or industrial development. As a result, development trends focus on recreation, conservation, public infrastructure, and transportation improvements. As described in Table 2.2.1-1 below, the majority of current and planned projects are proposed by public agencies, including Midpen, San Jose Water, Caltrans, and others. However, there are some nearby private developments, which appear to be primarily additions or modifications to residences on lands designated as hillside residential.

Table 2.2.1-1. Public and Private Developments within Approximately 1 Mile of the Project Area

Name	Location	Project Description	Status
Midpen Northeast Trailhead Crossing Project	Between Bear Creek Redwoods OSP and Bear Creek Road	This project would construct a new multi-use trail connection between Bear Creek Redwoods OSP and Bear Creek Road just west of Montevina Road and the southbound off-ramp; a staircase between the trail and Bear Creek Road; and curb ramps, additional and modified crosswalks, and modified intersection and roadway striping and signage throughout the interchange area.	Future project
Midpen Bear Creek Redwoods OSP North Parking Area Project	Bear Creek Redwoods OSP on the south side of Bear Creek Road, approximately 600 feet east of the Bear Creek Stables gate	This project would construct a new approximately 50-car and 8-horse trailer parking area to serve Bear Creek Redwoods OSP and connect to the future multi-use trail.	Future Project
Midpen Beatty Parking Area and Trail Connections	Beatty Parking Area/Sierra Azul Open Space Preserve on Alma Bridge Road, east of the Miller Point Parking Area	This project is intended to develop public access and parking in the Cathedral Oaks area of Sierra Azul Open Space Preserve, as fulfillment of the Beatty Trust Property Conservation Easement agreement with the County of Santa Clara.	On Hold
Midpen Bear Creek Stables Repair	Bear Creek Redwoods Open Space Preserve	Maintenance and repairs to continue to allow equestrian use, including water infrastructure improvements.	Ongoing
Midpen Bear Creek Redwoods Culvert Repair	Bear Creek Redwoods Open Space Preserve	Midpen will make repairs to the underlying culvert beneath the existing parking lot at Bear Creek Redwoods Open Space Preserve.	Future project
Caltrans/SR 17 Capital Preventative Maintenance Project (EA 04-1J970)	SR 17 from PM 2.8 to 13.9, 0.1 mile north of Hebard Way to the junction with the SR 17/I-280/I-880 interchange in Santa Clara County	Infrastructure improvements, including the following: repaving SR 17; improving or replacing drainage inlets, existing pipes, and culverts at 162 locations; replacing concrete slabs; modifying traffic signals; replacing guardrails; installing rumble strips; addressing minor concrete settlement issues; and cleaning and rehabilitating drainage systems.	Ongoing – construction anticipated to be completed in 2024

Name	Location	Project Description	Status
California Department of Technology (CTD) and Caltrans/ Middle Mile Broadband Network Project (EA 04-1Y410)	SR 17 from Santa Cruz County Line to I-280	This project will install fiber optic conduits and vaults along the highway.	Anticipated completion in late 2025
Midpen and Santa Clara County/Alma Bridge Road Newt Passage Project	Alma Bridge Road on the east side of the Lexington Reservoir	Biological conservation – this project will identify, select, and ultimately construct one or more corrective actions to provide safe passage for California newts, rough-skinned newts and other semiaquatic species cross Alma Bridge Road.	Future – feasibility study in progress; construction anticipated in 2025 or later
VTA and Caltrans/ SR 17 Corridor Congestion Relief (EA 04-4Q470)	SR 17 from north of Lark Avenue to south of East Main Street in Los Gatos	This project will widen SR 17 from Lark Avenue to SR 9 and modify the existing SR 17/SR 9 interchange by widening on-ramps and off-ramps, removing loop off-ramps (and possibly removing loop on-ramps), and realigning on-ramps and off-ramps.	Future project – environmental clearance to be completed in 2024; construction anticipated in 2026-2027
San Jose Water/Lake Kittredge Wetland Restoration	1 mile east of the proposed project	The initial project created a minimum of 0.268 acres of wetlands along the northwest shoreline of Lake Kittredge (also known as Howell Reservoir) as compensation for impacts related to maintenance activities in watershed, including permanent impacts to 0.014 acres of other waters of the U.S. A future, follow-on project will enhance a total of 0.255 acre of wetlands/waters to address impacts associated with maintenance program updates. The new or enhanced aquatic features are intended to benefit California red-legged frog, western pond turtle, and other species.	Ongoing – initial mitigation site construction completed in 2019; follow-on mitigation project anticipated in 2023

Name	Location	Project Description	Status
Town of Los Gatos and Caltrans/Los Gatos Creek Trail to Highway 9 Trailhead Connector (EA 04-3G631)	SR 9 between SR 17 and University Avenue in Los Gatos	This project is constructing two new connections to Los Gatos Creek Trail from SR 9. It consists of a southern trail alignment from University Avenue to Los Gatos Creek; a clear-span, prefabricated bridge over Los Gatos Creek connecting the southern alignment to the existing Los Gatos Creek Trail; and a northern alignment connecting the existing sidewalk on westbound SR 9 to the Los Gatos Creek Trail.	Ongoing
Town of Los Gatos and Caltrans/ Highway 17 Bicycle and Pedestrian Overcrossing (EA 04-3W890)	SR 17 on Blossom Hill Road between Roberts Road West and Roberts Road East	The project would construct a dedicated bicycle and pedestrian bridge just south of the existing Blossom Hill Road overcrossing. The existing overcrossing would have a pedestrian sidewalk and a dedicated bicycle lane along the north side.	Ongoing – environmental studies and preliminary engineering in progress; construction anticipated to be complete in 2026
Valley Water	Lexington Reservoir	This project would increase capacity of the spillway to Lexington Reservoir, either by widening the spillway or raising the walls.	Future project – final design anticipated by end of 2024
PLN21-089-Grading Abatement on Vina Dr.	18525 Vina Dr, Los Gatos, CA 95033	Private Residence.	Pending
PLN21-103-New Home on Vina Dr	18566 Vina Dr, Los Gatos, CA 95033	Private Residence.	Pending
PLN21-141-New Residence on State Hwy 17	0 State Hwy 17, Los Gatos, CA 95033	Private Residence.	Pending

Sources: Midpen 2023; Caltrans 2018; VTA and Caltrans 2022; San Jose Water 2023; Town of Los Gatos 2022b; Town of Los Gatos 2023; Santa Clara County 2023.

2.2.1.2 Environmental Consequences

No Build Alternative

The projects listed in Table 2.2.1-1 would occur with the No Build Alternative. The No Build Alternative would not affect existing land uses or access to properties in the project area.

Build Alternatives

The build alternatives would not preclude the projects listed in Table 2.2.1-1. Both alternatives would complement other efforts to improve trail connectivity, such as the Northeast Trailhead Crossing Project adjacent to Bear Creek Redwoods OSP and the Los Gatos Creek Trail to Highway 9 Trailhead Connector project, as well as efforts to enhance wildlife connectivity, such as Alma Bridge Road Newt Passage Project.

The Build Alternative with Northern Overcrossing would require access to, or full acquisition of, one private property to allow for an overcrossing trail connection to El Sereno OSP, west of SR 17. This is discussed further in Section 2.2.4, below. Both build alternatives also include regional trail connections outside of the Caltrans ROW, which would require access rights or potential partial acquisitions from multiple public and private landowners.

Obtaining access rights or acquiring property to close gaps in the regional trail system would not substantially conflict with land uses in the project area. Existing land uses outside of the Caltrans ROW are designed to support resource conservation and low density of development. The build alternatives would be consistent with the objective of these land use designations. While the construction of both build alternatives would allow for new trail access that does not currently exist, the trail overcrossing alternatives, new regional trails, and improvements to existing regional trails would not constitute new access that would open new areas to development.

2.2.1.3 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation is required.

2.2.2 Consistency with State, Regional, and Local Plans and Programs

2.2.2.1 Affected Environment

There are multiple community, regional, and transportation plans that include the project area. The following types of plans were considered and are discussed below:

- Transportation plans/programs

- Regional growth plans
- Habitat conservation plans or similar regional conservation plans
- General plans and related plans
- Climate change plans

Transportation Plans/Programs

The proposed project is included in Plan Bay Area 2050, the regional transportation plan (RTP) and sustainable community strategy (SCS) for the nine-county San Francisco Bay Area (ABAG and MTC 2021a; RTP ID No. 21-T08-060). The RTP lists projects of local and regional importance based on factors such as local support and need, ridership, and potential cost and funding. These factors provide direction on how anticipated federal, state, and local transportation funds will be spent in the Bay Area through 2050.

Plan Bay Area 2050 includes the following strategy that relates to the proposed project:

EN6: Modernize and expand parks, trails and recreation facilities. Invest in quality parks, trails and open spaces that provide inclusive recreation opportunities for people of all backgrounds, abilities and ages to enjoy.

In addition to the RTP, the following transportation plans and programs are relevant to the proposed project:

- ***Caltrans District 4 Pedestrian Plan.*** This plan implements the Vision and Statement Goals in *Toward an Active California*, the statewide bicycle and pedestrian plan (Caltrans 2022). It guides the development of a robust pedestrian network, and also identifies and prioritizes needs by location. Local public and partner engagement for the plan identified the need for a pedestrian crossing of SR 17 in the project vicinity.
- ***Santa Clara Countywide Bicycle Plan.*** The county bicycle plan contains visions, goals, and policies for the implementation of bicycle infrastructure in Santa Clara County (VTA 2018). It identifies the need for a crossing of SR 17 near Lexington Reservoir County Park. Policies related to the project include the following.

Policy 1a: Expand the Network: VTA will support construction of cross-county bicycle corridors and across-barrier connections³ throughout the

³ The *Santa Clara Countywide Bicycle Plan* identifies across-barrier connections as connections through “problem areas” that are barriers to bicycle access, such as freeways.

county, both as stand-alone projects and as part of related transportation projects.

- ***Santa Clara County Countywide Trails Master Plan Update.*** The county trails plan guides the development of the countywide recreational trail network (County of Santa Clara 1995). The plan identified a need for a pedestrian/bicycle/equestrian trail across SR 17 to allow an east-west connection of the Ridge Trail and Anza Trail, as well as a southerly extension of the Los Gatos Creek Trail to connect to the Ridge Trail (Santa Clara County Parks 2015).
- ***Town of Los Gatos Bicycle and Pedestrian Master Plan.*** This plan guides the development of the town's bicycle and pedestrian network, and identifies specific needs (Town of Los Gatos 2020). The plan includes surface improvement of the 1.8-mile Los Gatos Creek Trail segment between Main Street in Los Gatos and Lexington Reservoir.

Regional Growth Plans

Plan Bay Area 2050 also functions as a regional growth plan for the nine-county San Francisco Bay Area (ABAG and MTC 2021a). Plan Bay Area 2050 designates priority areas for development, production, and conservation.

Priority Development Areas are areas within existing communities that have been identified and approved by a local city or county for future growth because of proximity to transit, jobs, shopping, and other services. Promoting compact development within PDAs is intended to take development pressure off the region's open space and agricultural lands (ABAG and MTC 2021a). There are no Priority Development Areas in the project vicinity.

Priority Production Areas retain industrial land in key locations to support networks of production, advanced manufacturing, distribution and repair services. These firms and their supply chains are critical to the regional economy and expand the number of middle wage jobs available (ABAG and MTC 2021a). There are no Priority Production Areas in the project vicinity.

Priority Conservation Areas (PCAs) are designated to accelerate protection of key natural lands in the San Francisco Bay Region through purchase or conservation easements. PCAs are areas of regional significance that have community support and an urgent need for protection. These areas provide important agricultural, natural resource, historical, scenic, cultural, recreational, and/or ecological values and ecosystem functions. Unlike Priority Development Areas and Priority Production Areas, PCAs are defined as point locations rather than areas with defined boundaries. The nearest PCA is outside of the project area, on the southeastern side of Lexington Reservoir, and is identified as Lexington Hills. Another PCA is identified to the east of the project area, in the area of Sierra Azul OSP (ABAG and MTC 2021b).

Habitat Conservation Plans

No natural community conservation plans are currently in effect for the project area (CDFW 2021). The Santa Clara Valley Habitat Plan, which covers a plan area of approximately 519,506 acres, is the closest plan. Its current boundaries do not extend to the limits of the proposed project; however, the project would be consistent with the plan.

The PG&E Bay Area Operations and Maintenance Habitat Conservation Plan was finalized in September 2017. The plan area includes Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma counties. The plan covers ongoing PG&E operations and maintenance activities for 32 threatened and endangered plant and animal species (USFWS 2017). As the plan is specific to PG&E operation and maintenance activities, it does not contain policies or goals related to the proposed project, and is not discussed further.

Additionally, Midpen has multiple ongoing conservation plans and programs in and near the project area. These include the Bear Creek Redwoods Preserve Plan, Mountain Lion Conservation Research, and Climate Change Program. The proposed project is an integral part of Midpen's conservation objectives. Two of its primary goals are to reduce wildlife deaths and to maintain healthy wildlife populations through habitat connectivity.

The following conservation-related regulation and plans address the proposed project area:

- ***Assembly Bill (AB) 2344***. The Safe Roads and Wildlife Protection Act (2022) was passed in order to safeguard wildlife through the construction of new wildlife crossings on state highways. AB 2344 requires that Caltrans identify barriers to wildlife movements and prioritize crossings when designing new roads or making road improvements (Center for Biological Diversity 2022).
- ***California State Wildlife Action Plan***. This plan contains a statewide vision for wildlife conservation including specific goals, conservation targets, and strategies to examine the health of wildlife and prescribe actions to conserve both wildlife and vital habitat. Conservation Strategy 2 from this plan calls for coordination with Caltrans on siting of roads, and design and siting of wildlife crossings (CDFW 2015).
- ***Restoring California's Wildlife Connectivity 2022***. This plan was prepared by CDFW and Caltrans to address wildlife connectivity across the state. The report identifies approximately 150 segments of roadways, railways, and other infrastructure that are barriers to wildlife movement. SR 17 from Los Gatos to Scotts Valley is among the 12 statewide top priority list connectivity projects included in the report (CDFW 2022a).

- ***Safeguarding California Plan.*** This plan was prepared by the California Natural Resources Agency (CNRA) to adapt to climate change impacts in both the built and natural environments (CNRA 2018). It includes a roadmap for how state agencies should prepare for impacts to biodiversity and habitat. This includes conservation planning related to preserving biodiversity, protecting special-status species, promoting habitat connectivity, and multi-benefit conservation solutions.
- ***Santa Clara County Regional Conservation Investment Strategy (RCIS).*** The RCIS was developed to inform science-based nonbinding and voluntary conservation actions and habitat enhancement actions that would advance the conservation of focal species, including the ecological processes, natural communities, and habitat connectivity upon which those focal species and other native species depend. It identifies conservation goals, priorities, and actions to protect endangered and other focal species such as mountain lion, acquire land, restore habitat, and install wildlife crossings. The RCIS identifies SR 17 just north of Lexington Reservoir as a priority location to enhance wildlife permeability to maintain or increase genetic diversity in mountain lion populations (SCCRCIS 2020).
- ***Midpen's 2014 Vision Plan.*** This plan documents priority investments for Measure AA, including the development of a wildlife crossing and a regional multi-use trail crossing of SR 17 near Lexington Reservoir (Midpen 2014).

General Plans and Related Plans

The following planning documents address the proposed project area:

- ***Santa Clara County General Plan.*** The Santa Clara County General Plan, 1995 – 2010, addresses unincorporated areas of the county, which includes a portion of the project area as shown in Figure 2.2.1-1 above (Santa Clara County 1994). The county general plan contains the following goals and policies that relate to the proposed project:

C-PR 1: An integrated and diverse system of accessible local and regional parks, scenic roads, trails, recreation facilities, and recreation services should be provided.

C-PR 4: The public open space lands system should:

- a) preserve visually and environmentally significant open space resources; and
- b) provide for recreation activities compatible with the enjoyment and preservation of each site's natural resources, with trail linkages to adjacent and nearby regional park lands.

C-PR 7: Opportunities for access to regional parks and public open space lands via public transit, hiking, bicycling, and equestrian trails should be provided. Until public transit service is available, additional parking should be provided where needed.

C-PR 10: Recreation facilities and activities within regional parks and public open space land should be located and designed to be compatible with the long term sustainability of each site's natural and cultural resources, with particular attention to the preservation of unique, rare, or endangered resources (including historic and archeological sites, plant and animal species, special geologic formations, etc.).

C-RC 27: Habitat types and biodiversity within Santa Clara County and the region should be maintained and enhanced for their ecological, functional, aesthetic, and recreational importance.

C-RC 57: The scenic and aesthetic qualities of both the natural and built environments should be preserved and enhanced for their importance to the overall quality of life for Santa Clara County.

- ***Los Gatos General Plan.*** The Los Gatos 2040 General Plan was approved on June 30, 2022, superseding the previous general plan for the town. A portion of the project area is within the Town of Los Gatos, as shown in Figure 2.2.1-1 above. The general plan contains the following goals and policies that relate to the proposed project:

OSPR-2.1: Preserve the natural open space character of hillside lands, including natural topography, native vegetation, wildlife habitats and migration corridors, and viewsheds.

OSPR-2.2: The provision of open space areas should not detract from the existing character of the Town's hillsides.

OSPR-3.2: Improve connections between passive open space areas and on-street bicycle facilities and multi-use trails.

ENV-1.1: Require design review to prevent developments that, due to their site location and massing, block views from roadways and public spaces in the surrounding hillsides.

ENV-2.1: Ensure tree removal and replacement during development is consistent with the latest in tree conservation standards to support the Town's Arbor Day Foundation status as a Tree City USA.

State Scenic Highway Program

Although SR 17 is eligible for listing as a State Scenic Highway between SR 1 near Santa Cruz and SR 9 near Los Gatos (PM 0.0 in Santa Cruz County to PM 7.1 in Santa Clara County), it is not an Officially Designated State Scenic Highway (Caltrans 2019a). The visual impacts of the project are discussed in Section 2.2.7.

2.2.2.2 Environmental Consequences

Table 2.2.2-1 below summarizes the consistency of the No Build and build alternatives with applicable plans and programs. Unless otherwise noted, the Build Alternative with Southern Overcrossing and the Build Alternative with Northern Overcrossing would have the same level of consistency with the plans and programs listed below.

Table 2.2.2-1. Consistency with Applicable Plans and Programs

Plan	Policy	No Build Alternative	Build Alternatives
Plan Bay Area 2050	EN6: Modernize and expand parks, trails and recreation facilities. Invest in quality parks, trails and open spaces that provide inclusive recreation opportunities for people of all backgrounds, abilities and ages to enjoy.	No Change. This alternative would not make any improvements to parks, trails, or recreation facilities. It would not alter existing conditions or result in effects on any resource areas. The same applies for the No Build Alternative’s conformity to the other plans and policies discussed below.	Consistent. Both build alternatives would align with this policy by improving access to open space facilities, including by closing gaps in the regional trail system.
Caltrans District 4 Pedestrian Plan	NA	No Change.	Consistent. Both build alternatives would improve the regional pedestrian network through the construction of a multi-use trail overcrossing of SR 17, thus aligning with the goals of this plan.
Santa Clara Countywide Bicycle Plan	Policy 1a: Expand the Network: VTA will support construction of cross-county bicycle corridors and across-barrier connections throughout the county, both as stand-alone projects and as part of related transportation projects.	No Change.	Consistent. Both build alternatives would construct a multi-use trail overcrossing of SR 17 that would benefit bicyclists, pedestrians, and other types of trail users.

Plan	Policy	No Build Alternative	Build Alternatives
<p>Santa Clara County Countywide Trails Master Plan Update (1995), as part of the Santa Clara County General Plan, Parks and Recreation Element</p>	<p>Countywide Trails Master Plan Policy PR-TS 1.1 and County General Plan Policies C-PR 20/R-PR-22: A countywide system of trails offering a variety of user experiences should be provided that includes: trails within and between parks and other publicly owned open space lands; trails that provide access from the urban area to these lands; trails that connect to trails of neighboring counties; trails that connect to transit facilities; trails that give the public environmentally superior alternative transportation routes and methods; trails that close strategic gaps in non-motorized transportation routes; trails that offer opportunities for maintaining personal health; trails that offer opportunities for outdoor education and recreation; and trails that could serve as emergency evacuation routes.</p> <p>General Plan Policy C-PR 21: The countywide trail system should be linked to provide for regional trails including the Bay Area Ridge Trail, the Benito-Clara Trail; and the San Francisco Bay Trail systems encircling the urban areas of the County and the San Francisco Bay.</p>	<p>No Change.</p>	<p>Consistent. This plan identifies the need for a pedestrian, bicycle, equestrian trail across SR 17 to allow an east-west connection of the Ridge Trail and Anza Trail, and an extension of the Los Gatos Creek Trail to connect with the Ridge Trail. Both build alternatives would construct a multi-use trail overcrossing of SR 17. In addition, both include an option to connect the Los Gatos Creek Trail to the Ridge Trail (Trail Nos. 6 and 8; see Section 1.4.3). The Ridge Trail, Anza Trail, and Los Gatos Creek Trail are identified as countywide trails in the Countywide Trails Master Plan and County General Plan for implementation.</p>
<p>Town of Los Gatos Bicycle and Pedestrian Master Plan</p>	<p>NA</p>	<p>No Change.</p>	<p>Partially Consistent. This plan identifies the need for surface improvements to the Los Gatos Creek Trail. The build alternatives do not include improvements to this trail but would provide new regional trail connections, thus increasing connectivity and improving access to open space for Los Gatos Creek Trail users.</p>

Plan	Policy	No Build Alternative	Build Alternatives
Assembly Bill 2344 (AB 2344)	NA	No Change.	Consistent. AB 2344 calls for the construction of new wildlife crossings on state highways to safeguard wildlife. Both build alternatives would construct a wildlife undercrossing of SR 17.
California State Wildlife Action Plan	NA	No Change.	Consistent. This plan provides goals, targets, and strategies to conserve wildlife and vital habitat, including coordination with Caltrans on the design and siting of wildlife crossings. Both build alternatives propose a wildlife undercrossing of SR 17 in coordination with Caltrans, which would align with the goals of this plan.
Restoring California's Wildlife Connectivity 2022	NA	No Change.	Consistent. SR 17 from Los Gatos to Scotts Valley is one of the statewide top priorities for connectivity projects. Both build alternatives would construct a wildlife undercrossing south of Los Gatos that would complement the Laurel Curve wildlife crossing project near Scotts Valley, to address the barrier created by this segment of SR 17.

Plan	Policy	No Build Alternative	Build Alternatives
Safeguarding California Plan	NA	No Change.	Consistent. Both build alternatives would reduce wildlife mortality, improve biodiversity, and promote habitat connectivity through the construction of a wildlife undercrossing. The build alternatives would result in temporary and permanent impacts to potential special-status species habitat, as discussed in Section 2.4 below. However, the project is designed to be self-mitigating, and would provide a net benefit to wildlife conservation. Therefore, it would comply with this and other conservation plans.
Santa Clara County Regional Conservation Investment Strategy (RCIS)	NA	No Change.	Consistent. The RCIS identifies the need to enhance wildlife permeability for mountain lion across SR 17 just north of Lexington Reservoir. Both build alternatives include a wildlife crossing, directional fencing, and wildlife escape ramps to increase permeability for mountain lion and other species.
Midpen's 2014 Vision Plan	NA	No Change.	Consistent. This plan identifies the development of a wildlife crossing and regional multi-use trail crossing of SR 17 near Lexington Reservoir. The build alternatives would implement both of these.
Santa Clara County General Plan (1995-2010)	C-PR 1: An integrated and diverse system of accessible local and regional parks, scenic roads, trails, recreation facilities, and recreation services should be provided.	No Change.	Consistent. Both build alternatives would improve access to regional parks and recreational facilities and would make improvements to the existing regional trail system.

Plan	Policy	No Build Alternative	Build Alternatives
Santa Clara County General Plan	<p>C-PR 4: The public open space lands system should:</p> <p>a) preserve visually and environmentally significant open space resources; and</p> <p>b) provide for recreation activities compatible with the enjoyment and preservation of each site’s natural resources, with trail linkages to adjacent and nearby regional park lands.</p>	No Change.	Consistent. Both build alternatives would include a recreational trail overcrossing of SR 17 and trail linkages to improve access to visually and environmentally significant open space resources, compatible with the enjoyment and preservation of those resources.
Santa Clara County General Plan	<p>C-PR 7: Opportunities for access to regional parks and public open space lands via public transit, hiking, bicycling, and equestrian trails should be provided. Until public transit service is available, additional parking should be provided where needed.</p>	No Change.	Consistent. Both build alternatives would improve access to regional parks and public open space lands via hiking, bicycling, and equestrian trails. The build alternatives would not limit consideration of options to improve public transit access to regional parks and public open space lands.
Santa Clara County General Plan	<p>C-PR 10: Recreation facilities and activities within regional parks and public open space land should be located and designed to be compatible with the long term sustainability of each site’s natural and cultural resources, with particular attention to the preservation of unique, rare, or endangered resources (including historic and archeological sites, plant and animal species, special geologic formations, etc.).</p>	No Change.	Partially Consistent. Based on current information, neither build alternative would affect cultural resources in the project area. Both alternatives would result in temporary and permanent impacts to sensitive natural communities and potential special-status species habitat, as described further in Section 2.4. While the project is designed to be self-mitigating for effects on wildlife, the effects to sensitive communities and species habitat render it partially consistent with this general plan policy.

Plan	Policy	No Build Alternative	Build Alternatives
Santa Clara County General Plan	C-RC 27: Habitat types and biodiversity within Santa Clara County and the region should be maintained and enhanced for their ecological, functional, aesthetic, and recreational importance.	No Change.	Consistent. As discussed in Section 2.4 below, both build alternatives would result in temporary and permanent effects on potential special-status species habitat. However, the proposed wildlife undercrossing, directional fencing, escape ramps, and associated facilities would improve wildlife passage and habitat connectivity, thereby enhancing the health of wildlife populations. Therefore, the build alternatives would have a net benefit to biodiversity and would be consistent with this general plan policy.
Santa Clara County General Plan	C-RC 57: The scenic and aesthetic qualities of both the natural and built environments should be preserved and enhanced for their importance to the overall quality of life for Santa Clara County.	No Change.	Partially Consistent. The scenic and aesthetic qualities of the project area would be largely maintained, as discussed in Section 2.2.7 below. Both build alternatives are anticipated to moderately affect visual resources. However, the Build Alternative with Southern Overcrossing would site the overcrossing within Santa Clara County's sphere of influence. Therefore, it would be slightly less consistent with Policy C-RC 57 than the Build Alternative with Northern Overcrossing

Plan	Policy	No Build Alternative	Build Alternatives
Los Gatos General Plan	OSPR-2.1: Preserve the natural open space character of hillside lands, including natural topography, native vegetation, wildlife habitats and migration corridors, and viewsheds.	No Change.	Partially Consistent. As discussed in Section 2.4.1 below, both build alternatives would require tree and vegetation removal. However, they would also improve wildlife migration corridors through the construction of a wildlife undercrossing. Therefore, both build alternatives would be partially consistent with this general plan policy.
Los Gatos General Plan	<p>OSPR-2.2: The provision of open space areas should not detract from the existing character of the Town’s hillsides.</p> <p>Policy OSPR-2.2 is related to the following excerpt from the OSPR element: “The Town’s hillside areas are unique and add to the quality of life of Town residents and visitors alike. The Town’s Hillside Development Standards and Guidelines ensure that open space areas in the hillsides are preserved to the greatest extent possible. Viewsheds and the existing character of the hillsides and open space areas are carefully maintained through the implementation of the General Plan and the Town’s various planning processes.”</p>	No Change.	Partially Consistent. The existing character of the Los Gatos hillsides would be largely maintained. However, the new or improved regional trails proposed by both build alternatives may slightly detract from the existing character of Los Gatos’ hillsides. Additionally, if the Build Alternative with Northern Overcrossing is selected, this hillside character would potentially be affected because it would be sited within Los Gatos’ sphere of influence (see Figure 2.2.1-1, above). This area is classified as hillside residential by the Los Gatos General Plan Land Use element (Town of Los Gatos 2022). While the Northern Overcrossing would provide new public access through an open space area, the overcrossing structure itself would moderately detract from the hillside’s character by adding a new, noticeable built element.
Los Gatos General Plan	OSPR-3.2: Improve connections between passive open space areas and on-street bicycle facilities and multi-use trails.	No Change.	Consistent. Both build alternatives would improve trail connections and link directly to on-street bicycle facilities in Los Gatos via the Los Gatos Creek Trail.

Plan	Policy	No Build Alternative	Build Alternatives
Los Gatos General Plan	ENV-1.1: Require design review to prevent developments that, due to their site location and massing, block views from roadways and public spaces in the surrounding hillsides.	No Change.	Partially Consistent. As discussed in Section 2.2.7 below, both build alternatives may affect views in the project area, primarily through the construction of a trail overcrossing. The Northern Overcrossing would be located in Los Gatos' sphere of influence.
Los Gatos General Plan	ENV-2.1: Ensure tree removal and replacement during development is consistent with the latest in tree conservation standards to support the Town's Arbor Day Foundation status as a Tree City USA.	No Change.	Consistent. Both build alternatives would require tree and vegetation removal. However, as discussed in Section 2.4.1 below, these tree removals would be done in accordance with the applicable tree ordinances.

NA = Not applicable; overview of plan or program policy is provided in Section 2.2.2.1.

No Build Alternative

The No Build Alternative would not explicitly conflict with the plans and programs described in Table 2.2.2-1. However, it would not meet the recreational and wildlife connectivity goals of several of those plans, including *Midpen's 2014 Vision Plan*, *Caltrans District 4 Pedestrian Plan*, *Santa Clara Countywide Bicycle Plan*, *Santa Clara Countywide Trails Master Plan Update*, *Town of Los Gatos Bicycle and Pedestrian Master Plan*, Assembly Bill (AB) 2344, *California State Wildlife Action Plan*, *Restoring California's Wildlife Connectivity 2022*, *Safeguarding California Plan*, and *Santa Clara County RCIS*.

Build Alternatives

Overall, both build alternatives would be consistent with the plans and programs described in Table 2.2.2-1. Both alternatives would support state, regional, and local plan provisions to increase access to recreation facilities, including through construction of a new multi-use trail overcrossing of SR 17 and new and improved existing regional trails. In addition, both alternatives would support state, regional, and local efforts to construct new wildlife crossings of state highways in order to increase biodiversity, reduce wildlife mortality, and maintain healthy wildlife populations.

2.2.2.3 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation is required.

2.2.3 Parks and Recreational Facilities

2.2.3.1 Affected Environment

Publicly owned parks, recreation areas, and trails within 0.25 mile of the project area are shown in Figure 1.4-2 and described briefly in Table 2.2.3-1.

Table 2.2.3-1: Publicly Owned Parks, Recreation Areas, and Trails within 0.25 Mile of the Project Area

Name	Acres	Official with Jurisdiction	Features
Lexington Reservoir County Park	950	County Parks	Hiking, horseback riding, dogs on leash, and biking on designated paved and unpaved trails; picnic tables, restrooms, and parking; access to the reservoir and trailheads. Swimming or wading prohibited, but fishing, rowing, and non-gas-powered and electric motor boating allowed (County Parks 2022a). Important regional trails include: <ul style="list-style-type: none"> • Los Gatos Creek Trail, which extends for 11 miles from Lexington Reservoir to Meridian Avenue in San Jose (Town of Los Gatos 2022c). • Bay Area Ridge Trail (Ridge Trail) segment. The Ridge Trail is envisioned as a continuous 550-mile trail for hikers, mountain bicyclists, and equestrians along ridgelines overlooking San Francisco Bay. • Juan Bautista de Anza National Historic Trail (Anza Trail) segment. The Anza Trail is envisioned as a 1,200-mile trail from Nogales, Arizona, to the Bay Area that retraces the approximate route followed in 1775-1776 by Spanish commander Juan Bautista de Anza II, who led an expedition from Mexico to establish a presidio and mission near San Francisco Bay (National Park Service 2022).
Sanborn County Park	3,453	County Parks	Hiking on over 22 miles of trails; horseback riding, biking, and on-leash dog walking on designated trails; picnicking, day use for large gatherings, restrooms, and parking; hike-in and RV camping. Leashed dogs permitted only on specified trails and campsite areas. No swimming allowed (County Parks 2022b). Park also contains a Ridge Trail and Anza Trail segment.
El Sereno OSP	1,614	Midpen	7 miles of trails for hiking, biking, and on-leash dog walking, as well as horseback riding on designated trails (Midpen 2021a). Contains a shared segment of the Ridge Trail and Anza Trail.
St. Joseph’s Hill OSP	273	Midpen	4.2 miles of trails for hiking, biking, on-leash dog walking, and horseback riding on designated trails (Midpen 2021b, 2021c).
Sierra Azul OSP	19,438	Midpen	26 miles of trails for hiking, biking, and horseback riding on designated trails. Leashed dogs permitted only on specified trails (Midpen 2021d). Contains a shared Ridge Trail and Anza Trail segment.
Novitiate Park	8	Town of Los Gatos	Hiking, biking, on-leash dog walking, and horseback riding on designated trails. Street parking on Jones Road. Provides access to St. Joseph’s Hill and Sierra Azul OSPs and Lexington Reservoir County Park (Town of Los Gatos 2022c).

Notes: County Parks = Santa Clara County Parks and Recreation Department; Midpen = Midpeninsula Regional Open Space District; OSP = Open Space Preserve

All of the park facilities listed in Table 2.2.3-1 are operated by public agencies and thus are protected by the Park Preservation Act (California PRC Sections 5400-5409). Except for the Anza Trail, all of the facilities listed in Table 2.2.3-1 are also protected by Section 4(f) of the Department of Transportation Act of 1966 (49 USC 303), which provides protection for publicly owned parks and recreational resources. The Anza Trail is a formally designated National Historic Trail per 16 USC 1244(b)(17), and as such, is exempt from Section 4(f) (23 CFR 774.13[f][2]). Section 4(f) is discussed further in Appendix A.

2.2.3.2 Environmental Consequences

No Build Alternative

The No Build Alternative would not affect park or recreation facilities near the project area.

Build Alternatives

Lexington Reservoir County Park and Los Gatos Creek Trail

Both of the build alternatives would require work adjacent to Lexington Reservoir County Park, which County Parks operates under lease from Valley Water. The Build Alternative with Southern Overcrossing could also require work adjacent to the County Park for the eastern bridge landing and trail connection near Alma Bridge Road. The anticipated permanent and temporary impact areas adjacent to Lexington Reservoir County Park are already fenced off and restricted from public recreation access because of its proximity to water conveyance facilities. Therefore, the project would not require the direct temporary or permanent acquisition of Lexington Reservoir County Park recreational facilities.

Use of designated Lexington Reservoir County Park parking lots for construction staging and access is not proposed. However, temporary closures of a section of the Los Gatos Creek Trail could be necessary for construction equipment and vehicle access to the east side of the wildlife undercrossing area. The trail section is approximately 900 feet long and extends between two existing service roads, one on the west side of the spillway and one connecting to the east side of SR 17, as shown in Figure 2.2.3-1, below. If possible, temporary barriers will be placed to separate trail users from construction vehicles and activities; however, short-term full closures of the trail section could be needed to ensure the safety of pedestrians, cyclists, and equestrians during construction.



Figure 2.2.3-1: Detail of Potential Los Gatos Creek Closure Area (see Figure 1.4-1 for complete legend)

Establishment of a temporary trail detour route along the potential trail closure area may be infeasible due to the presence of special-status species habitat and steep topography. An alternative trail connection is available between East Main Street in Los Gatos and Alma Bridge Road, via the Flume Trail and Jones Trail through Novitiate Park and St. Joseph’s Hill OSP. However, the distance (approximately 2 miles) is greater than that of the Los Gatos Creek Trail in the same area (approximately 1.75 miles), and sections of the Flume Trail and Jones Trail are steeper than the Los Gatos Creek Trail, which may limit some trail uses. Although the actual temporary trail closure area would be small, the closure could effectively render the Los Gatos Creek Trail between East Main Street in Los Gatos and Alma Bridge Road temporarily unusable for some trail users.

With both build alternatives, a Transportation Management Plan (TMP) would be developed during the detailed design phase to address access disruptions during project construction for motorists, bicyclists, and pedestrians (Section 1.4.6, PF-TR-01). The TMP would include outreach to inform local jurisdictions, agencies, project neighbors, and the public of the times and locations of upcoming construction, including potential short-term closures of the Los Gatos Creek Trail.

The temporary closures of the Los Gatos Creek Trail could take place periodically over the 60-day construction period for the undercrossing. Once construction of the undercrossing is completed, the trail would be reopened. The duration of the trail closure would be substantially shorter than the overall construction period of two construction seasons (generally considered April through October) during the two-year period anticipated to complete the wildlife undercrossing and trail overcrossing. Temporary construction activities have the potential to interfere with the activities or

purposes of the Los Gatos Creek Trail for some trail users; however, the use would be considered *de minimis* under Section 4(f), as discussed further in Appendix A. Caltrans will request concurrence from County Parks on the *de minimis* finding under Section 4(f) prior to NEPA approval and after public review and comment concerning the effects of the project, in accordance with 23 CFR 774.13(g)(2). Additional minimization measures may be added in coordination with County Parks.

Visitors to the Los Gatos Creek Trail and parts of Lexington Reservoir within view or earshot of construction would be exposed to the periodic sights and sounds of construction equipment, earthwork, and structural work in the area of the wildlife undercrossing and both the Southern Overcrossing and Northern Overcrossing. With both alternatives, park visitors may also encounter construction equipment and personnel on Alma Bridge Road, which provides access to the Los Gatos Creek Trail as well as trails in St. Joseph's Hill and Sierra Azul OSPs. Temporary, short-term closures of the informal parking area along Alma Bridge Road near the southern terminus of the Jones Trail could be required for construction access and staging. The TMP (Section 1.4.6, PF-TR-01) would include notifications about any temporary changes in parking from project construction.

Temporary noise and visual impacts would be intermittent over the two construction seasons (generally considered April through October) during the two-year period anticipated to complete the wildlife undercrossing and trail overcrossing. The project design includes several standard Caltrans measures to reduce construction noise and dust, which would minimize construction-related impacts on park visitors.

After construction, the wildlife undercrossing would not be highly visible to visitors at Lexington Reservoir County Park. The western opening of the undercrossing would be within the fenced and gated Caltrans and San Jose Water properties along southbound SR 17, which is not publicly accessible. The eastern opening of the undercrossing, the sound wall above it along northbound SR 17, and the associated directional fencing and wildlife escape ramps would be most visible to park visitors on sections of the Los Gatos Creek Trail in the vicinity of the dam spillway, as described further in Section 2.2.7.2. These project components would be visually consistent with nearby water operations infrastructure and utilities, which include the concrete dam spillway, overhead electrical and telephone lines, and fencing. The undercrossing and associated facilities would be relatively smaller than the existing water infrastructure and therefore less visually prominent.

Neither the Southern Overcrossing alternative nor the Northern Overcrossing alternative (including the bridge and trail connections) would be highly visible from most locations in Lexington Reservoir County Park due to hilly topography and areas of dense tree screening. Like the wildlife undercrossing, these project components would be visually consistent with nearby water operations and utility infrastructure. The section of the Los Gatos Creek Trail closest to the Northern Overcrossing alternative location is in Caltrans and San Jose Water ROW, outside of the County Park boundary.

With the exception of the potential short-term, temporary closure of the Los Gatos Creek Trail, temporary construction activities would not result in adverse changes to the activities, features, or attributes of Lexington Reservoir County Park. Construction would not affect the Ridge Trail or Anza Trail segments in the County Park. The proposed action would not permanently use the Lexington Reservoir County Park property or adversely affect the activities and features that qualifies it for protection under Section 4(f). Therefore, no "use" would occur.

St. Joseph's Hill OSP

The Jones Trail in St. Joseph's Hill OSP is roughly parallel to, and approximately 0.20 mile east of, SR 17. From south to north, this trail extends from Alma Bridge Road in Lexington Reservoir County Park through St. Joseph's Hill OSP to the end of Jones Road in Los Gatos. With both alternatives, trail users on the Jones Trail within view or earshot of project construction could experience the periodic sights and sounds of construction equipment, earthwork, and structural work. Temporary noise and visual impacts would be intermittent over the two construction seasons. Temporary construction activities would not result in adverse changes to the activities, features, or attributes of the Jones Trail.

After construction, trail users on some sections of the Jones Trail would have views to the west of the project facilities. Figure 2.2.3-2 shows a view of the southern and central part of the project area from the Jones Trail. In this view, the wildlife undercrossing, sound wall, wildlife fencing, and wildlife escape ramps would be visible on the far right just below SR 17, and the Southern Overcrossing alternative bridge and trail connections would be visible on the center left. The Northern Overcrossing alternative bridge and trail connections would also be visible from a section of the Jones Trail slightly farther to the north. From vantage points on the Jones Trail, the project elements would be noticeable but not visually dominant. The proposed action would not permanently use the Jones Trail or other facilities in St. Joseph's Hill OSP, or adversely affect the activities and features that qualify them for protection under Section 4(f). Therefore, no "use" would occur.



Figure 2.2.3-2: View of the southern and central project area, looking west/southwest from the Jones Trail; yellow arrows indicate approximate locations of the Southern Overcrossing and wildlife undercrossing

Other Park and Recreation Facilities

The proposed project also includes improvements to existing trails and the construction of new trail segments that are outside of the Caltrans ROW. The improved and new trail segments are intended to connect multiple parks and open space preserves and to close gaps in local, regional, and national trail systems. Trail construction would involve work in several publicly owned park and recreation facilities: Lexington Reservoir County Park and Sanborn County Park, operated by County Parks; and El Sereno, St. Joseph's Hill, and Sierra Azul Open Space Preserves, operated by Midpen. The trail work would also include connections with the Los Gatos Creek Trail, Ridge Trail, and Anza Trail within those properties. Temporary, short-term closures of informal parking areas along Alma Bridge Road for St. Joseph's Hill and Sierra Azul OSPs could be required for trail construction access and staging. The TMP (Section 1.4.6, PF-TR-01) would include notifications about any temporary changes in parking from project construction.

The proposed trail improvements would be solely for the purpose of enhancing the recreational activities and features of those properties. As such, a Section 4(f) "use" would not occur (23 CFR 774.13[g][1]; FHWA 2022).

Novitiate Park, operated by the Town of Los Gatos, lies north of St. Joseph's Hill OSP and outside of the project limits. The proposed project would not affect Novitiate Park. The property is a Section 4(f) property, but no "use" would occur.

Midpen, as the project sponsor, concurs with these determinations. Caltrans will request written concurrence from County Parks, the official with jurisdiction over Lexington Reservoir County Park, prior to NEPA approval in accordance with 23 CFR 774.13(g)(2).

The Anza Trail is a formally designated National Historic Trail per 16 USC 1244(b)(17), and as such, is exempt from Section 4(f) (23 CFR 774.13[f][2]).

2.2.3.3 Avoidance, Minimization, and/or Mitigation Measures

Implementation of project features including the TMP (Section 1.4.6, PF-TR-01) and other standard measures for construction-related noise and dust (Section 1.4.6, PF-NOI-01 and PF-AIR-01) would reduce the potential for short-term, temporary impacts to trail users and park visitors. The project would result in long-term benefits to recreation access. No avoidance, minimization, or mitigation is required.

2.2.4 Relocations and Real Property Acquisition

2.2.4.1 Affected Environment

As stated in Section 2.2.1 above, land uses in the project vicinity are primarily open space/recreational and residential. Other than the areas of new regional trail segments and improvements to existing trails, the majority of the proposed project is within the Caltrans ROW.

2.2.4.2 Environmental Consequences

No Build Alternative

The No Build Alternative would not result in relocations or real property acquisition.

Build Alternatives

Both build alternatives are anticipated to result in property impacts, including the following types of easements.

- *Temporary construction easements* allow for movement of construction equipment, vehicles, and personnel during project construction. The easement is limited in

duration to the time needed to construct the project facilities adjacent to the property.

- *Maintenance easements* are typically for periodic future maintenance access to roadway features such as electrical connections or landscaping on property owned by another public agency.
- *Utility easements* would involve installation or relocation of infrastructure such as electrical and communications lines, or connection of new lines to existing lines. Once the infrastructure is installed, relocated, or connected to, periodic future utility maintenance may need to be conducted on the property.

Temporary construction easements, maintenance easements, and utility easements would not result in changes to existing land use or interfere with the continued use of properties for their existing purposes. The temporary construction easements would affect defined work areas for a limited period of time, which would not exceed two construction seasons, as discussed in Section 1.4.4.6. Following construction, the temporarily affected parcels would be restored to pre-project conditions.

The Build Alternative with Northern Overcrossing would require permanent access rights to, or full acquisition of, one private residential property. The relocation of current occupants would be needed if full acquisition is required.

Both build alternatives also include regional trail connections outside of the Caltrans ROW, which would require access rights or potential partial acquisitions from multiple public and private landowners including County Parks, Valley Water, San Jose Water, Santa Clara County, and the Town of Los Gatos.

The access agreements and property acquisitions would not displace a substantial number of people or residences, or result in other adverse physical effects on the environment.

The actual impacts to properties would be determined during detailed project design.

2.2.4.3 Avoidance, Minimization, and/or Mitigation Measures

All easements, access agreements, and property acquisitions would be determined as part of property owner negotiations during the detailed design phase. No other avoidance, minimization, or mitigation is required.

2.2.5 Utilities/Emergency Services

2.2.5.1 Affected Environment

The project area contains existing power, gas, telecommunication, and water utilities. PG&E provides gas and electricity service, and Comcast and Frontier Communications

provide telecommunication services. San Jose Water and Valley Water manage the water utilities in the project area.

As part of the Caltrans Middle Mile Broadband Network (MMBN), a fiber optic line will be constructed along SR 17 within the project area. The fiber optic line construction is scheduled for late Fall 2023.

Police protection and traffic enforcement services in the project area are provided by the Los Gatos Police Department and the Santa Clara County Sheriff's Department. CHP has jurisdiction over the SR 17 corridor for matters involving traffic violations and emergency services. Fire protection services in the study area are provided by the Santa Clara County Fire Department.

2.2.5.2 Environmental Consequences

No Build Alternative

The No Build Alternative would not require utility relocations or replacements and would not affect emergency services.

Build Alternatives

Both build alternatives would require changes to existing utilities. Along northbound SR 17, poles that carry PG&E 12-kilovolt (kV) electric and Frontier Communications telephone lines would have to be replaced with taller poles to provide adequate vertical clearance above the wildlife undercrossing and the Southern and Northern Overcrossing bridges. The approximate number of poles to be replaced is five for the Build Alternative with Southern Overcrossing and four for the Build Alternative with Northern Overcrossing.

Both build alternatives would accommodate the relocation of a San Jose Water 12-inch water transmission main. The existing water main does not conflict with either of the alternatives but would be replaced due to its age (approximately 70 years old) and proximity to the proposed construction area. The water main could be accommodated in a sleeve within the wildlife undercrossing (to be confirmed during final design). San Jose Water would be responsible for the design and construction of the water main relocation, as noted in Section 1.4.4.3.

Construction of the wildlife undercrossing with both alternatives would temporarily conflict with the MMBN fiber optic line, which is scheduled to be completed before the proposed project. The PDT has been in coordination with Caltrans and the California Department of Technology, the sponsor of the MMBN project, to determine options for temporary relocation and post-construction accommodation of the facility.

Final verifications of utilities would be performed during the project's detailed design phase, and any needed relocations would be coordinated with the affected utility owner. No disruption to electrical power or water service is anticipated.

Construction of both build alternatives would require lane closures and one single nighttime full-highway closure. Law enforcement, fire, and emergency services would

be maintained during project construction. During final design, a TMP would be developed for the project to minimize construction-related delays and inconvenience to project area residents and the traveling public. As described in Section 1.4.6 (PF-TR-01), the TMP would include notification to emergency service providers and the public of lane closures and detours; coordination with the CHP and local law enforcement on contingency plans; and using portable Changeable Message Signs where possible to minimize delays. The TMP would be implemented to ensure that emergency services would not be affected during project construction. Therefore, project construction is not expected to result in decreased response times.

The project would not affect the number of lanes or other traffic operations on SR 17; therefore, there would be no long-term effects on emergency services.

2.2.5.3 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation is required.

2.2.6 Traffic and Transportation/Pedestrian and Bicycle Facilities

2.2.6.1 Affected Environment

SR 17 is a major north-south route connecting I-280 in San Jose with SR 1 in Santa Cruz. SR 17 serves interregional and regional travel, including recreational and commute traffic and goods movement. The highway has four lanes within the project limits, two northbound and two southbound, which are separated by a concrete median barrier.

Local roads in the project area include the following:

- Alma Bridge Road, which extends between Aldercroft Heights Road and SR 17, along the northern and eastern shores of Lexington Reservoir.
- Montevina Road, which extends between Bear Creek Road and El Sereno OSP
- Black Road, which extends from Montevina Road to Skyline Boulevard (SR 35)
- Bear Creek Road, which extends from old Santa Cruz Highway to SR 9

Each road generally has two lanes—one lane in each direction.

Approximately 0.6 mile north of the intersection of SR 17 with Alma Bridge Road, there is a service road and CHP turnout with northbound highway access. The service road provides access to water conveyance facilities associated with Lexington Reservoir as well as to the Los Gatos Creek Trail.

The Santa Cruz Metropolitan Transit District (Santa Cruz Metro) operates the only regularly scheduled public transportation route in the project area, the Highway 17 Express. This Amtrack Thruway route has daily weekend and weekday service between

the Santa Cruz Metro Center and the San Jose Diridon Station, with some commute-period trips also serving downtown San Jose and San Jose State University (Santa Cruz Metropolitan Transit District 2023).

There are no park and ride facilities in the project area (Caltrans 2019b).

Walking and bicycling on SR 17 in the project area is not prohibited (Caltrans 2019b, 2022). However, the lack of shoulders and steep slopes along both sides of the road provide little separation from fast-moving motor vehicle traffic. The Los Gatos Creek Trail, which is just east of the northbound lanes of SR 17, is the primary north-south route in the project area for non-automotive travel. The trail extends approximately 9.3 miles from Lexington Reservoir in the south to Meridian Avenue in San Jose in the north (City of San Jose 2022).

No formal bicycle lanes exist in the project area. The only sidewalk in the project area is on the Bear Creek Road overcrossing, in the southern project limits, which has an 8-foot-wide sidewalk on the north side only. Improvements to pedestrian, bicycle, and equestrian facilities at the Bear Creek Road interchange are planned as part of another project, as described in Section 1.9.2.3.

2.2.6.2 Environmental Consequences

No Build Alternative

With the No Build Alternative, walking and bicycling on SR 17 would continue to be allowed. Non-automotive recreational access across SR 17 in the project area would remain as it is, and no improvements would be made to regional multi-use trails. There would be no change in the potential for wildlife-vehicle collisions on SR 17.

Build Alternative

Neither of the build alternatives would change long-term traffic operations or increase the capacity of SR 17 or other roads in the project area. The proposed wildlife undercrossing, directional fencing, and escape ramps would help to channel wildlife away from the roadway of SR 17 and reduce the potential for conflicts with motorists. The Build Alternative with Northern Overcrossing would allow for continued use of the service road/CHP pullout along northbound SR 17.

Both build alternatives would construct a recreational trail overcrossing within a 2.2-mile segment of SR 17 where no other crossings exist. Both overcrossing alternatives and proposed additional trail segments would connect multiple parks and preserves and help to close gaps in local, regional, and national trail systems. The project would not change pedestrian or bicycle access to SR 17; however, the overcrossing and trails would provide an additional travel option that is separated from highway traffic.

Construction of both build alternatives would require lane closures and one single nighttime full-highway closure, as described in Section 1.4.4.6. Construction access and staging could also result in temporary, short-term delays along sections of Alma Bridge Road, Montevina Road, Black Road, and Bear Creek Road, as well as a section of the Los Gatos Creek Trail (Section 2.2.3). Trail construction could result in temporary, short-term access delays for vehicles entering and exiting Vulcan Materials Company on Limekiln Canyon Road.

With both build alternatives, a TMP would be developed during the detailed design phase to address traffic disruptions from project construction for motorists, bicyclists, and pedestrians (Section 1.4.6, PF-TR-01). The TMP would include outreach to inform local jurisdictions, agencies, neighbors, and the public of the times and locations of upcoming construction, construction signs in and approaching the project area, and incident management for traffic control in the vicinity of construction activities. Access would be maintained for emergency response vehicles throughout construction. Effects on traffic during project construction would be temporary and short-term.

The project would not affect the final number of lanes or other traffic operations on SR 17; therefore, there would be no long-term effects on traffic.

2.2.6.3 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation is required.

2.2.7 Visual/Aesthetics

2.2.7.1 Affected Environment

The following discussion is based on the Visual Impact Assessment completed for this project in June 2023 (AECOM 2023a).

The project area landscape is characterized by steep topography, with the exception of the low-lying Lexington Reservoir area. The hillsides of the project area are generally covered with dense, mature tree stands. Other vegetation in the project area includes marsh, scrub, grasslands, and ornamental trees. The land cover types of the project area are varied, and generally correlate to elevation (e.g., grassland at low elevations, woodland at high elevations). Exceptions are built-up areas, such as pockets of housing, as well as water treatment facilities operated by Valley Water and San Jose Water, and park facilities operated by Santa Clara County. Figures 2.2.7-1 and 2.2.7-2 below demonstrate the project area's aesthetic qualities from different locations and perspectives.



Figure 2.2.7-1: View of SR 17, Lexington Reservoir, and the hills of the Santa Cruz Mountains from the site of a potential trail connection



Figure 2.2.7-2: View of the project area from the Jones Trail, within St. Joseph's Hill OSP

Visual Resources and Resource Change

Visual resources of the project setting are defined and identified below by assessing visual character and visual quality in the project corridor. Resource change is assessed by evaluating the visual character and the visual quality of the visual resources that comprise the project corridor before and after the construction of the proposed project.

Visual Character. Visual character includes attributes such as form, line, and color, and is used to describe, not evaluate, the quality of the setting; that is, these attributes are neither considered good nor bad. However, a change in visual character can be evaluated when it is compared with the viewer response to that change. Changes in visual character can be identified by how visually compatible a proposed project would be with the existing condition by using visual character attributes as an indicator. For this project, the following attributes were considered:

- Form – visual mass or shape
- Lines – edges or linear definition
- Color – reflective brightness (e.g., light, dark) and hue (e.g., red, green)

Visual Quality. Visual quality is evaluated by identifying the vividness, intactness, and unity present in the project corridor. Public attitudes validate the assessed level of quality and predict how changes to the project corridor can affect these attitudes. This process helps identify specific methods for addressing each visual impact that may occur as a result of the project. The three criteria for evaluating visual quality are defined below:

- Vividness – the extent to which the landscape is memorable and is associated with distinctive, contrasting, and diverse visual elements
- Intactness – the integrity of visual features in the landscape and the extent to which the existing landscape is free from non-typical visual intrusions
- Unity – the extent to which all visual elements combine to form a coherent, harmonious visual pattern

Resource change in this assessment is considered from the perspectives of two primary groups: *neighbors* (people with views *to* the road) and *highway users* (people with views *from* the road). For this assessment, neighbors are considered to be persons who live in the project area or visit it for recreational purposes (e.g., residents, hikers, equestrians, mountain bikers). Highway users are considered to be persons driving or riding in a vehicle on SR 17, which could include commuters or recreational visitors.

2.2.7.2 Environmental Consequences

No Build Alternative

The No Build Alternative would not make any changes to the project area or otherwise affect visual resources.

Build Alternatives

Visual impacts are determined by assessing changes to the visual resources and predicting viewer response to those changes. Impacts discussed under Short-Term Construction Impacts are considered temporary impacts. Impacts discussed under Long-Term Operational Impacts are considered permanent impacts.

Short-Term Construction Impacts

Construction of the project would be visible to drivers on SR 17, recreational users of the project area, and nearby residents. During construction, viewers on and adjacent to SR 17 would see construction materials, temporary fencing and barriers, equipment, workers, and operations (e.g., excavation, trail building, and the installation of an overcrossing bridge). Temporary fencing would be erected to accommodate additional right-of-way and equipment staging space, or where temporary construction easements are required.

A detailed description of project construction activities is provided in Section 1.4.4.6 above. Major construction activities would include, but are not limited to:

- Construction of one trail overcrossing
- Construction of trail connections to the trail overcrossing
- Construction of one wildlife undercrossing

Project construction would primarily take place during the day. However, some nighttime work along SR 17 would be necessary, and could temporarily add new sources of light and glare. This would primarily be visible to highway users on SR 17, as the nearby county parks and open space are closed after sunset. Nighttime construction may also be visible to local residents, particularly adjacent to the Southern Overcrossing, if the Build Alternative with Southern Overcrossing is selected.

Construction-related visual impacts would be unavoidable but temporary. Highway users on SR 17 and recreational visitors in the vicinity of work areas would have views of construction activities during this period. Residents near the site of the Build Alternative with Southern Overcrossing may have views of the construction of the overcrossing bridge and trail connection.

Long-Term Operational Impacts

Permanent visual impacts were determined by assessing changes to the visual resources and predicting viewer response to those changes. Impacts are summarized below through an overall discussion of visual resources and visual responses, and specific discussion of changes at four key views.

Overall Visual Impacts. The overall changes to visual character and quality with the Southern and Northern Overcrossing alternatives would be similar, as both build alternatives would include a wildlife undercrossing, wildlife directional fencing, and supporting infrastructure as well as improved and new regional trails, as detailed in Section 1.4. The build alternatives differ only in the siting of the proposed trail overcrossing bridge and connecting trails. Therefore, they are anticipated to have the same level of visual impacts.

Overall, the build alternatives would result in permanent changes to form, lines, and color in the project area. The construction of a new trail overcrossing, wildlife undercrossing, and trail connections would be the primary changes. Additionally, the proposed new or improved trail segments, such as the Alma Bridge Road to Manzanita Trail, would affect visual character. The proposed trail overcrossing would be a visually dominant feature. The proposed overcrossing and trail connections would be noticeable and readily observed by neighbors and highway users alike. The proposed elements of the build alternatives would also impart changes on vividness, intactness, and unity.

Intactness and unity would be slightly lowered by the build alternatives, as the project area exhibits a high degree of visual integrity and harmony between natural visual elements and constructed features. However, the build alternatives would increase vividness by adding new, diverse, and contrasting visual elements, which would temper the build alternatives' effects on visual quality. Therefore, overall resource change would be moderate for the build alternatives.

Impacts to key views. Key views are specific perspectives that are used to demonstrate project impacts at different locations, as it is not feasible to analyze all of the views in which the proposed project would be seen. Four key views were used for this assessment. The key views were selected based on the locations where project features would be most visible and would have a high potential for viewer exposure. As noted above, this assessment considers highway users (i.e., persons driving or riding in a vehicle on SR 17) and neighbors (i.e., persons who live in the project area or visit it for recreational purposes).

The four key views selected for this assessment are shown in Figure 2.2.7-3 below.

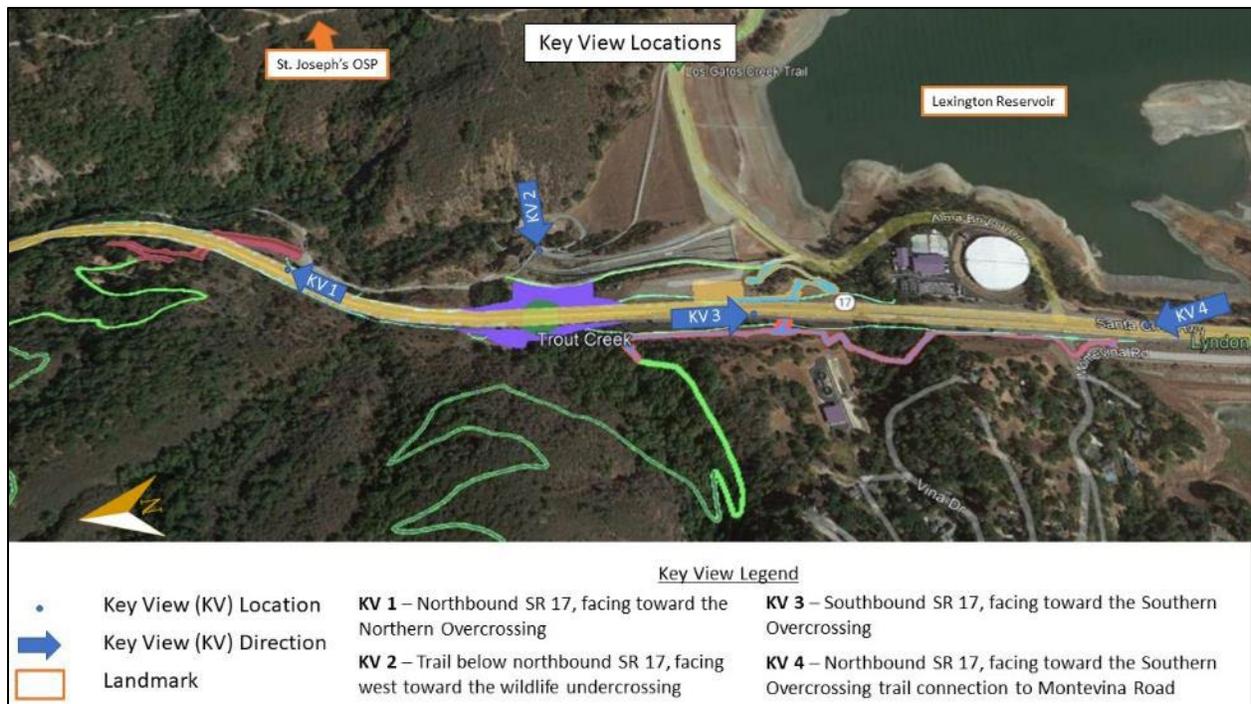


Figure 2.2.7-3: Key View Locations

Key View (KV) 1 – Northbound SR 17, Facing Toward the Northern Overcrossing (Build Alternative with Northern Overcrossing)



Figure 2.2.7-4: KV-1 Existing Condition/No Build Alternative

The existing visual character of KV-1 is visually dominated by the form, lines, and color of SR 17 and the adjacent hillsides. Dense green vegetation lines the hillsides adjacent to SR 17, while the highway itself is flat and characterized by a large gray reflective surface.

The visual quality of KV-1 is moderate-high. While the adjacent hillsides are intact and unified, the highway itself is in a moderate state of repair, and somewhat detracts from visual harmony.



Figure 2.2.7-5: KV-1 Proposed Condition

The Build Alternative with Northern Overcrossing proposes to construct a trail overcrossing, ramp, and trail connection at this location.

Resource Change. The overcrossing structure type will be determined at a later phase of project development, but for the purposes of visual analysis, it is simulated here as a girder bridge on abutments. The proposed trail overcrossing, ramp, trail connection, and wildlife directional fencing at this location would alter the visual character of KV-1. These features would represent a change in form and would introduce new distinct horizontal and vertical lines. Additionally, the color of KV-1 would be altered, as the overcrossing bridge would be a new potential source of glare due to its concrete and fencing, and new gray hues would be introduced. One wildlife escape ramp may also be visible from this location, on the west side of SR 17. However, this feature would not substantially alter visual character, and would appear as a gap in the proposed wildlife directional fencing from a highway user's perspective.

The visual quality of KV-1 would be slightly reduced by the project. While vividness would be slightly increased by the introduction of distinctive, contrasting, and diverse visual elements, these new elements detract from intactness and unity. The balance of built and natural features at this viewpoint is altered, affecting the overall harmonious visual pattern. Therefore, overall resource change would be moderate.

Viewer Response. Views of KV-1 would be accessible to both highway users and neighbors. Highway users would view the proposed features for short durations, and highway neighbors (including recreational trail users and one residence) would have prolonged exposure.

Viewer exposure for all highway users would be moderate-low at KV-1, as drivers and vehicle passengers would only view the proposed features briefly while traveling at highway speeds. Viewer sensitivity would be moderate-high for recreational travelers on the highway, and moderate for commuters, as recreational visitors are predicted to scrutinize their surroundings more than commuters. Viewer exposure and sensitivity for neighbors would be high. Based on the nature of the proposed changes, and average viewer exposure and sensitivity, overall viewer response is anticipated to be moderate.

Visual Impact. The construction of a trail overcrossing bridge and associated project features would constitute a notable change to KV-1, which would alter its visual character and slightly lower visual quality. These changes are most likely to be noticed by highway users such as drivers and neighbors such as recreational trail users. However, these changes may be interpreted as positive to some, including recreational trail users, who would make use of the new overcrossing and potentially gain new views of the surrounding hillsides from above the highway. Therefore, the project is anticipated to have a moderate visual impact on KV-1.

Key View (KV) 2 – Los Gatos Creek Trail Below Northbound SR 17, Facing West Toward the Wildlife Undercrossing (Both Build Alternatives)



Figure 2.2.7-6: KV-2 Existing Condition/No Build Alternative

The existing visual character of KV-2 is heavily influenced by constructed visual elements. In the foreground, the spillway of Lenihan Dam dominates the form. Fencing, the San Jose Water pipeline, and utility structures represent the most distinct lines in this view. While the hue of KV-2 is primarily green, the aforementioned constructed gray and industrial features also contribute heavily to color.

The visual quality of KV-2 is moderate. KV-2 is relatively vivid, as it includes contrasting elements. However, the constructed features visible in KV-2, such as the dam spillway, fencing, and water pipeline detract from visual quality overall. Their utilitarian design reduces intactness, and disrupts the harmony of an otherwise natural setting, thus reducing unity.



Figure 2.2.7-7: KV-2 Proposed Condition

Both build alternatives would construct a wildlife undercrossing (dark half circle in the upper left of center area of Figure 2.2.7-7), directional wildlife fencing, wildlife escape ramps (brown section of fencing in the top left of Figure 2.2.7-7), and sound walls of up to 8 feet in height (gray structure above the wildlife undercrossing in Figure 2.2.7-7) at this location. Additionally, if on-site conditions permit, excess soil may be used to bury or create ramps along the San Jose Water pipeline pictured above (the white, horizontal tube on the hillside), and to reshape topography. This would allow animals to traverse the pipeline more easily, as well as visually blending it with the setting.

The wildlife undercrossing type shown in Figure 2.2.7-7 is a concrete arched culvert, which is one of two structure type options that could be used. The other structure option is a single-span concrete slab unit bridge. The concrete slab unit bridge would appear almost the same as the arched culvert shown in Figure 2.2.7-7, except that the opening would be rectangular rather than arched.

Resource Change. The visual character and quality of KV-2 would be altered by the project. The added constructed features would alter form, lines, and color, and would reduce visual quality somewhat. Additional strong horizontal and vertical lines would be

introduced, and the balance of color would be shifted. However, the composition essentially remains one that is a blend of hard-edged built forms among a backdrop of vegetated hills.

The visual quality of KV-2 would be slightly reduced, primarily due to the project's effects on unity. By constructing a sound wall, wildlife undercrossing, wildlife directional fencing, and escape ramps, the project would further detract from the existing natural visual pattern on the hillside. However, the visual quality of KV-2 is already heavily influenced by constructed visual elements (i.e., the spillway of Lenihan Dam and the adjacent fencing). With the inclusion of the earthen ramps over the pipeline, one of the existing visual intrusions would be effectively screened. Therefore, overall resource change would be moderate-low to moderate.

Viewer Response. Views of KV-2 would be accessible to neighbors, such as recreational trail users, fishers, mountain bikers, and equestrians. Highway users and residents would not have direct views of KV-2. Highway users may notice two proposed features depicted in KV-2 – sound walls above the wildlife undercrossing and raised powerlines.

The proposed sound walls would be a notable change from the perspective of highway users. The walls would have a maximum height of 8 feet and would extend up to 230 feet along northbound SR 17 and 190 feet along southbound SR 17. The sound walls would obscure existing views of a nearby hillside east of SR 17 and reduce the openness of the area from highway users' perspectives. Additionally, the utility poles pictured above would need to be replaced with taller poles to increase the vertical clearance of the utility lines over the wildlife crossing. This change would be minor from the perspective of this viewer group, particularly at highway speeds.

Those who are familiar with the Los Gatos Creek Trail and the Lexington Reservoir area would be sensitive to changes. Viewer sensitivity is anticipated to be high due to this familiarity and expectations related to the natural setting of the trail. Viewer exposure would be moderate. Neighbors such as recreational users would be directly exposed to the proposed project features for extended periods of time; however, the number of users and frequency of trail use would reduce the overall exposure. Based on the nature of the proposed changes and average viewer exposure and sensitivity, viewer response is anticipated to be moderate-high.

Visual Impact. The project would impart substantial changes to the hillside above the Los Gatos Creek Trail. As stated above, this would lead to moderate-low to moderate resource change and moderate-high viewer response. Therefore, the project is anticipated to have a moderate to moderate-high visual impact on KV-2. Over time, the added built features are likely to be at least partially screened as vegetation matures on the regraded hillside, reducing their prominence.

Key View (KV) 3 – Southbound SR 17, Facing Toward the Southern Overcrossing (Build Alternative with Southern Overcrossing)



Figure 2.2.7-8: KV-3 Existing Condition/No Build Alternative

The existing form of KV-3 is visually dominated by the adjacent hillsides. KV-3 contains distinct lines of SR 17, the concrete median barrier, the overhead utility lines and cellular towers, as well as softer lines from the adjacent hillsides. The color of this view is balanced between natural features and the highway itself.

The existing visual quality of KV-3 is moderate to moderate-high. While this view is relatively vivid and unified, the state of SR 17 (i.e., pavement and median barrier scarring and weathering) and the various constructed features slightly reduce intactness.



Figure 2.2.7-9: KV-3 Proposed Condition

The Build Alternative with Southern Overcrossing proposes to construct a trail overcrossing, trail connections, and fencing at this location.

Resource Change. The overcrossing structure type will be determined at a later phase of project development, but for the purposes of visual analysis, it is simulated here as a girder bridge on abutments. The form, lines, and color of KV-3 would be substantially altered by the project. The proposed trail overcrossing would visually dominate the form of KV-3. The overcrossing bridge would partially block background views of the sky and hillsides. Additionally, the overhead utility lines and poles along northbound SR-17 would need to be raised to accommodate the new structure, subtly shifting their position in the horizon.

While not visible in this key view, two new retaining walls are needed with this alternative. One retaining wall of approximately 265 feet in length and up to 8 feet in height would be constructed along the shoulder of northbound SR 17. Views of this wall are obstructed by the median barrier for travelers in standard sedans or smaller vehicles traveling south, as indicated in Figure 2.2.7-9. On the west side of SR 17 on the opposite side of the structure as shown, a second retaining wall of approximately 260 feet in length and up to 14 feet in height would be constructed along the western edge of the north-south trail connection. The overcrossing structure, in conjunction with

the proposed retaining wall and fencing, would create a less spacious viewshed, free of congesting elements. These features, along with taller utility poles, would introduce new distinct horizontal and vertical lines, and the balance of colors would be altered.

The visual quality of KV-3 would be reduced by the project. While vividness would be slightly increased by the introduction of new contrasting visual elements, intactness and unity would be reduced, leading to a net reduction in visual quality. While the existing conditions of KV-3 are lacking in a harmonious visual pattern, the project would not improve this condition. Therefore, overall resource change would be moderate-high.

Viewer Response. Views of KV-3 would be accessible to highway users and neighbors, as with KV-1. Additionally, there are multiple residential properties just west of KV-1, on streets along and adjacent to Montevina Road. There is no direct line of sight from those residential properties to KV-3. However, residents can be expected to use the new trail overcrossing, and are assumed to have a high degree of familiarity with existing conditions.

While viewer exposure and sensitivity would be moderate for highway users due to the reasons discussed under KV-1, they would be high for neighbors. Viewer exposure and sensitivity would be particularly high for those who live in the aforementioned residential properties. Based on the nature of the proposed changes, and average viewer exposure and sensitivity, viewer response is anticipated to be moderate-high.

Visual Impact. The construction of a trail overcrossing, trail connections, and fencing at this location would be prominent changes to the visual landscape. Viewer response to these changes would be heavily influenced by the reaction of neighbors, such as recreational trail users and residents. Based on the assessed changes to the visual character and predicted viewer response, the project is anticipated to have a moderate-high visual impact at KV-3.

Key View (KV) 4 – Northbound SR 17, Facing Toward the Montevina Road Trail Connection (Build Alternative with Southern Overcrossing)



Figure 2.2.7-10: KV-4 Existing Condition/No Build Alternative

The existing visual character of KV-4 is represented by the form, lines, and color of SR 17 and the adjacent hillsides. The wide, flat appearance of SR 17 is prominent in this view, and the nearby slopes are covered with grassland and dense, mature tree stands.

The existing visual quality of KV-4 is moderate to moderate-high. The hillsides adjacent to SR 17 demonstrate a high degree of vividness, intactness, and unity. However, SR 17 itself suffers from scarring and weathering, which detracts from the harmonious visual pattern from this perspective. The roadway itself is also wide at KV-4 due to the presence of an exit lane and standard-width shoulder. This causes the roadway to dominate foreground views, reducing vividness. Additionally, the powerlines and utility poles adjacent to SR 17 reduce the intactness of an otherwise relatively undisturbed area.



Figure 2.2.7-11: KV-4 Proposed Condition

The Build Alternative with Southern Overcrossing proposes to build a trail connection to Montevina Road along the hillside above and west of SR 17 at this location. This would require vegetation removal, as well as the construction of a retaining wall along the downhill side of the new trail connection. The wall can be seen on the left of the highway in Figure 2.2.7-11 approaching the overcrossing in the distance. The need for, and specific length and heights of, the retaining wall would be determined during detailed design. The retaining wall could be up to approximately 281 feet in length and up to 5 feet in height. The retaining wall could also have safety railing on top (not simulated in Figure 2.2.7-11). Wildlife directional fencing would also be constructed at this location, which is shown below the proposed trail connection to Montevina Road in Figure 2.2.7-11. Additionally, this alternative would construct the Southern Overcrossing bridge, which is barely visible in the background of KV-4. See Figure 2.2.7-9 above for a closer view of this overcrossing, and a discussion of its visual impacts.

Resource Change. The proposed changes to KV-4 are the construction of a new trail connection and retaining wall, and a small amount of vegetation removal on the hillside west of SR 17. This would slightly alter the form, lines, and color of KV-4, and create a slightly barer appearance.

The visual quality of KV-4 would be slightly reduced by the project. As stated above, the hillside west of SR 17 is a major contributing factor to visual quality. Even with the proposed vegetation removal, the hillside would remain densely vegetated; however, the long line of the retaining walls would introduce new built, engineered features to the view. These changes would slightly detract from visual quality. Therefore, overall resource change would be low.

Viewer Response. KV-4 would be accessible to highway users and neighbors. Highway users would include drivers and vehicle passengers, while neighbors would include recreational trail users and nearby residents. As stated above under the discussion of KV-3, there are multiple residential properties surrounding Montevina Road, one of which is visible in the photographs above.

Highway users would have moderate viewer exposure and sensitivity at KV-4, while neighbors such as trail users and nearby residents would have moderate-high viewer exposure and sensitivity. Nearby residents would not have a direct view of the proposed changes, as they would be screened by the hills and vegetation west of SR 17. Based on the nature of the proposed changes, and average viewer exposure and sensitivity, viewer response is anticipated to be moderate.

Visual Impact. While the addition of retaining walls at KV-4 would constitute a notable change, the trail connection remains secondary within the overall setting and would not be a substantial change to visual character or quality. Viewer response is predicted to be moderate. Therefore, the project is anticipated to have a moderate-low visual impact on KV-4.

Conclusion

Based on the discussion above, the build alternatives would have an overall moderate visual impact on the project area. Both build alternatives would construct a wildlife undercrossing, directional wildlife fencing, wildlife escape ramps, and sound walls. Additionally, they would construct one trail overcrossing bridge and associated trail connections). These changes would alter the visual character and quality of the project area and would be prominent to highway users (i.e., persons driving or riding in a vehicle on SR 17) and neighbors (i.e., persons who live in the project area or visit it for recreational purposes) alike. While the two potential trail overcrossings would be sited in different areas, it is anticipated that their visual impacts would be similar, based on the visual impact discussion above. Therefore, both build alternatives would have moderate visual impacts.

2.2.7.3 Avoidance, Minimization, and/or Mitigation Measures

The project would implement a number of measures during construction to minimize vegetation removal, replace highway planting, and shield construction materials,

equipment, and nighttime lighting from view (Section 1.4.6, PF-VIS-01 through PF-VIS-06).

The following measures are also proposed to avoid or minimize visual impacts from the project. These will be designed and implemented in coordination with Midpen and with concurrence of the Caltrans District Landscape Architect.

AMM-VIS-01: Aesthetic Treatment of Trail Overcrossing. The trail overcrossing (northern or southern) shall be architecturally treated to blend with the surrounding environment. These treatments may include decorative fencing and color and texture for concrete elements. The design will be finalized during the detailed design phase and will be context sensitive.

AMM-VIS-02: Aesthetic Treatment of Sound and Retaining Walls. The proposed sound walls adjacent to the wildlife undercrossing, as well as any retaining walls required for the project, will be architecturally treated to blend with the surrounding environment. The design will be finalized during the detailed design phase and will be context sensitive.

AMM-VIS-03: Aesthetic Treatment of Wildlife Escape Ramps. If metal components are used for the proposed wildlife escape ramps, those components will include a matte finish, paint and/or stain to reduce glare and blend with the environment.

2.2.8 Cultural Resources

2.2.8.1 Affected Environment

The following discussion is from the Historic Property Survey Report (AECOM 2023b) completed for the proposed project in August 2023.

The study area for cultural resources is the archaeological and architectural Area of Potential Effects (APE), which encompasses all areas within the physical footprint of the improvements proposed for the build alternatives as well as areas that may either be directly or indirectly affected by project construction activities. The APE conforms to the Caltrans ROW, except in the following locations:

- Where proposed project facilities or construction access extends outside of the ROW, including trails that would connect overcrossings to existing and proposed future trails, and improved and new regional trail segments intended to close east-west gaps in the Ridge Trail (Figure 1.4-2);
- Where the APE extends to the north and south of the project limits to encompass the potential future extension of wildlife fencing along SR 17, which would be determined based on post-construction effectiveness monitoring and the availability of funding.

The APE also conforms to the anticipated extent of temporary construction easements, utility and maintenance easements, access rights, and property acquisition that may be needed from private property owners and public agencies. The APE represents the maximum extent for project-related activities, contains all areas that could be permanently affected by the project, and includes the entirety of known or reasonably anticipated boundaries of archaeological or built historic properties.

The vertical APE represents the maximum subsurface vertical extent of project-related activities for the proposed undertaking. Although this varies throughout the APE depending on the project activity, the most substantial vertical impacts are associated with the piles for the two trail overcrossing alternatives, which would extend approximately 60 feet below surface. The wildlife undercrossing would be excavated to 30 feet below the current road surface, and retaining walls would be excavated to approximately 10 feet below ground.

Records and Archival Review

A cultural resources records search was conducted by the Northwest Information Center of the California Historical Resources Information System, at California State University, Sonoma, for the APE and a 0.5-mile radius. Reports for previous studies were reviewed for the APE and a 0.5-mile radius. The Los Gatos Historical Society and the Santa Clara County Historical & Genealogical Society were also contacted for information or concerns regarding historical resources in or near the project area. No responses were received.

One previously recorded resource has been identified in the APE, a historic-era archaeological site that is considered eligible for listing in the National Register of Historic Places (NRHP). This site is also a historic resource for purposes of CEQA.

Native American Consultation

The Native American Heritage Commission (NAHC) was contacted on May 7, 2022, to request a search of the Sacred Lands File for cultural resources of significance to Native Americans within or near the APE.

The NAHC replied on September 9, 2022, stating that a search of the Sacred Lands File had been completed and was negative for cultural resources, and providing a list of nine Native American tribes who may have information related to cultural resources in the APE. On November 23, 2022, project information and maps were sent to Native American tribes via e-mail and U.S. Mail (Tribal Consultation Notices). The Tribal Consultation Notices initiated consultation as required under Section 106 of the National Historic Preservation Act and CEQA (PRC Section 21080.3.1 and Chapter 532 Statutes of 2014, also known as California AB 52). No Native American tribes responded within 30 days to the Tribal Consultation Notices.

Although none of the Native American tribes in the project area requested consultation in response to the Tribal Consultation Notices, in the spirit of Public Resources Code Section 21080.3.1, Midpen sent follow-up e-mails to all recipients on May 17, 2023, as a courtesy to conduct informal consultation. Two recipients replied to the May 17, 2023, courtesy notice. Representatives of the Tamien Nation responded on May 17, 2023, and requested additional information about the project. The Muwekma Ohlone Indian Tribe of the San Francisco Bay Area Region responded on May 19, 2023, and recommended monitoring of project construction by Native Americans. As part of this ongoing informal consultation, Midpen, VTA, and Caltrans staff met with a representative from the Tamien Nation on November 29, 2023 to discuss the proposed project and potential Tribal Cultural Resources in the area. A site visit with Tamien Nation will be scheduled in the future.

Consultation with Native American groups is ongoing.

Field Survey Results

Accessible portions of the APE were surveyed by archaeologists between May 2021 and March 2022. One cultural resource and an isolated prehistoric artifact were identified during the survey.

2.2.8.2 Environmental Consequences

No Build Alternative

The No Build Alternative would not affect any cultural resources.

Build Alternatives

No construction activities would take place in the historic-era archaeological site. Therefore, the cultural resources finding for both build alternatives is No Adverse Effect with Standard Conditions – Environmentally Sensitive Areas (ESAs) (Caltrans 2023a).

Neither Build Alternative would cause a substantial adverse change to a known historical or archaeological resource as defined by 14 CCR 15064.5(a), including the isolated prehistoric artifact, or affect or use any Section 4(f) historic resource.

Potential effects of the build alternatives on Tribal Cultural Resources are discussed in Section 3.2.18.

2.2.8.3 Avoidance, Minimization, and/or Mitigation Measures

The project includes PF-CUL-01 (Section 1.4.6), which provides a protocol for cultural resource discoveries if encountered during construction. In addition, the following measure would be included to avoid or minimize impacts to cultural resources.

AMM-CUL-01: Implement Environmentally Sensitive Area Action Plan. To ensure avoidance of the previously determined eligible site, the site will be designated as an ESA for the duration of project construction in accordance with the requirements set forth in the Environmentally Sensitive Area Action Plan (AECOM 2023b). The requirements include delineating the ESA on all project plans, conducting a preconstruction meeting with construction personnel to ensure that the ESA is properly understood, and coordinating/monitoring ESA installation by the contractor. In addition, an archaeologist will conduct field reviews of the ESA to ensure that it remains intact and is not compromised.

2.3 PHYSICAL ENVIRONMENT

2.3.1 Hydrology and Floodplain

2.3.1.1 Affected Environment

The following discussion is based on the Location Hydraulic Study Memorandum (HDR/WRECO 2023a), which was completed in August 2023.

Watershed

The project area is in an undefined hydrologic sub-area (#205.40) of the Guadalupe River Hydrologic Area in the Santa Clara Hydrologic Unit. The hydrologic sub-area (HSA) comprises 96,468 acres (Caltrans 2023b). The project is in the Guadalupe River Watershed, which covers an approximate area of 171.3 square miles (Valley Water 2023).

Floodplain

Floodplains are defined using Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs), which categorize floodplains into different areas. The project area is located within FEMA FIRMs 06085C0360H and 06085C0380H, which have an effective date of May 18, 2009. All of the proposed project activities except for construction of the Montevina Ridge Trail to Sanborn County Park (Trail No. 3; see Section 1.4.3) are in FIRM 06085C0380H (Figure 2.3.1-1). Trail No. 3 is in FIRM 06085C0360H (Figure 2.3.1-2).

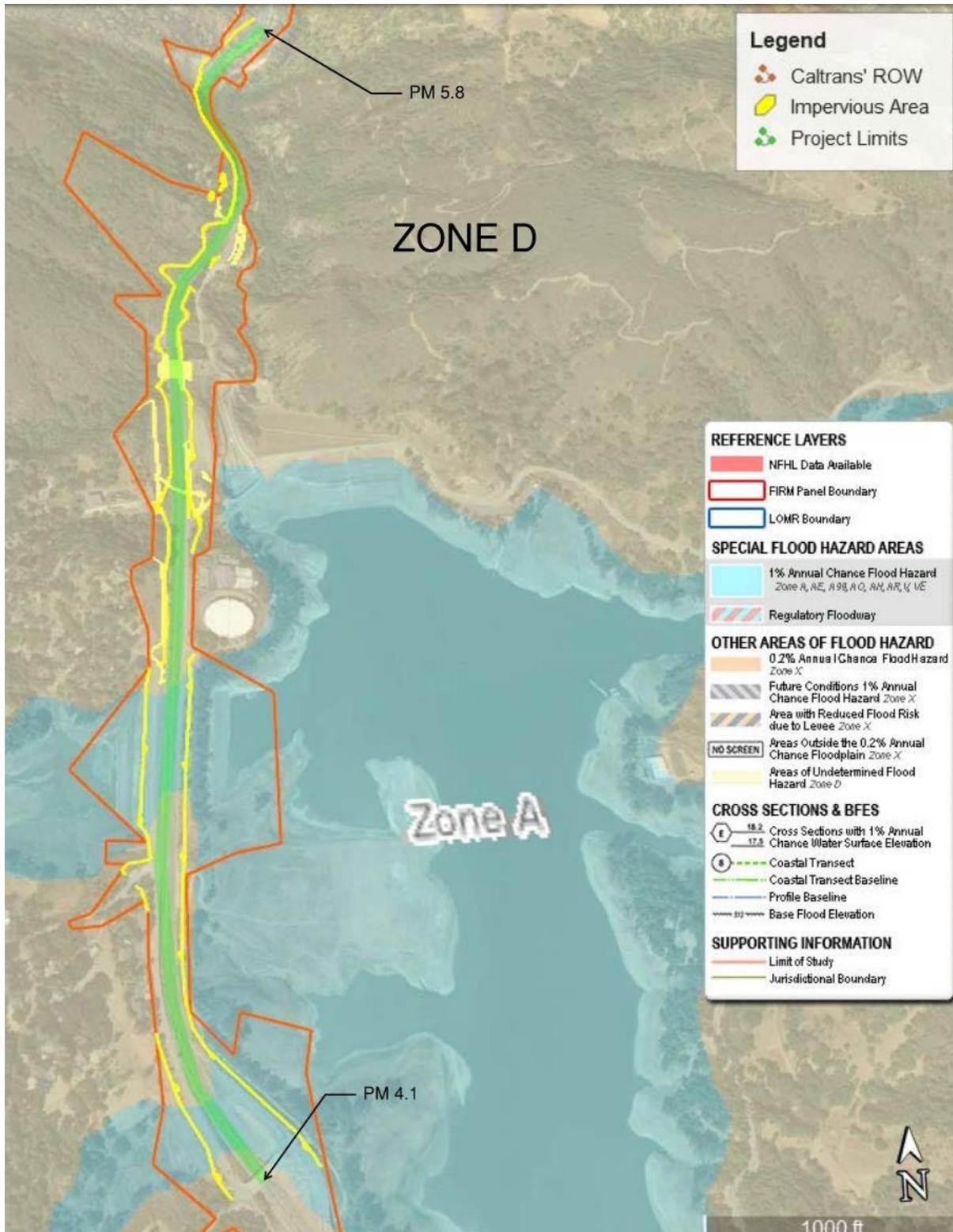


Figure 2.3.1-1. FEMA Floodplain (06085C0380H) and Work within the Caltrans ROW



Figure 2.3.1-2. FEMA Floodplain (06085C0360H)

The sections of SR 17 that cross over Lexington Reservoir (generally south of Montevina Road and Alma Bridge Road) and the area just north of Bear Creek Road are in Special Flood Hazard Area (SFHA) Zone A, which represents areas with a 1% annual chance of flooding (Figure 2.3.1-1). Other than those sections of SR 17, the entire project area lies in non-SFHA Zone D, which comprises areas with possible but undetermined flood hazards because no flood hazard analysis has been conducted.

The FEMA Flood Insurance Study for Santa Clara County (FEMA 2017) does not identify the cross sections of Los Gatos Creek adjacent to the project area as having a known water surface elevation.

Beneficial Uses

Areas of the project contain natural and beneficial floodplain values including, but not limited to, fish, wildlife, plants, open space, natural beauty, scientific study, outdoor recreation, forestry, natural moderation of floods, water quality maintenance, and groundwater recharge.

2.3.1.2 Environmental Consequences

No Build Alternative

The No Build Alternative would not affect the floodplains within the project limits. None of the existing floodplain values in or adjacent to the project would be altered under the No Build Alternative.

Build Alternatives

Watershed

Both build alternatives would add net new impervious surface area from the proposed crossings, retaining walls, sound walls, and footings for wildlife directional fencing and escape ramps. The total areas of net new impervious surface would be 1.34 acres for the Build Alternative with Southern Overcrossing and 0.95 acre for the Build Alternative with Northern Overcrossing. The added impervious area from each alternative would contribute less than 0.01% area to the effective watershed, based on the most conservative assumptions. The increase in impervious surface area from both alternatives would be insignificant in the context of the watershed and would not affect flows or flooding in the project limits.

Floodplain

The majority of the proposed project area is not within an SFHA. With both build alternatives, wildlife directional fencing and escape ramps are proposed in FEMA SFHA Zone A. For both alternatives, these project elements would create approximately 1.9 acres of disturbed soil area (DSA) and approximately 0.05 acre of impervious area. All other work included in the build alternatives would be within non-SFHA Zone D. The build alternatives would not change overall land use, substantially increase impervious area or fill within the floodplain, or change the 100-year water surface elevation. Therefore, the build alternatives would have minimal impact to the floodplain.

Neither build alternative would result in a “significant encroachment” as defined in 23 CFR 650.105. A significant encroachment is a highway encroachment, and any direct support of likely base floodplain development, that would involve one or more of the following construction or flood-related impacts:

- A significant potential for interruption or termination of transportation facility that is needed for emergency vehicles or provides a community’s only evacuation route,
- A significant risk (to life or property), or
- A significant adverse impact on natural and beneficial floodplain values.

The project limits along SR 17 are within FEMA SFHA Zone A, where no depths or base flood elevations are shown because detailed analyses are not performed for such areas. Potential traffic interruptions due to the base flood are not anticipated because the project footprint and new impervious area within the FEMA SFHA is minimal.

Neither build alternative would result in a significant risk to life or property. Potential impacts to natural and beneficial floodplain values are discussed below.

Because the project would not have a significant encroachment into the base or 100-year floodplain, an “Only Practicable Alternative Finding” is not required.

Beneficial Uses

Potential short-term adverse effects during the construction activities to natural and beneficial floodplain values may include vegetation removal for equipment access and staging, and temporary disturbance of wildlife habitat. Section 1.4.6 lists several project features that would be implemented during construction to reduce the potential for effects on natural and beneficial floodplain values, such as delineating Environmentally Sensitive Areas for exclusion (PF-BIO-01), cleaning up and recontouring temporarily disturbed areas and staging areas (PF-BIO-03), and revegetating temporarily affected areas (PF-VIS-03). As a result, the project would not have adverse effects on long-term natural and beneficial floodplain values.

2.3.1.3 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation is required.

2.3.2 Water Quality and Stormwater Runoff

2.3.2.1 Affected Environment

This section is based on the Water Quality Assessment Report (HDR/WRECO 2023b), which was completed in August 2023.

Regional and Local Hydrology

The project is within the Guadalupe River Watershed (Valley Water 2023). The watershed originates at the confluence of Guadalupe Creek and Los Alamitos Creek, and the mainstem is joined by three other tributaries: Ross Creek, Canoas Creek, and Los Gatos Creek. The watershed contains six major reservoirs: Calero Reservoir on Calero Creek, Guadalupe Reservoir on Guadalupe Creek, Almaden Reservoir on Alamitos Creek, Vasona Reservoir, Lexington Reservoir, and Lake Elsmán Reservoir on Los Gatos Creek (Santa Clara Valley Urban Runoff Pollution Prevention Program [SCVURPPP] 2023).

Surface Waters

The project's receiving water bodies are Lexington Reservoir, Los Gatos Creek, Black Creek, Trout Creek, and Ravine Creek. The main body of Lexington Reservoir is to the east of SR 17 and is situated between upper and lower Los Gatos Creek. The 2.5-mile-long reservoir flows north to lower Los Gatos Creek. Tributaries of Lexington Reservoir include Black Creek, Briggs Creek, Aldercroft Creek, Hendrys Creek, and upper Los Gatos Creek. Trout Creek and Ravine Creek are tributaries of lower Los Gatos Creek.

Surface Water Quality Objectives/Standards

The San Francisco Bay Basin Plan (SFRWQCB 2019) establishes water quality objectives for all surface waters in the San Francisco Bay Region. Water quality objectives are numeric and narrative and are used to define the appropriate levels of environmental quality, protect beneficial uses, and manage activities that can impact aquatic environments. The Basin Plan lists the following narrative and numeric water quality objectives for the region's surface waters: bacteria, bioaccumulation, biostimulatory substances, color, dissolved oxygen, floating material, oil and grease, population and community ecology, pH, radioactivity, salinity, sediment, settleable material, suspended material, sulfide, taste and odors, temperature, toxicity, turbidity, and un-ionized ammonia.

Water Quality Impairments and Total Maximum Daily Loads

The 2020/2022 California Integrated Report (CWA Section 303[d] List / 305[b] Report) (SWRCB 2022) lists Lexington Reservoir and lower Los Gatos Creek as pollutant impaired. Lexington Reservoir is identified as being impaired by mercury, with an expected total maximum daily loads (TMDL) completion date of 2029. Lower Los Gatos Creek is identified as being impaired by diazinon (an organophosphate used in pest control) and water temperature. The USEPA approved a TMDL for diazinon in 2007. A TMDL for water temperature has an expected completion date of 2031.

Beneficial Uses

Existing beneficial uses for Lexington Reservoir and lower Los Gatos Creek include municipal and domestic water supply, groundwater recharge, cold and warm freshwater habitat, wildlife habitat, and recreation. The Basin Plan (SFRWQCB 2019) lists Lexington Reservoir as having commercial and sport fishing. Lower Los Gatos Creek is identified as offering preservation of rare and endangered species as well as potential spawning. The Basin Plan shows that Black Creek has the same beneficial uses as Lexington Reservoir, and Trout Creek and Ravine Creek have the same beneficial uses as Los Gatos Creek.

There are no Areas of Special Biological Significance in the project vicinity (Caltrans 2022b).

Trash

SR 17 within the project limits is identified as having low and moderate trash generation areas (Caltrans 2022c). The project is required to implement trash control measures in areas classified as moderate trash generation areas, per Water Code Section 13383.

Groundwater Resources

The project area is not located in any identified groundwater basin (California Department of Water Resources 2022). The nearest groundwater basin is the Santa Clara Valley groundwater basin (Basin No. 2-9.02). The water in Lexington Reservoir is

used to replenish groundwater supplies by gradually releasing it to Los Gatos Creek to recharge groundwater ponds downstream (Valley Water 2019).

Preliminary geotechnical testing for the project conducted in 2021 encountered free groundwater at one location on SR 17 at a depth of 34 feet, corresponding to Elevation 506 feet (AECOM 2023c). Free groundwater was not encountered at any other locations within the project area, therefore the water encountered in the boring could represent a perched condition rather than a local or regional groundwater table.

2.3.2.2 Environmental Consequences

No Build Alternative

No short-term, temporary water quality impacts would occur with the No Build Alternative. The No Build Alternative would not result in new construction or improvements other than projects that have already been programmed. The No Build Alternative would not result in long-term water quality impacts.

Build Alternatives

Drainage Patterns

The total amount of net new impervious surface would be 1.34 acres for the Build Alternative with Southern Overcrossing and 0.95 acre for the Build Alternative with Northern Overcrossing. These increases in impervious area are minor and would not change existing drainage patterns. Specific drainage improvements will be determined during the PS&E phase.

Suspended Particulates (Turbidity)

The build alternatives would add minimal impervious area and have minimal potential to increase sediment in runoff to receiving water bodies. Stormwater impacts would be reduced through the proper implementation of permanent erosion control, design pollution prevention, and stormwater treatment measures.

Oil, Grease, and Chemical Pollutants

The build alternatives would not change traffic patterns or congestion or result in additional particle deposition from exhaust and heavy metals from braking. Both build alternatives would include source control measures such as protection of existing vegetation, vegetating surfaces of disturbed soils, and permanent erosion control measures such as hydroseeding. Implementation of treatment BMPs would avoid impacts to water quality.

Trash

The build alternatives would implement trash control measures to comply with California Water Code Section 13383. The specific trash control measures will be determined during PS&E based on maintenance accessibility, potential impacts to federally listed species habitat, and existing Valley Water and San Jose Water conveyance and delivery systems in the vicinity.

Temperature

Lower Los Gatos Creek has a TMDL for water temperature, with the expected TMDL completion date in 2031. The source of this pollutant is unknown. Treatment BMPs would reduce sediment discharge into Los Gatos Creek and Lexington Reservoir, and would not exacerbate the water temperature TMDL.

Erosion and Accretion Patterns

Hydromodification can cause increased bed and bank erosion, loss of habitat, increased sediment transport and deposition, and increased flooding. The potential for hydromodification impacts must be considered because the build alternatives would create or replace at least 1 acre of impervious surface (SCVURPPP's Hydromodification Management Plan (2005)). Hydromodification will be further evaluated during PS&E.

Aquifer Recharge/Groundwater

The receiving water bodies in the project area have beneficial uses for groundwater recharge. The added impervious area from the build alternatives would decrease the perviousness within the project area, but the added impervious areas would be minimal. Treatment BMPs including infiltration and bioretention devices may be installed to infiltrate directly to the soil, rather than discharging to surface waters; therefore, permanent impacts to groundwater recharge for the receiving water bodies are not anticipated.

Long-term dewatering of groundwater is also not anticipated.

Short-Term Impacts to Water Quality

During project construction, the Build Alternative with Southern Overcrossing would result in 12.86 acres of disturbed soil area (DSA), and the Build Alternative with Northern Overcrossing would result in 11.86 acres of DSA. Since the build alternatives would disturb more than 1 acre of soil, the project must comply with the Construction General Permit (CGP), which includes performing a risk level determination to determine the required monitoring and sampling of stormwater during construction. The risk level assessment is determined from the combined receiving water risk and sediment risk.

The receiving water risk is determined based on the receiving water bodies having either a 303(d) listing for sediment impairment or a TMDL for sediment or the existing beneficial uses for cold freshwater habitat, migration, and fish spawning. The sediment risk is determined from the product of the rainfall runoff erosivity factor, the soil erodibility factor, and the length-slope factor.

Both build alternatives are likely to be classified as Risk Level 2. Therefore, in addition to implementation of standard construction site BMPs, the contractor would be required to perform quarterly non-stormwater discharge visual inspections, and rain-event visual inspections pre-storm, daily during a storm event, and post-storm. Risk Level 2 projects are also required to implement Rain Event Action Plans and comply with Numeric Action Level effluent limits for pH and turbidity. The risk assessment may be updated during PS&E using more detailed design information.

Long-Term Impacts During Operation and Maintenance

The total amount of net new impervious surface would be 1.34 acres for the Build Alternative with Southern Overcrossing and 0.95 acre for the Build Alternative with Northern Overcrossing, as noted above. The added impervious area would have a minimal increase in stormwater pollution effects. Runoff from project activities would be directed to stormwater treatment facilities such as biofiltration swales. Pollution and runoff sources are not expected to change. These impacts would be reduced through the implementation of stormwater treatment BMPs (Section 1.4.4.4).

Applicable Project Features

Implementation of the following project features, which are described in Section 1.4.6, would reduce the potential for the impacts described above:

- PF-WQ-01. Temporary Water Quality Best Management Practices (BMPs)
- PF-WQ-02. Permanent Water Quality and Stormwater Treatment
- PF-WQ-03. Erosion Control and Water Quality for Trail Construction

2.3.2.3 Avoidance, Minimization, and/or Mitigation Measures

Implementation of the project features listed above would reduce the potential for impacts to water quality and stormwater runoff. No additional avoidance, minimization, or mitigation is required.

2.3.3 Geology/Soils/Seismic/Topography

The following discussion is based on the Structure Preliminary Geotechnical Reports completed in September 2023 (AECOM 2023c) and the Phase I Environmental Site Assessment prepared in March 2019 (Hoexter Consulting 2019).

2.3.3.1 Affected Environment

The project area is located within the central region of the Coast Ranges Geomorphic Province, which extends from the Oregon border south to the Transverse Ranges. The general topography is characterized by subparallel, northwest-trending mountain ranges and intervening valleys. The region has undergone a complex geologic history of sedimentation, volcanic activity, folding, faulting, uplift, and erosion. The project vicinity is along the northeast flank of the uplifted Santa Cruz Mountains on the southwest side of San Francisco Bay.

In the area of the proposed wildlife undercrossing and trail overcrossing alternatives, SR 17 is underlain primarily by Cretaceous- and Jurassic-age Franciscan Complex bedrock with Holocene- and Pleistocene-age alluvial terrace and landslide deposits (McLaughlin et al. 2001). Franciscan lithologies along the project alignment have been mapped as *mélange* and sandstone. The *mélange* matrix is described as sheared argillite and lithic metasandstone; this surrounds blocks of blueschist, amphibolite, chert, limestone, and mafic igneous rocks in blocks of varying size from a meter to several kilometers in length (McLaughlin et al. 2001). The sandstone is a lithic graywacke. The alluvial terrace deposit was derived from a wide range of rock types that comprise the Franciscan Complex, which is the principal bedrock geologic unit exposed in the Santa Cruz Mountains.

Proposed trails on the west side of SR 17 are mapped as radiolarian chert (Lower Cretaceous and Jurassic), sandstone (Upper and/or Lower Cretaceous), *mélange* of the central belt (Upper Cretaceous), and landslide deposits (Holocene and Pleistocene) (McLaughlin et al. 2001). The westernmost trail segment, the Montevina Ridge Trail to Sanborn County Park (Trail No. 3), is mapped as sandstone and sheared rock (Brabb 2000).

Trails on the east side of SR 17 are mapped as a mix of *mélange* of the central belt (Upper Cretaceous), foraminiferal limestone (Upper and Lower Cretaceous), volcanic rocks (Lower Cretaceous), serpentized ultramafic rocks (Jurassic), Santa Clara formation (Pleistocene and Pliocene), alluvium (Holocene and Pleistocene), and basaltic volcanic rock blocks (McLaughlin et al. 2001).

Seismic Hazards

Alquist-Priolo earthquake fault zones are regulatory zones surrounding the surface traces of active faults in California. (A trace is a line on the earth's surface defining a fault.) Wherever an active fault exists, if it has the potential for surface rupture, a structure for human occupancy cannot be placed over the fault and must be a minimum distance from the fault (generally 50 feet). The project area does not cross any known active faults (USGS 2021) and is not within an Alquist-Priolo fault zone (CGS 2002; Figure 2.3.3-1). Therefore, surface rupture due to faulting in the project area is not expected to occur.

The intensity of ground shaking depends on the size of the earthquake, the distance of the epicenter from the site, the direction of earthquake propagation along the fault, and the site geologic conditions. The closest point of the San Andreas fault is approximately 0.6 mile southwest of the southern project limit at Bear Creek Road. The fault is a minimum of approximately 1.6 miles west-southwest of the wildlife undercrossing and both trail overcrossings. Trail No. 3, the Montevina Ridge Trail to Sanborn County Park, would be within 0.3 mile from the fault (CGS 2022). The project area is expected to experience strong to very strong ground shaking during large earthquakes on any of the major active faults in the San Francisco Bay Area.

Other Geological Hazards

Liquefaction

Liquefaction occurs when a saturated or partially saturated soil substantially loses strength and stiffness in response to an applied stress, such as earthquake shaking or sudden change in stress condition, causing the soil to behave like a liquid. The soil type most susceptible to liquefaction is loose, cohesionless, granular soil below the water table and within about 50 feet of the ground surface. CGS mapping shows the Los Gatos Creek channel area to the north of the dam spillway as a liquefaction zone (CGS 2022; Figure 2.3.3-1). The closest areas of the Los Gatos Creek liquefaction zone would be approximately 175 feet southeast of the eastern landing of the Northern Overcrossing bridge and 375 feet east of the wildlife undercrossing.

Landslides

The California Geological Survey (CGS) performed an inventory of existing landslides in much of the San Francisco Bay Area by analyzing aerial photographs and satellite imagery, field reconnaissance and a review of previously published landslide mapping. Areas found to be most susceptible to earthquake-induced landslides are steep slopes in poorly cemented or highly fractured rocks, areas underlain by loose, weak soils, and areas on or adjacent to existing landslide deposits. These geologic and terrain conditions exist in many parts of the project area.

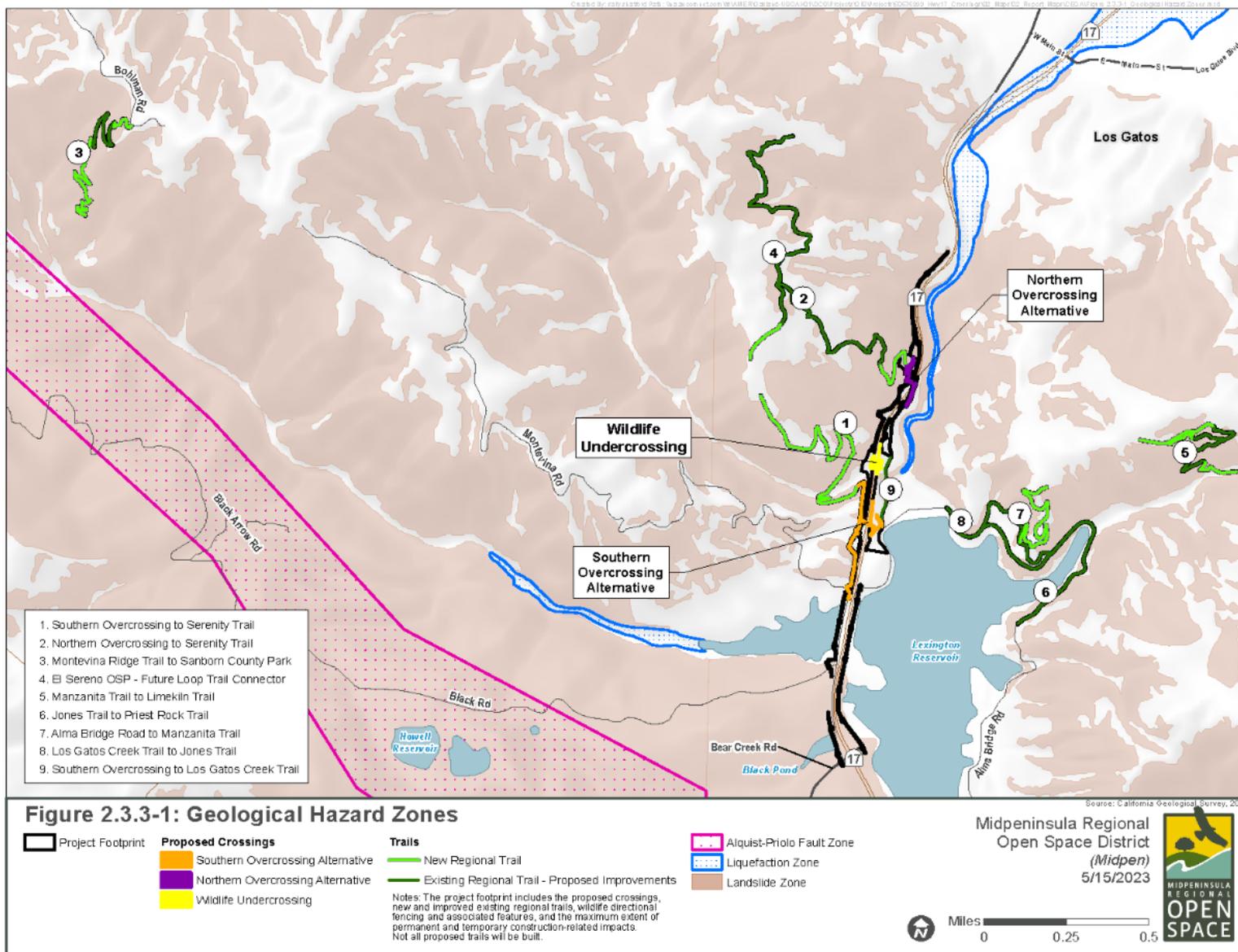


Figure 2.3.3-1: Geological Hazard Zones

No evidence of active landsliding was observed at any of the proposed crossing locations, but landslide deposits were observed near the location of the Northern Overcrossing alternative (AECOM 2023c). CGS mapping shows that the majority of the project area falls within landslide zones (CGS 2022). Project elements that are partly or wholly within mapped landslide zones include the Northern Overcrossing alternative west of SR 17, the Southern Overcrossing alternative west of SR 17, all proposed new and improved existing trails, and areas with wildlife directional fencing and escape ramps (Figure 2.3.3-1). The proposed wildlife undercrossing and sound walls are not within a mapped landslide zone.

The relatively steep terrain within the project limits should be considered susceptible to landsliding, either seismically induced or otherwise.

Expansive or Corrosive Soils

Expansive soils that shrink or swell with changes in moisture content have the potential to disrupt structures that are constructed on them. Expansive soils are identified by a Plasticity Index (PI). This identifies the soils that have the ability to undergo deformation without cracking. Soils that have a high plasticity index have a wide range of moisture content in which the soil performs as a plastic material. Highly and moderately plastic clays have large PI values. The soils mapped in the project area are moderate for linear expansivity, with majority classified as clayey loam and well-drained (USDA 2023).

The project area contains low to moderate corrosive soils (USDA 2023).

Settlement

Compaction settlement, or seismic densification, occurs when loose granular soils above the water table increase in density as a result of earthquake shaking. The soil densification can result in differential settlement because of variations in soil composition, thickness, and initial density. An evaluation of the potential for compaction settlement to occur where fills are present would be completed during the design phase and be mitigated through appropriate foundation design.

Erosion and Scour

Due to the hilly nature and presence of stream channels in the project area, the potential for erosion exists. Areas along creeks and unlined drainages in the project area could be susceptible to scour.

2.3.3.2 Environmental Consequences

The following discussion pertains to both the No Build and build alternatives because seismic and geologic hazards in the project area are present under the existing condition and would be present under both the No Build and build alternatives. The proposed improvements would not increase existing seismic or other geological hazards.

Seismic Hazards

The proposed project would not exacerbate the potential for seismic shaking; the intensity of the earthquake ground motion at the site would depend on the characteristics of the generating fault, the distance to the earthquake epicenter, the magnitude and duration of the earthquake, and specific site geologic conditions. Caltrans' design and construction guidelines incorporate engineering standards that address seismic risks. Project elements would be designed and constructed to meet seismic design requirements for ground shaking and ground motions, as determined for the project vicinity and site conditions (Section 1.4.6, PF-GEO-02). Caltrans also requires that additional geotechnical subsurface and design investigations be performed during the final project design and engineering phase. These standards and requirements would avoid the potential for adverse impacts related to seismic activity. The project would have no impact.

Other Geological Hazards

No project facilities would be built on liquefaction zones, although the eastern landing of the Northern Overcrossing bridge would be within 175 feet of the Los Gatos Creek liquefaction zone. Both build alternatives would fall within mapped landslide zones. Landslides have the potential to occur, but the project would be designed to account for potential landsliding. Caltrans' design and construction guidelines incorporate engineering standards that address risks associated with liquefaction and landslides. PF-GEO-01 (Section 1.4.6) provides for geotechnical investigations to be performed during final design for any proposed new earthwork or new structure in the Caltrans ROW within the project limits. The investigations will address geologic hazards related to expansive or corrosive soils, settlement, and scour.

During project construction, earthmoving activities such as grading, excavation, and trenching have the potential to result in soil erosion and loss of topsoil, especially in areas with steep slopes. BMPs would be implemented to reduce erosional impacts during construction activities, such as stabilization of graded areas with appropriate erosion control device and use of rock slope protection (Section 1.4.6, PF-WQ-01 through PF-WQ-03).

2.3.3.3 Avoidance, Minimization, and/or Mitigation Measures

Implementation of the project features listed above would reduce the potential for impacts from seismic and geologic hazards. No avoidance, minimization, or mitigation is required.

2.3.4 Paleontology

2.3.4.1 Affected Environment

This section summarizes the Paleontological Evaluation Report/Paleontological Mitigation Plan prepared for the proposed project (Cogstone Resource Management 2023).

Project Area Paleontology

The project area lies within the Coast Ranges Geomorphic Province. The Coast Ranges are typified by northwest-southeast trending mountains and valleys roughly parallel to the San Andreas fault zone. Mountains of the Coast Ranges are typically late Mesozoic to Cenozoic in age (less than 200 million years old) and consist of metamorphic and sedimentary rocks.

The surface of the project area is mapped as multiple formations deposited between modern and Jurassic times. These units are summarized below, from youngest to oldest in geologic age (based on Cohen et al. 2022), and shown in Figure 2.3.4-1.

- Historic sediments in the area such as artificial fill (af) are human-made deposits that, in California, are usually less than 200 years old. Deposits are typically less than a few feet thick but can be substantially thicker in the areas of overpasses, freeways, and other large earthworks. Any fossils that may be encountered in artificial fill are not scientifically significant.
- Holocene stream channel deposits (Qhc) are less than 11,700 years old and consist of silt, sand, gravel, and boulders that are deposited into dissected stream channels.
- Pleistocene to Holocene deposits range from 2.6 million years before present (bp) to modern age. These units include landslide, alluvial terrace, and alluvium deposits. The landslides may be derived from older formations, and deposits contain primarily unconsolidated and intact blocks of soil debris and rock that have been moved downslope due to gravitational processes. Alluvial terrace deposits consist of soil, silt, sand, gravel, and boulders that are deposited in alluvial fans and streams. Alluvium units of silt, sand, gravel, and boulder sediments are unconsolidated and are deposited in terraces, stream channels, and alluvial fans.

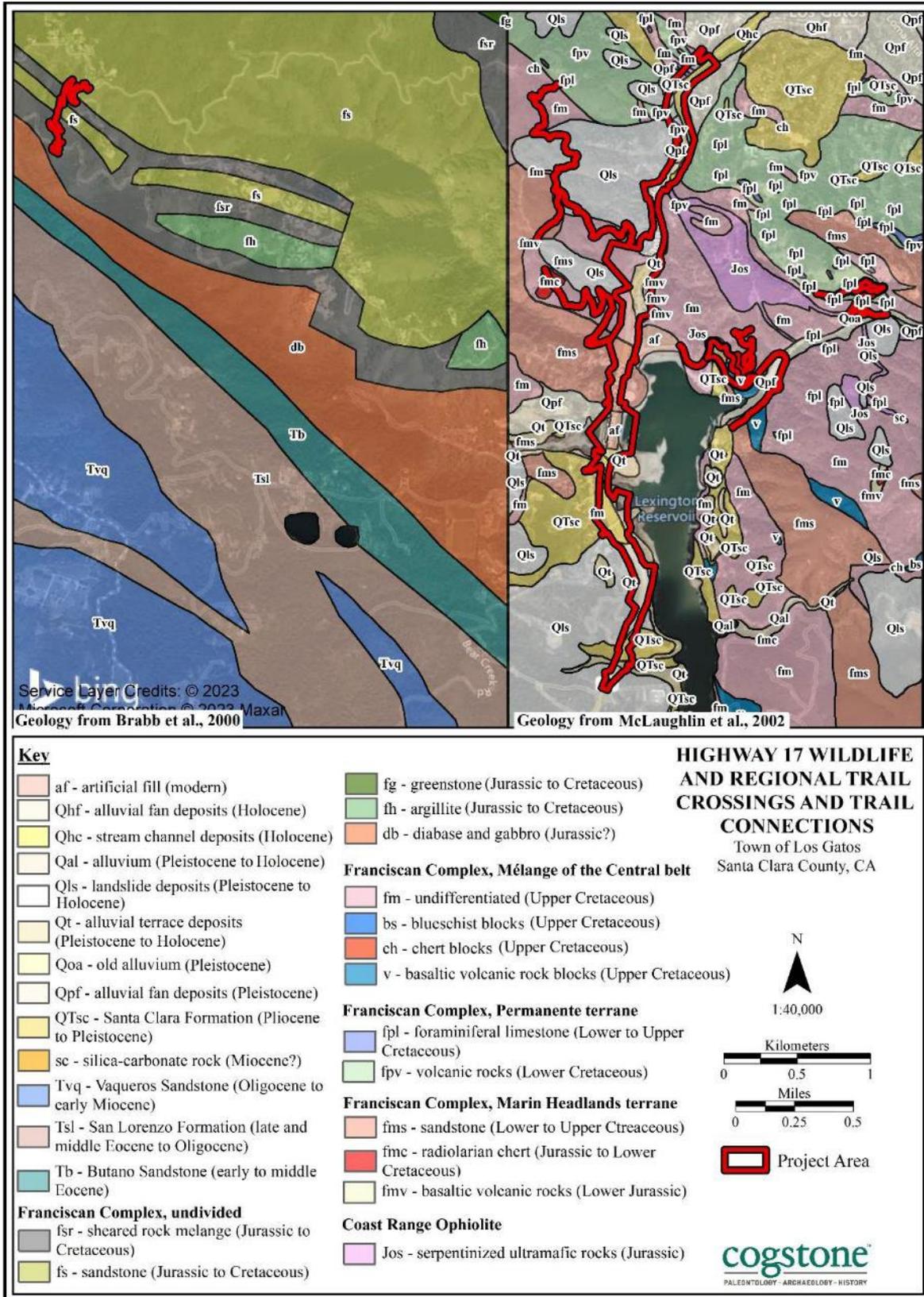


Figure 2.3.4-1: Project Area Geology

- Pleistocene deposits range from 2.6 million to 11,700 years bp and include alluvial fan deposits. These deposits consist of soil, silt, sand, gravel, and boulders deposited in older alluvial fans. This unit includes younger fans that incise older alluvial fans, and also includes some overbank and channel deposits of Pleistocene waterways. Thirteen fossil localities have been recorded from Pleistocene alluvium in Santa Clara County. The nearest locality to the project was approximately 11.5 miles to the north-northeast and yielded remains of a Columbian mammoth from 11.5 feet below the surface. Other nearby localities within Santa Clara County have produced fossils of extinct Pleistocene Harlan's ground sloth, Columbian mammoth, horse, dwarf pronghorns, camel, and bison. The records show that these fossils were found less than 12 feet below the surface.
- The late Pliocene to early Pleistocene Santa Clara Formation ranges from 5.3 million to 11,700 years bp. This unit consists of gray to red-brown fluviually deposited, poorly sorted and poorly consolidated thin-bedded lacustrine mudstones, silts, sands, pebble and boulder conglomerates. Erosion is significant in some areas with more than 100 feet of exposure. Extensive geological borings in the Santa Clara Valley indicate that fluvial deposits including the Santa Clara Formation and both Pleistocene and Holocene alluvium have a combined depth of approximately 330 to 1,315 feet (100 to 400 meters). Six localities are recorded from the Santa Clara Formation in Santa Clara County, with the closest approximately 16 miles to the north of the project area. Extinct horse, camel, long horned bison, fish and plants were recovered from these localities. The only locality with a recorded depth produced long-horned bison from a depth of 22 feet.
- The Jurassic to Cretaceous Franciscan Complex ranges from 201.4 to 66.0 million years bp. This group of units consist of strongly to weakly metamorphosed chert, graywacke, argillite, limestone, sandstone, serpentinite, basalt, and other rocks. Eight units of this complex can be found within the study area (Mélange of the Central Belt: undifferentiated and basaltic volcanic rock blocks; Permanente terrane: foraminiferal limestone and volcanic rocks; Marin Headlands terrane: sandstone, radiolarian chert, and basaltic volcanic rocks; and undifferentiated sandstone and sheared rock). The Permanente Terrane foraminiferal limestone contains several species of foraminifers and sparse megafossils, and the Marin Headlands terrane radiolarian chert contains radiolarian faunas. Otherwise, there are no records of fossils from the Franciscan Complex from Santa Clara County.
- The Jurassic era Coast Range Ophiolite ranges from 201.4 to 145.0 million years bp. This unit consists of serpentinitized ultramafic rocks of harzburgite, dunite, and peridotite along with minor blocks and sheared inclusions of gabbro and diabase. While these rocks were originally included within the Franciscan Complex (Bailey and Everhart 1964), McLaughlin et al. (2002) reassigned them to the Coast Range ophiolite and suggested they are related to the ophiolitic basement of the Sierra Azul block and its outlier in the Santa Teresa Hills. No record of fossils was found for the Coast Range Ophiolite from within the project area or a 1-mile buffer.

A records search of the project area was obtained from the University of California, Museum of Paleontology for fossil localities within a 1-mile radius of the project. Additional literature and resources were consulted including the University of California Museum of Paleontology online database, the California Academy of Sciences, and the Paleobiology Database. There was no record of vertebrate fossils from within the project area or a 1-mile buffer.

Determining Paleontological Sensitivity

Caltrans uses a three-part scale to characterize paleontological sensitivity, consisting of no potential, low potential, and high potential (Caltrans 2016). The scale generally correlates with the likelihood for a geologic unit to contain significant vertebrate, invertebrate, or plant fossils. Occurrences of fossil resources are closely tied to the geologic units (e.g., formations or members) that contain them. The probability of finding significant fossils in an area can be broadly predicted from previous records of fossils recovered from the geologic units in and/or adjacent to the area. As a practical matter, no consideration is generally afforded to paleontological sites for which scientific importance cannot be demonstrated.

A paleontological resource is significant if one or more of the following criteria apply:

4. The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct.
5. The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein.
6. The fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas.
7. The fossils demonstrate unusual or spectacular circumstances in the history of life.
8. The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.

The following units in the project area are considered to have high sensitivity:

- **Santa Clara Formation.** This unit is considered to have high potential to contain significant paleontological resources because of the scientifically significant vertebrate fossils that have been recovered from that Pliocene to Pleistocene formation.
- **Pleistocene alluvial fans, Pleistocene to Holocene alluvial terraces, Pleistocene to Holocene alluvium, and Holocene stream channel deposits.** For the most part, fossils of extinct Pleistocene animals start appearing at about 8

feet below the surface of California's large valleys where Holocene and Pleistocene deposits are mapped at the surface. Therefore, areas mapped as Pleistocene at the surface are given a high sensitivity, along with all deposits mapped as Holocene or Pleistocene except for landslide deposits, at a depth of 8 feet or more. Landslide ages are based on when the landslide was formed and not the age of the sediment. However, stratigraphic associations are easily lost and fossils can be damaged in landslides, so unless the sediments are well preserved and contain fossils, these deposits are ranked as low sensitivity.

The remaining units are considered to have either low or no sensitivity for paleontological resources because of lack of documented fossil occurrences in the project area or previous disturbance that would compromise the ability to determine fossil age.

Due to the presence of sensitive geologic units within the project area, a Paleontological Mitigation Plan was prepared to address potential discoveries during project construction.

2.3.4.2 Environmental Consequences

No Build Alternative

The No Build Alternative would not include any ground-disturbing activities and would therefore not affect paleontological resources.

Build Alternatives

Some proposed project activities would take place in geological units that are considered to have high sensitivity for paleontological resources.

For the Build Alternative with Northern Overcrossing, construction of the overcrossing bridge would involve disturbance of up to 90 feet below ground surface in Pleistocene to Holocene alluvial terraces, which are considered sensitive at depths of 8 feet or more.

Both build alternatives would include sections of new trails or improved existing trails/roads in Santa Clara Formation, which is considered sensitive, and Pleistocene to Holocene alluvium, which is considered sensitive at depths of 8 feet or more: the Manzanita Trail to Limekiln Trail (Trail No. 5), Alma Bridge Road to Manzanita Trail (Trail No. 7), and Southern Overcrossing to Los Gatos Creek Trail (Trail No. 9).

With both build alternatives, sections of fencing, wildlife escape ramps, electrified mats, and gates would also be constructed in areas of Santa Clara Formation and Pleistocene to Holocene alluvial terraces.

The remaining project activities are not anticipated to encounter sensitive resources.

Caltrans Standard Specification 14-7.03 will be implemented to provide for stopping work, securing the area, and performing further investigation if paleontological resources are encountered during project construction (Section 1.4.6, PF-GEO-03). In addition, the implementation of AMM-PAL-01 (Section 2.3.4.3) would reduce potential impacts to paleontological resources by allowing for the recovery of fossil remains and associated specimen data and corresponding geologic and geographic site data that otherwise might be lost.

No permits are anticipated to be needed for monitoring or fossil recovery.

2.3.4.3 Avoidance, Minimization, and/or Mitigation Measures

AMM-PAL-01: Paleontological Mitigation Plan. Implementation of the following measures will avoid potential impacts to sensitive paleontological resources, if present.

- Update and finalize the Paleontological Mitigation Plan once project design is nearly complete. The final plan will be implemented during construction.
- Include a specification in the construction contract stating that paleontological monitoring will occur in accordance with the Paleontological Mitigation Plan.

2.3.5 Hazardous Waste/Materials

2.3.5.1 Affected Environment

The information in this section is based on the Phase I Initial Site Assessment prepared for the project in March 2019 (Hoexter Consulting 2019). The purpose of the Environmental Site Assessment was to identify potential hazardous materials in soil, groundwater, and/or building materials that could be disturbed during project construction and maintenance activities. The assessment included review of the physical setting, historical land uses, regulatory agency environmental records, previous environmental investigations in the project vicinity, coordination with the Santa Clara County Department of Environmental Health, and a site reconnaissance.

The California State Water Resources Control Board GeoTracker and United States Environmental Protection Agency Enforcement and Compliance History Online (ECHO) databases were reviewed in March 2023 for the current project area and a 1-mile buffer, to account for any updates or new information since the 2019 Environmental Site Assessment.

Hazardous Materials Sites

The 2019 Environmental Site Assessment identified seven locations within 1 mile of the project area that were listed in regulatory agency databases. Six were wireless or water utility sites or water treatment facilities that were licensed to store hazardous materials

and/or to discharge wastewater as part of operations, and no violations or enforcement actions were recorded. One was a 2012 report of spilled oil along SR 17 near Alma Bridge Road that was contained and placed in drums. None of the locations were determined to have potential to affect the proposed project area.

The GeoTracker and ECHO database searches identified the following additional sites:

- GeoTracker identified a leaking diesel underground storage tank cleanup site at 17820 Alma Bridge Road, approximately 0.45 mile east of SR 17 (Site no. T060850093). The case was closed in December 1995, with no pending regulatory action.
- The Lexington Quarry at 18500 Limekiln Canyon Road (EPA Registry ID No. 110056932271) and Caltrans District 4 EA 1J9704 at SR 17 PM 3.9 (EPA Registry ID No. 110071190674) were listed in the ECHO database, but no violations or other regulatory actions were reported.

Aerially Deposited Lead

SR 17 has been in its present location since the 1950s. Lead was used as a gasoline additive through the mid 1990s. Soils with elevated concentrations of lead as a result of aerially deposited lead (ADL) may be present along the Caltrans right-of-way within the limits of both build alternatives. ADL could also be present along Alma Bridge Road and other roadways in the project area.

Naturally Occurring Asbestos

Naturally Occurring Asbestos (NOA) commonly occurs within some units of the Franciscan Assemblage, a geologic unit that is present in the project area. Most Franciscan Assemblage units underlying the project area do not commonly include NOA-bearing rocks. However, localized occurrences of NOA-bearing rocks can occur within the mélangé unit of the Franciscan Assemblage, which does occur in the project area. Although rocks with the potential to bear NOA were not observed, a detailed survey was not conducted.

Contaminated Soil from Fill Materials

Fill was placed for the construction of SR 17. Undocumented fill may contain NOA, waste materials, heavy metals, and other sources of contamination. The origin of the fill is unknown and may contain soils from outside of the area of original highway construction.

Herbicide Residues

Herbicide use along SR 17 within this investigation is unknown. Residual concentrations of herbicides may be present within shallow soils adjacent to the roadway.

2.3.5.2 Environmental Consequences

No Build Alternative

The No Build Alternative would not affect potential hazardous material sites in the project area.

Build Alternatives

Handling and Storage of Hazardous Materials

Project construction and maintenance activities are expected to involve the routine transport, use, and disposal of hazardous materials (e.g., fuels, paints, and lubricants) that could pose a threat to human health or the environment if not properly managed. The transport, use, and disposal of hazardous materials during construction is regulated and enforced by federal and state agencies.

Workers who handle hazardous materials are required to adhere to OSHA and California Division of Occupational Safety and Health (Cal/OSHA) health and safety requirements. Hazardous materials must be transported in accordance with Resource Conservation and Recovery Act of 1976 (RCRA) and USDOT regulations and disposed of in accordance with RCRA and the California Code of Regulations at a facility that is permitted to accept the waste.

In accordance with the SWRCB, a SWPPP must be prepared and implemented during construction for coverage under the Construction General Permit. The SWPPP requires implementation of BMPs for hazardous materials storage and soil stockpiles, inspections, maintenance, training of employees, and containment of releases to prevent runoff into existing storm water collection systems or waterways.

Adherence to federal and state regulations during project construction and maintenance reduces the risk of exposure to hazardous materials and accidental hazardous materials releases. Compliance with existing regulations is mandatory; therefore, construction of both build alternatives is not expected to create a hazard to construction workers, the public, or the environment through the routine transport, use, disposal, or accidental release of hazardous materials. As a result, the project would have no adverse effects related to the routine transport, use, disposal, or accidental release of hazardous materials during construction and maintenance activities and no mitigation is required.

Disturbance of Hazardous Materials

The American Society for Testing and Materials, which sets standards for Phase I hazardous materials assessments, defines a Recognized Environmental Condition as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material

threat of a future release to the environment (E1527). No Recognized Environmental Conditions have been identified for this project.

Construction of both build alternatives could disturb ADL in shallow soils along SR 17 from historical vehicle emissions. There is also a potential for NOA, contaminated fill, and herbicides in soil to be encountered during construction. With both build alternatives, a Preliminary Site Investigation will be performed to investigate hazardous materials concerns and will include required measures for managing hazardous materials encountered during project construction (Section 1.4.6, PF-HAZ-01). All areas of proposed soil disturbance must be sampled adequately to characterize the soil accurately. A work plan for the Preliminary Site Investigation indicating an adequate number of soil samples must be approved by Caltrans before commencing any soil sampling.

ADL from the historical use of leaded gasoline exists along roadways throughout California. There is the likely presence of soils with elevated concentrations of lead as a result of ADL on the state highway system ROW within the limits of the project alternatives. Soil determined to contain lead concentrations exceeding stipulated thresholds must be managed under the July 1, 2016, ADL Agreement between Caltrans and the California Department of Toxic Substances Control. This ADL Agreement allows such soils to be safely reused within the ROW in the project limits as long as all requirements of the ADL Agreement are met.

Following construction, no long-term impacts are expected to occur related to hazardous waste and materials. Maintenance work would be required periodically over the life of the project and may require the use of hazardous materials. However, with adherence to federal and state regulations regarding the use of hazardous materials, no long-term impacts would occur.

2.3.5.3 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation is required.

2.3.6 Air Quality

The project would not change the existing or future motor vehicle capacity of SR 17 within the project limits. The project would therefore not affect long-term air quality, prevent attainment of National Ambient Air Quality Standards, or result in substantial air quality impacts under NEPA.

Construction activities would not last more than five years at any individual site. Therefore, construction-related emission increases would be temporary. With both build alternatives, the construction contract will include requirements to comply with all California Air Resources Board emissions reduction regulations and additional measures

to reduce construction impacts to nearby residences and businesses (Section 1.4.6, PF-AIR-01).

The project was submitted to the Air Quality Conformity Task Force in May 2023 for interagency consultation, and it was determined on May 25, 2023, that the project is exempt from project-level air quality conformity determination under 40 CFR 93.126, Table 2 as a project that is limited to “bicycle and pedestrian facilities.”

The CEQA discussion of air quality is provided in Section 3.2.3, and construction emissions of greenhouse gases (GHGs) are addressed in Section 3.2.8. Naturally occurring asbestos and aerially deposited lead are discussed in Section 2.3.5.

Climate Change

Neither the U.S. EPA nor FHWA has issued explicitly guidance or methods to conduct project-level greenhouse gas analysis. FHWA emphasizes concepts of resilience and sustainability in highway planning, project development, design, operations, and maintenance. Because there have been requirements set forth in California legislation and executive orders on climate change, the issue is addressed in the CEQA chapter of this document. The CEQA analysis may be used to inform the NEPA determination for the project.

2.3.7 Noise

The project would not substantially change the horizontal or vertical alignment of SR 17 or increase traffic capacity. The build alternatives would not increase traffic noise levels compared to the No Build Alternative or existing conditions. Therefore, the project is not a Type I project for purposes of 23 CFR 772.7. A traffic noise study and consideration of traffic noise abatement is not required.

With both build alternatives, the construction contractor will be required to adhere to construction noise control measures for equipment and operating hours to reduce temporary noise impacts during construction (Section 1.4.6, PF-NOI-01).

The CEQA noise discussion is provided in Section 3.2.13.

2.4 BIOLOGICAL ENVIRONMENT

2.4.1 Natural Communities

This section is summarized from the Natural Environment Study for the proposed project, which was completed in May 2023 (AECOM 2023d).

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plant or animal species. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed below in Section 2.4.5. Wetlands and other waters are discussed below in Section 2.4.2.

2.4.1.1 Affected Environment

The Biological Study Area (BSA) is the maximum extent of the potential temporary and permanent direct and indirect impacts from the project. The BSA includes the project footprint, which is the maximum extent of construction-related, ground-disturbing activities, including staging and access; a minimum 10-foot buffer around the project footprint; and areas along SR 17 to the north and south of the PM limits, to accommodate the potential future extension of wildlife fencing if necessary. The BSA is approximately 282 acres.

The BSA includes 17 habitat types that vary considerably across the BSA. Shrub-dominated communities tend to dominate the highest elevations and on the driest slopes. Tree-dominated communities are common on lower elevations and in relatively mesic sites, such as the canyons of intermittent and seasonal creeks. Disturbed and non-native tree-dominated communities occur closer to SR 17 and adjacent areas. The BSA does not have suitable fish habitat.

Sensitive Natural Communities

For the purpose of identifying sensitive natural communities, vegetation was mapped to the alliance level following the nomenclature in the Manual of California Vegetation (California Native Plant Society [CNPS] 2022a). Sensitive natural communities have not been designated as critical habitat under the Federal Endangered Species Act but have been assigned global (G) and state (S) rarity rankings based on range and distribution of a given type of vegetation, and the proportion of occurrences that are of good ecological integrity (CDFW 2022b). Natural communities defined as those with a state (S) rank of S1-S3 (S1: Critically imperiled, S2: Imperiled, and S3: Vulnerable) are

considered sensitive natural communities to be addressed in the environmental review processes of CEQA and its equivalents (CDFW 2022b).

Natural communities listed in the CDFW California Natural Community List (CDFW 2022b) with state (S) ranks of S1-S3 are considered sensitive natural communities to be addressed in the environmental review process. The BSA contains three sensitive natural communities: brittle leaf–woolly leaf manzanita chaparral (S3), California bay forest and woodland (S3), and California buckeye groves (S3).

Brittle leaf–woolly leaf manzanita chaparral (*Arctostaphylos* [*crustacea*, *tomentosa*] Shrubland Alliance) is defined as having a dominant (>30-50%) relative cover of brittle leaf manzanita (*A. crustacea*) or woolly leaf manzanita (*A. tomentosa*). In the BSA, this sensitive natural community is present along the Southern Overcrossing to Serenity Trail (Trail No. 1) and the Northern Overcrossing to Serenity Trail (Trail No. 2).

California bay forest and woodland (*Umbellularia californica* Forest & Woodland Alliance) is defined as having a dominant (>30-50% relative) cover of California bay in the tree canopy and may co-occur with coast live oak (*Quercus agrifolia*) or interior live oak (*Q. wislizeni*). This community is generally found in relatively mesic locations, typically along canyons with ephemeral or intermittent creeks within the BSA, and largely outside of the Caltrans ROW. Within the BSA, this community is common along the El Sereno OSP – Future Loop Trail Connector (Trail No. 4), Southern Overcrossing to Serenity Trail (Trail No. 1), Northern Overcrossing to Serenity Trail (Trail No. 2), Montevina Ridge Trail to Sanborn County Park (Trail No. 3), and several locations along SR 17.

California buckeye groves (*Aesculus californica* Forest & Woodland Alliance) are defined as having a dominant (>30-50% relative) cover of California buckeye in the tree canopy and may co-occur with California bay at a lower cover. This community is generally found in relatively xeric south-facing slopes within the BSA. California buckeye groves occur along the Montevina Ridge Trail to Sanborn County Park (Trail No. 3), El Sereno OSP – Future Loop Trail Connector (Trail No. 4), and Southern Overcrossing to Serenity Trail (Trail No. 1).

Trees

Trees are common in the BSA, within the sensitive nature communities mentioned above and throughout. Trees within the BSA are mainly California natives such as coast live oak and California bay. An inventory was conducted of trees that may be temporarily or permanently impacted by project activities. The inventory focused on the portions of the BSA within the Caltrans ROW because tree avoidance would be prioritized in the construction of improved or new regional trails outside of the Caltrans ROW.

Migratory Corridors and Habitat Fragmentation

The BSA is located at the confluence of a vast expanse of protected open space and park land that is owned and/or managed by Midpen, Valley Water, and Santa Clara County Parks. Additionally, the project vicinity includes large swaths of private watershed land that is owned by the San Jose Water. These open lands provide a critical corridor for the movement of wildlife throughout the Santa Cruz Mountains.

SR 17 presents a barrier to wildlife and limits the functionality of this wildlife corridor and the open space and County Parks land on either side of the highway. SR 17 is also classified as a roadkill hotspot, a stretch of roadway where there is a statistically significant cluster of wildlife-vehicle collisions (University of California, Davis 2015). Midpen has funded wildlife use studies examining the pattern of collisions between wildlife and motor vehicles that take place on SR 17 between Los Gatos and the Lexington Reservoir. These studies have documented that 12 mountain lions have been killed by vehicles on SR 17 in Santa Clara County in the last 11 years, 7 of which were killed in the BSA. Since 2014, at least 65 mountain lions have been killed on roadways in San Mateo, Santa Cruz, and Santa Clara counties, primarily along Interstate 280 and SR 17. The majority have been sub-adult or young adult mountain lions (CDFW 2023). Columbian black-tailed deer is the most common species involved in wildlife-vehicle collisions in the BSA, with 101 individuals killed between 2000 and 2018 (Caltrans 2020a). Additionally, in this time span, a total of 146 animals were killed by vehicle collisions including many small to medium-sized mammals such as coyotes (*Canis latrans*), gray foxes (*Urocyon cinereoargenteus*), raccoons (*Procyon lotor*), and striped skunks (*Mephitis mephitis*). Larger animals such as elk (*Cervus canadensis*) and black bear (*Ursus americanus*) are not currently present, but may make their way into the project area if future landscape-level changes such as a large wildfire or habitat alteration due to climate change occurs. Although not specifically designed for these species, the proposed wildlife crossing and directional fencing would also prevent collisions with, and may provide passage for these species as well.

Ephemeral and intermittent creeks, riparian corridors, and the open water of Lexington Reservoir (adjacent to the BSA) also provide habitat and foraging grounds for a variety of wildlife and may serve as movement corridors between breeding and dispersal habitat for amphibians and reptiles who move seasonally to reproduce or to disperse. Pacific newts (*Taricha* sp.), for example, move from upland habitat to nearby lakes and streams to reproduce, crossing roads in the process. According to the California Road Ecology Center, between 4,000 and 5,000 amphibians and reptiles are killed each winter and spring on Alma Bridge Road adjacent to Lexington Reservoir (University of California, Davis 2021), and part of the BSA. A separate Midpen project is being undertaken with Santa Clara County Roads to study the feasibility of providing safe passage for newts across Alma Bridge Road, within and extending beyond the BSA.

Fish Passage

There are no historical or recent records of anadromous fish in Trout Creek. No suitable fish habitat is present in the BSA.

2.4.1.2 Environmental Consequences

The No Build Alternative would not affect sensitive natural communities, trees, or fish passage. The No Build Alternative maintains the barrier for wildlife movement, and SR 17 would continue to experience a statistically significant cluster of wildlife-vehicle collisions (University of California, Davis 2015). Studies by Midpen and Caltrans documented 12 mountain lions killed by vehicles in Santa Clara County in the last 11 years, 101 Columbian black-tailed deer killed in the BSA between 2000 and 2018, and a total of 146 different species of wildlife killed by vehicle collisions in the BSA between 2000 and 2018 (Caltrans 2020a). These previous patterns of collisions between wildlife and motor vehicles on SR 17 between Los Gatos and the Lexington Reservoir would be expected to continue with the No Build Alternative.

The build alternatives are anticipated to have the impacts described below.

Sensitive Natural Communities

Temporary and permanent impacts are anticipated for sensitive natural communities. California bay forest and woodland would be impacted by project impacts within the Caltrans ROW, and all three sensitive natural communities are anticipated to be impacted in areas outside of the Caltrans ROW, either where a new trail would be constructed or where an existing trail would be improved.

Table 2.4.1-1 lists the anticipated temporary and permanent impacts for brittle leaf-woolly leaf manzanita chaparral, California bay forest and woodland, and California buckeye groves.

Table 2.4.1-1: Estimated Direct Impacts (In Acres) on Sensitive Natural Communities

Habitat Type	Temporary Impacts: Build Alternative with Southern Overcrossing	Temporary Impacts: Build Alternative with Northern Overcrossing	Permanent Impacts: Build Alternative with Southern Overcrossing	Permanent Impacts: Build Alternative with Northern Overcrossing
Brittle leaf-woolly leaf manzanita chaparral	0.046	0.046	0.02	0.02
California bay forest and woodland	3.845	3.984	0.632	0.639
California buckeye groves	0.108	0.108	0.004	0.004

Note: Acres rounded to the nearest thousandth of an acre.

Trees

Of the 334 trees recorded during the tree inventory, approximately 182 trees may be impacted by the Build Alternative with Southern Overcrossing, and approximately 165 trees may be impacted by the Build Alternative with Northern Overcrossing.

As a result of the wildlife undercrossing construction, both build alternatives would have temporary or permanent impacts on riparian trees in the Trout Creek corridor west of SR 17. The Trout Creek riparian corridor is a high-gradient, V-shaped canyon with steep banks and no real floodplain. Of the impacted trees listed for each build alternative, approximately 10 riparian trees, including California bay and coast live oak species, are anticipated to be impacted by project activities. The number of impacted trees will be finalized based on final design.

Migratory Corridors and Habitat Fragmentation

Both build alternatives include construction of a wildlife undercrossing of SR 17, which would connect thousands of acres of habitat that are currently fragmented by the highway. Connecting large areas of wildlands is critical to preserving healthy wildlife populations by allowing mountain lions and other animals to move between habitats; seek food, shelter, mates, and territory; and maintain genetic diversity (Penrod et al. 2013). The wildlife undercrossing, directional fencing, escape ramps, and electrified mats would also help to reduce vehicle collisions with wildlife in the project vicinity.

Both build alternatives would result in temporary disturbance to, and removal of, natural land cover, as well as temporary disruption to wildlife movement and habitat use from human activity, noise, and lighting during construction. The anticipated temporary impact areas are primarily adjacent to lands dedicated to water infrastructure and park and open space uses, which provide thousands of acres of suitable habitat. Therefore, although project construction could temporarily disrupt use of habitat in the vicinity of construction activities, the areas of disturbance would be extremely small in comparison to the amount of surrounding suitable habitat.

Construction of new unpaved trails and improvements to existing trails both in and outside of the Caltrans ROW would displace other land cover types, and human presence on the trails could result in wildlife avoidance of those areas. However, the trails would not preclude use by wildlife species, and human trail use would be restricted to daytime, during the park and open space hours of operation. Wildlife would have ample suitable habitat to avoid daytime human presence on the trails.

Fish Passage

No suitable fish habitat is present in the BSA; therefore, no impacts would occur.

Applicable Project Features

The following project features, which are described in Section 1.4.6, will reduce the potential for the impacts to sensitive natural communities, trees, and habitat connectivity described above:

- PF-BIO-01 Environmentally Sensitive Area Delineation
- PF-BIO-03 Site Restoration
- PF-BIO-04 Post Construction Planting and Restoration
- PF-BIO-05 Approved Project Biologist
- PF-BIO-06 Worker Environmental Awareness Training
- PF-BIO-07 Biological Monitor
- PF-BIO-11 Tree Protection
- PF-BIO-12 Invasive Plant Control
- PF-BIO-14 Construction Lighting
- PF-NOI-01 Construction Noise

Removal of trees or other plantings outside of the Caltrans ROW will be addressed as part of property owner negotiations during the detailed design phase. Replacement planting in the Caltrans ROW will be provided in accordance with PF-BIO-04. Riparian trees that are removed will be mitigated at an agency-approved ratio.

The wildlife undercrossing, directional fencing, and escape ramps would also help to reduce vehicle collisions with wildlife in the project vicinity.

2.4.1.3 Avoidance, Minimization, and/or Mitigation Measures

The following measure will be implemented to minimize impacts to sensitive natural communities.

AMM-BIO-01: Preconstruction Biological Survey. Before the start of the project, an agency-approved biologist will conduct a survey in the project area for special-status plant and wildlife species. If special-status species are discovered, the appropriate buffer will be implemented. If any listed species are discovered that could be impacted by project activities, Caltrans will consult with state and federal regulators with jurisdiction or CNPS as appropriate, if translocation and/or relocation of affected plant(s) or animal(s) would be considered as an option.

2.4.2 Wetlands and Other Waters

2.4.2.1 Affected Environment

This section is summarized from the Natural Environment Study and Aquatic Resource Delineation Report for the proposed project, which were completed in May 2023 (AECOM 2023d, e).

Wetlands and waters of the U.S. in the BSA include intermittent creeks, ephemeral creek/drainages, culverts, seep wetlands, seasonal freshwater marsh, and perennial freshwater marsh.

Intermittent creek waters include natural and artificial drainages that convey waters during the wet season (winter to spring) but normally are dry during summer months. Within the BSA, intermittent creeks include Trout Creek, Briggs Creek, and four additional unnamed intermittent creeks. Eleven ephemeral channels in the BSA include natural drainages and artificial ditches that convey water primarily during and briefly after precipitation events, exhibit an ordinary high water mark, and are a tributary to a waters of the U.S. Several of the intermittent creeks and ephemeral drainages connect to culverts that drain either to Los Gatos Creek or Lexington Reservoir. There are 10 potentially jurisdictional culverts in the BSA that total approximately 715 linear feet. A full delineation of wetlands and waters of the U.S. is provided in the Aquatic Resources Delineation Report (AECOM 2023e).

Seep wetlands (*Juncus* Seep Alliance-Iris-leaved rush seep) occurs on slopes where groundwater comes to the surface and “seeps” across the slope, creating permanently saturated habitat without a defined bed and bank or defined water-catching depression. Seep wetlands in the BSA are vegetated with iris-leaf rush seeps (*Juncus* [*oxymiris*, *xiphioides*] Provisional Herbaceous Alliance), which are defined as having a dominant cover of iris-leaved rush or another rush with equitant leaves. Seep wetlands occur in the BSA along the Manzanita Trail to Limekiln Trail (Trail No. 5) and on the Jones Trail to Priest Rock Trail (Trail No. 6).

Seasonal freshwater marsh (*Typha* Herbaceous Alliance) is dominated by herbaceous vegetation that thrive in fresh water. Within the BSA, the dominant plant species in seasonal freshwater marsh is narrowleaf cattail at 50% or greater cover. Other non-dominant herbaceous species include curly dock, cotoneaster and foxtail barley. Shrubs may be present such as coyote brush (*Baccharis pilularis*) and California blackberry (*Rubus ursinus*). This wetland vegetation community is seasonally flooded by fresh water and tends to have clayey or silty soils. One occurrence of seasonal freshwater marsh is present in the BSA, along the Jones Trail to Priest Rock Trail (Trail No. 6).

Perennial freshwater marsh wetland (*Juncus-Carex* Alliance) is an herbaceous wetland dominated by vegetation that can tolerate flooding/saturation for a greater part of the year. Within the BSA, this wetland is dominated by *Juncus* spp. or *Carex* spp. at a cover

of 50% or greater. Species present in the herbaceous layer also include common rush (*J. patens*) and tall flatsedge (*Cyperus eragrostis*). Shrubs such as coyote brush and California blackberry may be present but are widely scattered and located in slightly higher and less saturated areas. Perennial freshwater marsh is present in the BSA on the western side of SR 17.

2.4.2.2 Environmental Consequences

The No Build Alternative would not affect wetlands, other waters of the U.S., or culverts.

Both build alternatives may have direct and indirect impacts on sensitive wetland communities and other waters of the U.S. through ground disturbance during construction (Table 2.4.2-1). Temporary effects on these communities may include staging of equipment, access to structure locations for construction activities, and/or direct and indirect impacts on natural hydrology. Some areas would not be restored/replanted because of conversion of natural vegetation communities to proposed project components (wildlife undercrossing, wildlife directional fencing and escape ramps, trail overcrossing, and trails). Replanting plans for temporarily affected wetlands and waters of the U.S. would be detailed during final design.

Table 2.4.2-1: Estimated Direct Impacts (In Acres) on Wetlands and Other Waters

Habitat Type	Temporary Impacts: Build Alternative with Southern Overcrossing	Temporary Impacts: Build Alternative with Northern Overcrossing	Permanent Impacts: Build Alternative with Southern Overcrossing	Permanent Impacts: Build Alternative with Northern Overcrossing
Seasonal Freshwater Wetland	—	—	—	—
Seep Wetland	0.018	0.018	—	—
Perennial Freshwater Wetland	—	—	—	—
<i>Subtotal Wetlands</i>	<i>0.018</i>	<i>0.018</i>	—	—
Intermittent Creek	0.17	0.168	0.005	0.004
Ephemeral Creek/ Drainage	0.013	0.013	—	—
Culvert	0.004	0.004	0.005	0.005
<i>Subtotal Other Waters</i>	<i>0.187</i>	<i>0.185</i>	<i>0.01</i>	<i>0.009</i>
Total Wetlands and Other Waters	0.205	0.203	0.01	0.009

Note: Acres rounded to the nearest thousandth of an acre.

The following project features, which are described in Section 1.4.6, will reduce the potential for impacts to wetlands and waters of the U.S.:

- PF-BIO-01 Environmentally Sensitive Area Delineation
- PF-BIO-03 Site Restoration
- PF-BIO-04 Post Construction Planting and Restoration
- PF-BIO-05 Approved Project Biologist
- PF-BIO-06 Worker Environmental Awareness Training
- PF-BIO-07 Biological Monitor
- PF-BIO-12 Invasive Plant Control
- PF-WQ-01 Temporary Water Quality BMPs
- PF-WQ-02 Permanent Water Quality and Stormwater Treatment
- PF-WQ-03 Erosion Control and Water Quality for Trail Construction

2.4.2.3 Avoidance, Minimization, and/or Mitigation Measures

AMM-BIO-01, described in Section 2.4.1.3, and AMM-BIO-4 below will help to avoid and/or minimize impacts to wetlands and other waters within the project footprint:

AMM-BIO-04: Wetland Protection. To protect wetlands, the following measures will be implemented:

- Wetlands will be flagged and avoided to the maximum extent practicable for all construction activities, including access and staging.
- Work will occur outside of the wet-weather season (October 31 to April 15) to the maximum extent practicable in and adjacent to delineated wetlands.
- Whenever feasible, wetlands and waters will be spanned using plates or bridge structures to avoid travel in wetlands and waters entirely.
- If construction activities cannot avoid work in wetlands during wet-weather season, then high-density polyethylene or plywood marsh mats will be used where heavy vehicles must traverse wetlands.

Mitigation

MM-BIO-01: Mitigation for Wetlands and Waters. The project is designed to be self-mitigating, and the wildlife undercrossing would result in a net benefit to the broader ecosystem. Furthermore, Midpen is seeking to develop a mitigation credit agreement (MCA) that could provide compensatory mitigation for some, or all, of the project's impacts on both state and federally regulated resources.

On-site in-kind habitat restoration will be implemented where practicable to offset permanent impacts. If on-site restoration to offset permanent impacts cannot be achieved because of site constraints and/or limitations, Midpen and Caltrans would coordinate with the regulatory agencies with jurisdiction to determine appropriate compensation. The final mitigation requirement, if any, would be determined after selection of a preferred alternative and in coordination with the regulatory agencies.

2.4.3 Plant Species

2.4.3.1 Affected Environment

This section is summarized from the Natural Environment Study for the proposed project, which was completed in May 2023 (AECOM 2023d).

Seventeen special-status plant species were documented in the BSA during field surveys for the NES or were determined to have a moderate or greater potential to occur based on habitat suitability and proximity to known occurrences (USFWS iPac tool [2023a], California Natural Diversity Database (CNDDDB) (CDFW 2022c, CNPS 2022b) (Table 2.4.3-1).

Table 2.4.3-1: Special-Status Plant Species

Scientific Name	Common Name	CNPS Rank	General Habitat Description	Survey Results
<i>Amsinckia lunaris</i>	bent-flowered fiddleneck	CRPR 1B.2	Foothill woodland, valley grassland	Not observed during surveys; determined to have moderate or greater potential to occur.
<i>Azolla microphylla</i>	western mosquito-fern	CRPR 4.2	Freshwater wetlands, wetland-riparian	Not observed during surveys; determined to have moderate or greater potential to occur.
<i>Calandrinia breweri</i>	Brewer's calandrinia	CRPR 4.2	Northern coastal scrub, coastal sage scrub, chaparral	Not observed during surveys; determined to have moderate or greater potential to occur.
<i>Clarkia breweri</i>	Brewer's clarkia	CRPR 4.2	Serpentine substrates within northern coastal scrub, foothill woodland, chaparral	Not observed during surveys; determined to have moderate or greater potential to occur.
<i>Clarkia concinna</i> ssp. <i>automixa</i>	Santa Clara red ribbons	CRPR 4.3	Foothill woodland	Not observed during surveys; determined to have moderate or greater potential to occur.
<i>Collinsia multicolor</i>	San Francisco collinsia	CRPR 1B.2	Serpentine substrates within northern coastal scrub, closed-cone pine forest	Not observed during surveys; determined to have moderate or greater potential to occur.
<i>Dirca occidentalis</i>	western leatherwood	CRPR 1B.2	North coastal coniferous forest, closed-cone pine forest, mixed evergreen forest, foothill woodland, chaparral, wetland-riparian	Not observed during surveys; determined to have moderate or greater potential to occur.
<i>Fritillaria liliacea</i>	fragrant fritillary	CRPR 1B.2	Serpentine substrates within northern coastal scrub, coastal prairie, valley	Not observed during surveys; determined to have moderate or greater potential to occur.

Scientific Name	Common Name	CNPS Rank	General Habitat Description	Survey Results
			grassland, wetland-riparian	
<i>Galium andrewsii</i> ssp. <i>gatense</i>	phlox-leaved serpentine bedstraw	CRPR 4.2	Serpentine substrates within yellow pine forest, foothill woodland, chaparral	Not observed during surveys; determined to have moderate or greater potential to occur.
<i>Hoita strobilina</i>	Loma Prieta hoita	CRPR 1B.1	Chaparral, cismontane woodland, and riparian woodland habitats, usually in mesic sites and usually on serpentinite substrates	Documented within the BSA along the El Sereno OSP - Future Loop Trail (Trail No. 4) and along the Northern Overcrossing to Serenity Trail (Trail No. 2).
<i>Leptosiphon ambiguus</i>	serpentine leptosiphon	CRPR 4.2	Serpentine substrates within northern coastal scrub, foothill woodland, valley grassland	Not observed during surveys; determined to have moderate or greater potential to occur.
<i>Lessingia tenuis</i>	spring lessingia	CRPR 4.3	Yellow pine forest	Not observed during surveys; determined to have moderate or greater potential to occur.
<i>Malacothamnus arcuatus</i>	arcuate bush-mallow	CRPR 1B.2	Chaparral	Not observed during surveys; determined to have moderate or greater potential to occur.
<i>Monolopia gracilens</i>	woodland woollythreads	CRPR 1B.2	Grassland, cismontane woodland, and openings in broad-leaved upland forests, chaparral, and North Coast coniferous forest	Documented in the BSA along the Manzanita Trail to Limekiln Trail (Trail No. 5).
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	CRPR 1B.2	Freshwater wetlands, wetland-riparian	Not observed during surveys; determined to have moderate or greater potential to occur.
<i>Sanicula hoffmannii</i>	Hoffman's sanicle	CRPR 4.3	Northern coastal scrub, coastal sage scrub, mixed evergreen forest, and chaparral	Documented within the BSA on the Northern Overcrossing to Serenity Trail (Trail No. 2) and on private property near the El Sereno OSP, west of SR 17. An additional population observed near but outside of the BSA and Caltrans ROW.
<i>Streptanthus albidus</i> ssp. <i>peramoenus</i>	most beautiful jewelflower	CRPR 1B.2	Serpentine substrates within foothill woodland, chaparral, valley grassland	Not observed during surveys; determined to have moderate or greater potential to occur.

2.4.3.2 Environmental Consequences

The No Build Alternative would not affect special-status plant species in the project area.

The build alternatives are anticipated to have the impacts described below to the special-status plants listed in Table 2.4.3-1.

Of the 17 special-status plant species that were identified or have a moderate or greater potential to occur in the BSA, only one is anticipated to be affected by the project: Loma Prieta hoita. One patch of Loma Prieta hoita along the El Sereno OSP - Future Loop Trail (Trail No. 4) occurs partially within a temporary impact area. About 25 stems within a 0.005-acre area are expected to be temporarily impacted by either build alternative. Other patches of Loma Prieta hoita are outside of the project impact areas and are not anticipated to be affected.

Two other special-status plants, woodland woollythreads and Hoffman's sanicle, were documented during special-status plant surveys in the BSA.

A single patch of three woodland woollythreads plants was identified along the Manzanita Trail to Limekiln Trail (Trail No. 5). The plants were located approximately 50 feet away from the nearest impact area, along an existing road at the edge of a chaparral community. The project is not anticipated to affect this species.

Approximately 20 Hoffman's sanicle plants were observed in a single location in the BSA, in the bed of an old roadcut and adjacent coyote brush scrub habitat on the Northern Overcrossing to Serenity Trail (Trail No. 2). This population is approximately 0.2 mile from the nearest impact area; therefore, no effects to Hoffman's sanicle are expected.

If feasible, the El Sereno OSP - Future Loop Trail (Trail No. 4) will be relocated to avoid Loma Prieta hoita. Implementation of the following project features, which are described in Section 1.4.6, would reduce the potential for impacts to special-status plant species:

- PF-BIO-01 Environmentally Sensitive Area Delineation
- PF-BIO-05 Approved Project Biologist
- PF-BIO-06 Worker Environmental Awareness Training
- PF-BIO-07 Biological Monitor
- PF-BIO-11 Tree Protection
- PF-BIO-12 Invasive Plant Control

2.4.3.3 Avoidance, Minimization, and/or Mitigation Measures

AMM-BIO-01, described in Section 2.4.1.3, and AMM-BIO-5 and AMM-BIO-06 below will avoid and/or minimize impacts to special-status plant species:

AMM-BIO-05: Special-Status Plant Avoidance. Conduct protocol-level special-status plant surveys during the appropriate phenotypic period in advance of construction. Fence and/or flag known populations of special-status plants for avoidance prior to the onset of construction. In areas where protocol-level special-status plant surveys were not conducted due to inaccessible terrain, conduct preconstruction special-status plant surveys within suitable habitat before construction occurs in those areas. If special-status plant species are discovered during preconstruction surveys, fence the populations for avoidance.

AMM-BIO-06: Special-Status Plant Monitoring. If fencing and/or flagging is not practical to install around known populations of special-status plants due to the size or location of the plant/population or presence of physical hazards, ground-disturbing work near special-status plant species will proceed under supervision of a project biologist.

2.4.4 Animal Species

This section is summarized from the Natural Environment Study for the proposed project, which was completed in May 2023 (AECOM 2023d).

2.4.4.1 Affected Environment

Ten special-status animal species (excluding federally threatened and endangered species, which are covered in Section 2.4.5) were documented in the BSA during field surveys for the NES or were determined to have a moderate or greater potential to occur based on the literature review (USFWS iPac tool [2023a], CNDDDB [CDFW 2022c]) (Table 2.4.4-1).

Table 2.4.4-1: Special-Status Animal Species

Scientific Name	Common Name	Listing Status	General Description	Survey Results
<i>Antrozous pallidus</i>	Pallid bat	State species of special concern	Locally common yearlong resident species occurring throughout in open, dry habitats such as grassland, shrublands, brushy terrain, rocky canyons, open farmland, desert, non-coniferous woodlands, and mixed coniferous forests with rocky areas for roosting (CDFW 2022d). Roost alone, in small groups (2 to 20 bats), or in colonies (100s of individuals) in rock crevices, old buildings, caves, mines and hollow trees, and are one of the bat species most predictably associated with bridges (Western Bat Working Group 2022).	Moderate potential to occur, based on habitat suitability (mostly outside of the Caltrans ROW) and documented occurrences in the CNDDDB approximately 6.5 miles from the BSA (CDFW 2022c).
<i>Neotoma fuscipes annectens</i>	San Francisco dusky-footed woodrat	State species of special concern	Found in forested habitats of moderate canopy in the Coast Ranges of California. Houses (middens) are made of sticks and leaves are built at the base of or in a tree, around a shrub, or at the base of a hill (CDFW 2008a). Breeding occurs from December to September with a peak in mid-spring. The species is mostly nocturnal and active year-round.	Present, based on observation of middens during field surveys in the BSA along the majority of the proposed trail segments outside of the Caltrans ROW.

Scientific Name	Common Name	Listing Status	General Description	Survey Results
<i>Puma concolor</i>	Mountain lion (puma, cougar)	State specially protected species, state candidate threatened	Solitary, territorial, and require large areas of relatively undisturbed habitat with adequate prey (deer primarily) abundance and habitat connectivity to allow successful dispersal and gene flow (CDFW 2022e). Mountain lions are active yearlong, are mostly nocturnal and crepuscular, and tend to move through a fixed range in response to prey movements.	Present, based on observations of scat during field surveys. Fecal DNA survey from 2017-2021 indicated Santa Cruz Mountains has a density of 2 mountain lions per 100 square kilometers; total abundance in the area is approximately 58 individuals (CDFW 2023). Additionally, mountain lion roadkill has been documented on SR 17 in the BSA, as described in Section 2.4.1.
<i>Taxidea taxus</i>	American badger	State species of special concern	Wide-ranging mid-sized predators found in open scrub or grassy areas. Badgers can move up to 6 miles in a day in search of prey, which includes small mammals, some reptiles, insects, earthworms, eggs, birds, and carrion (CDFW 2022f). Badgers are active both day and night and are typically solitary, except during the mating season, in summer and early autumn, with young born in March and early April (Long 1973).	Moderate potential to occur, based on habitat suitability and the documented CNDDB occurrences over 10 miles east of the BSA (CDFW 2022c).

Scientific Name	Common Name	Listing Status	General Description	Survey Results
<i>Aquila chrysaetos</i>	Golden eagle	State fully protected, protected under the Bald and Golden Eagle Protection Act (BGEPA) (16 USC 668–668d) of 1940	Mostly resident but some migrate into California from northerly breeding locations to overwinter (CDFW 2022g). Golden eagles inhabit a variety of habitat types including forests, canyons, shrublands, grasslands, and oak woodlands, nest on cliffs or on mature trees. Golden eagles are active during the day yearlong.	Present, based on observations of golden eagles during field surveys and documented occurrences in the CNDDDB (CDFW 2022c). However, the specific habitat requirements for nesting are not present within the BSA, and the species likely uses the BSA for foraging only.
<i>Elanus leucurus</i>	White-tailed kite	State fully protected	Year-round resident in coastal and valley lowlands and occur in savannas, open woodlands, marshes, grasslands, and partially cleared and cultivated fields. White-tailed kites breed from February to October with a peak of breeding activity in May to August.	Moderate potential to occur, based on suitable habitat in the BSA and database records of white-tailed kites in the vicinity of the BSA.
<i>Haliaeetus leucocephalus</i>	Bald eagle	State endangered, fully protected, protected under the BGEPA (16 USC 668–668d) of 1940	Permanent residents and uncommon winter migrants. Bald eagles occur mainly in mountain and foothill forests and require large bodies of water such as reservoirs, lakes, and rivers with abundant fish for hunting (CDFW 1999). Nests are built in the upper canopy of the tallest trees in the area with stout limbs, snags, or on broken-topped trees. Bald eagles are active yearlong during the day and breed February through July.	Present, based on observations of bald eagles during field surveys and documentation of bald eagle occurrences in the CNDDDB database.

Scientific Name	Common Name	Listing Status	General Description	Survey Results
<i>Aneides niger</i>	Santa Cruz black salamander	State species of special concern	Active at night year-round in streamside microhabitats such as in shallow standing water or seeps, under stones and other debris along stream edges (Thomson et al. 2016). Females lay eggs in July or early August, and small juveniles appear shortly after onset of fall rains, often in October or November (Thomson et al. 2016).	High potential to occur, based on suitable habitat (largely in riparian corridors) and documented occurrences in the CNDDDB (CDFW 2022c).
<i>Dicamptodon ensatus</i>	California giant salamander	State species of special concern	Year-round resident in mesic coastal forests and chaparral habitat from sea level to approximately 3,000 feet (Thomson et al. 2016). This salamander is nocturnal, but also active in daylight during wet conditions. Breeding occurs from March to May, with a peak of breeding activity in May (CDFW 1997).	Moderate potential to occur based on habitat suitability (primarily in bodies of water and intermittent creeks outside of the ROW) and recent occurrences documented in the CNDDDB (CDFW 2022c).
<i>Emys marmorata</i>	Western pond turtle	State species of special concern; proposed federally threatened ⁴	Occurs in a broad range of aquatic habitats including flowing rivers and streams, permanent lakes, ponds, reservoirs, settling ponds, marshes and other wetlands. Western pond turtles require upland habitat that is suitable for nesting which includes loose soil and low human disturbance and basking materials such as logs, rocks, mats of floating vegetation, or open mud banks (Thomson et al. 2016). Eggs are laid from March to August (CDFW 2000).	High potential to occur, based on suitable habitat (largely outside of the Caltrans ROW near bodies of water) and documented occurrences in the CNDDDB (CDFW 2022c).

⁴ On October 3, 2023, the USFWS published a notice of proposed rulemaking to designate the northwestern pond turtle and southwestern pond turtle as threatened species under the Federal Endangered Species Act. The comment period on the proposed rulemaking ends on December 4, 2023. The project will require consultation with the USFWS under Section 7 of FESA, including for western pond turtle, as described in Section 2.4.5.

2.4.4.2 Environmental Consequences

The No Build Alternative would not affect special-status animals in the project area. With the No Build Alternative, SR 17 would remain a barrier for wildlife movement, including for mountain lion and American badger. The previous patterns of collisions between wildlife and motor vehicles on SR 17 between Los Gatos and the Lexington Reservoir would be expected to continue with the No Build Alternative.

The following section describes the potential impacts of the build alternatives on the special-status animals listed in Table 2.4.4-1.

Mountain Lion

Both build alternatives are anticipated to result in temporary and permanent impacts on mountain lion habitat. Mountain lions could occur throughout the BSA, including in areas along SR 17 and Alma Bridge Road, despite the frequent motor vehicle traffic, human presence, and associated noise and other disturbances. Construction activity, noise, and lighting, especially during nighttime work associated with the wildlife undercrossing and the trail overcrossing, could cause mountain lions (if present) to seek quieter habitats at times during the two construction seasons needed to build the project elements along SR 17. Construction could also cause deer and other mountain lion prey to avoid active work areas, which would have temporary, localized impacts on potential mountain lion foraging habitat.

Daytime construction of improved or new regional trails outside of the Caltrans ROW would involve smaller construction equipment and work crews than the project elements along SR 17, and trail construction would affect smaller areas over a longer period of time (intermittently over approximately 5 years). Regardless, trail construction could also cause mountain lions to avoid active work areas.

The anticipated temporary impact areas are primarily adjacent to lands dedicated to water infrastructure and park and open space uses, which provide thousands of acres of suitable habitat for mountain lions. Therefore, although project construction could temporarily disrupt mountain lion use of habitat in the vicinity of construction activities, the areas of disturbance would be extremely small in comparison to the amount of surrounding suitable habitat.

Both build alternatives would permanently replace some natural land cover with structures and pavement, including the side walls and wing walls of the wildlife undercrossing and the trail overcrossing bridge. The bottom surface of the wildlife undercrossing would be dirt or structural concrete covered in compacted dirt and small rocks. The total amount of new impervious surface throughout the project area would be approximately 1.34 acres for the Build Alternative with Southern Overcrossing and 0.95 acre for the Build Alternative with Northern Overcrossing (HDR/WRECO 2023b).

Trails both in and outside of the Caltrans ROW would be unpaved. Although the trails would displace other land cover types that could provide mountain lion habitat, trails would not preclude use by mountain lions and their prey. Human presence on the trails could result in mountain lion avoidance; however, since trail users would only be present during the day and mountain lions are mostly nocturnal, substantial impacts are not anticipated. Several project features and measures are included that would avoid injury or mortality of mountain lions and reduce the potential for disturbance of the species during construction.

Finally, both build alternatives include construction of a wildlife undercrossing underneath SR 17, which would connect tens of thousands of acres of suitable mountain lion habitat that are currently fragmented by the highway. Connecting large areas of wildlands is critical to preserving healthy wildlife populations by allowing mountain lions and other animals to move between habitats; seek food, shelter, mates, and territory; and maintain genetic diversity (Penrod et al. 2013). The wildlife undercrossing, directional fencing, and escape ramps would also help to reduce vehicle collisions with mountain lions in the project vicinity. The project benefits are anticipated to offset the reduction in potential habitat for mountain lion. The amount of potential habitat reduction due to the project would be negligible compared to the additional habitat that the project would connect.

Bald Eagle

Nesting bald eagles are sensitive to disturbance in the vicinity of their nests. Visual and noise disturbance arising from construction activity have the potential to disrupt normal nesting behavior and negatively impact reproductive success of eagles, depending on the intensity and distance of the activity from the nest. Eagles are not expected to nest within the Caltrans ROW, and they typically do not nest immediately adjacent to highways or other human infrastructure that generates noise.

Construction of the project would require the removal or trimming of trees that bald eagles could use for nesting. Approximately 182 trees may be impacted by the Build Alternative with Southern Overcrossing, and approximately 165 trees may be impacted by the Build Alternative with Northern Overcrossing. However, many of these trees are not suitable for bald eagle nesting due to their small size, shape, structure, and surrounding tree density, which are all factors used by eagles to select trees to support their large nests. In addition, the impact to bald eagles associated with the temporary removal of trees would be negligible when compared to the abundance of suitable nesting habitat adjacent to the project.

Golden Eagle

Nesting golden eagles are sensitive to disturbance in the vicinity of their nests. Visual and noise disturbance from construction activity have the potential to disrupt normal nesting behavior and negatively impact reproductive success of eagles, depending on the intensity and distance of the activity from the nest. Eagles are not expected to nest

within the Caltrans ROW, and they typically do not nest immediately adjacent to highways or other human infrastructure that generates noise.

Construction of the project would require the removal or trimming of trees that golden eagles could use for nesting. Approximately 182 trees may be impacted by the Build Alternative with Southern Overcrossing, and approximately 165 trees may be impacted by the Build Alternative with Northern Overcrossing. However, many of these trees are not suitable for golden eagles nesting due to their small size, shape, structure, surrounding tree density etc., which are all factors used by eagles to select trees to support their large nests. In addition, the impact to golden eagles associated with the temporary removal of trees would be negligible when compared to the abundance of suitable nesting habitat adjacent to the project.

White-Tailed Kite

Nesting white-tailed kites are sensitive to disturbance in the vicinity of their nests. Visual and noise disturbance from construction have the potential to disrupt normal nesting behavior and negatively impact reproductive success of kites, depending on the intensity and distance of the activity from the nest. White-tailed kites are more tolerant of human disturbance than bald eagles and golden eagles and have the potential to nest near highways and other human infrastructure that generates noise.

Project construction would require the removal or trimming of trees that white-tailed kites could use for nesting. Approximately 182 trees may be impacted by the Build Alternative with Southern Overcrossing, and approximately 165 trees may be impacted by the Build Alternative with Northern Overcrossing. However, many of these trees are not suitable for white-tailed kite nesting due to their small size, shape, structure, surrounding tree density etc., which are all factors used by kites to select trees to support their nests. In addition, the impacts to white-tailed kites associated with temporary impacts to trees would be negligible when compared to the abundance of suitable nesting habitat adjacent to the project.

San Francisco Dusky-Footed Woodrat

San Francisco dusky-footed woodrats could be injured or killed by heavy equipment or vehicles during tree and vegetation removal, wildlife undercrossing and trail overcrossing construction, and trail construction or improvement. Project construction could result in the removal of woodrat habitat and/or the crushing or dismantling of their middens. During construction, if woodrats or their middens are present near the project footprint, increased human presence and noise could result in behavioral changes such as fleeing or avoidance.

In addition to injury, mortality, and harassment of San Francisco dusky-footed woodrats, construction of the project may result in the removal of San Francisco dusky-footed woodrat habitat and/or the crushing or dismantling of their middens.

American Badger

Both build alternatives are anticipated to result in temporary and permanent impacts on American badger habitat. Construction activity, noise, and lighting, especially during nighttime work associated with the wildlife undercrossing and the trail overcrossing, could cause badgers (if present) to seek quieter habitats at times during the two construction seasons needed to build the project elements along SR 17.

The anticipated temporary impact areas are primarily adjacent to lands dedicated to water infrastructure and park and open space uses, which provide thousands of acres of suitable habitat for American badgers. Therefore, although project construction could temporarily disrupt badger habitat use, the areas of disturbance would be extremely small in comparison to the amount of surrounding suitable habitat.

Both build alternatives would permanently replace some natural land cover with structures and pavement, including the side walls and wing walls of the wildlife undercrossing and the trail overcrossing bridge. The bottom surface of the wildlife undercrossing would be dirt or structural concrete covered in compacted dirt and small rocks. The total amount of new impervious surface throughout the project area would be approximately 1.34 acres for the Build Alternative with Southern Overcrossing and 0.95 acre for the Build Alternative with Northern Overcrossing (HDR/WRECO 2023b). Trails both in and outside of the Caltrans ROW would be unpaved. Although new trails would displace other land cover types that could provide American badger habitat, the trails would not preclude use by badgers. Human presence on the trails could result in badger avoidance; however, since trail users would typically only be present during the day and badgers are mostly nocturnal, substantial impacts are not anticipated.

Finally, both build alternatives include construction of a wildlife undercrossing of SR 17, which would connect a critical habitat connectivity corridor and open up thousands of acres of suitable American badger habitat that are currently fragmented by the highway (Diamond et al. 2022). Connecting large areas of wildlands is critical to preserving healthy wildlife populations by allowing badgers and other animals to move between habitats; seek food, shelter, mates, and territory; and maintain genetic diversity (Penrod et al. 2013). The wildlife undercrossing, directional fencing, and escape ramps would also help to reduce potential vehicle collisions with badgers and other animals in the project vicinity. The project benefits are anticipated to offset the reduction in potential habitat, which is negligible compared to the additional habitat that the project would connect.

Pallid Bat

Pallid bats may use trees in the project footprint for day or night roosting. Approximately 182 trees may be impacted by the Build Alternative with Southern Overcrossing, and approximately 165 trees may be impacted by the Build Alternative with Northern Overcrossing. However, not all of these trees would be suitable for use by pallid bat as they prefer to use hollows and/or openings below bark, which may not

be present. If bats are present within hollows or under bark during tree removal, injury or mortality to bats could occur. In addition, if bats are present in the vicinity of construction, increased human presence and noise could result in behavioral impacts to bats, such as fleeing and avoidance.

Given the availability of alternative natural habitat for pallid bat in the project vicinity, substantial adverse impacts to bat habitat are not expected.

California Giant Salamander and Santa Cruz Black Salamander

Potential impacts to these species and their habitats are similar and therefore are discussed together below.

Trout Creek, Limekiln Creek, Los Gatos Creek (outside of, but directly adjacent to, the BSA), and Briggs Creek (at the southern end of the BSA) have the potential to support aquatic breeding habitat for California giant salamanders and Santa Cruz black salamanders. Both build alternatives would result in temporary and permanent impacts in the Trout Creek corridor from construction of the wildlife undercrossing, and in and adjacent to Limekiln Creek from construction of the Manzanita Trail to Limekiln Trail (Trail No. 5). Individuals may be injured or killed by heavy equipment or vehicles during tree and vegetation removal, wildlife undercrossing and trail overcrossing construction, and trail construction or improvement. This could occur if salamanders are under leaf litter, in other refugia, or using upland and aquatic habitats for dispersal. Human presence and noise during construction could also cause behavioral changes to salamanders in the project vicinity such as fleeing and avoidance.

The project could also result in indirect impacts, such as degradation of aquatic habitat for both species through erosion, sedimentation, accidental spills, and invasive species. Sediment and pollutants from erosion or accidental spills can enter the habitat and temporarily impact water quality and food availability for both species. Additionally, the project will result in ground-disturbing activities in natural areas that do not currently experience human or vehicle traffic. These activities result in the introduction of non-native weeds to aquatic or upland habitats, and once established, the non-native invasive species can become a long-term impact if not prevented or controlled through best management practices.

Western Pond Turtle

Project construction has the potential to injure or kill western pond turtles dispersing through the project footprint from aquatic habitat. Females commonly deposit eggs between May and August; therefore, nests could be crushed by heavy equipment during construction. Human presence and noise during construction could also cause behavioral changes to western pond turtles in the project vicinity such as fleeing and avoidance.

The project could also result in indirect impacts, such as degradation of aquatic habitat for western pond turtle through erosion, sedimentation, accidental spills, and the introduction of invasive species. Sediment and pollutants from erosion or accidental spills can enter the habitat and temporarily impact water quality and food availability. Additionally, the project will result in ground-disturbing activities in natural areas that do not currently experience human or vehicle traffic. These activities could result in the introduction of non-native weeds to western pond turtle aquatic or upland habitats, and once established, the non-native invasive species can become a long-term impact if not prevented or controlled through best management practices.

On October 3, 2023, the USFWS published a notice of proposed rulemaking to designate the northwestern pond turtle and southwestern pond turtle as threatened species under the Federal Endangered Species Act (FESA; 88 Federal Register [FR] 68370–68399). The comment period on the proposed rulemaking ends on December 4, 2023.

The project will require consultation with the USFWS under Section 7 of the FESA, including for western pond turtle, as described in Section 2.4.5.

Applicable Project Features

Implementation of the following project features, which are described in Section 1.4.6, would reduce the potential for the impacts described above:

- PF-BIO-01 Environmentally Sensitive Area Delineation
- PF-BIO-03 Site Restoration
- PF-BIO-04 Post-Construction Planting and Restoration
- PF-BIO-05 Approved Project Biologist
- PF-BIO-06 Worker Environmental Awareness Training
- PF-BIO-07 Biological Monitor
- PF-BIO-08 Stop Work Authority
- PF-BIO-11 Tree Protection
- PF-BIO-14 Construction Lighting
- PF-NOI-01 Construction Noise

2.4.4.3 Avoidance, Minimization, and/or Mitigation Measures

AMM-BIO-01 (Section 2.4.1.3), AMM-BIO-04 (Section 2.4.2.3), and the measures below will avoid and/or minimize impacts to special-status animals. No compensatory mitigation is anticipated under either build alternative. Measures AMM-BIO-08 through AMM-BIO-10 for California red-legged frog (Section 2.4.5.3) would also serve to avoid and/or minimize impacts to California giant salamander and Santa Cruz black salamander since the two species are observed to have similar habitat in the BSA.

AMM-BIO-02: Wildlife Species Relocation. When special-status wildlife species are present and it is determined that they could be injured or killed by construction

activities, the agency-approved biologist, in coordination with the appropriate state and federal wildlife agencies, will identify appropriate methods for capture, handling, exclusion, and/or relocation of individuals that could be affected. Actions that could harm or kill individual state fully protected species or listed species that are in the project area will be avoided or delayed until the species leaves the affected area.

AMM-BIO-03: Nesting Bird Protection. To protect nesting birds, including those protected by the Migratory Bird Treaty Act (MBTA), the following measures will be implemented:

- During the bird nesting season (typically February 1 through August 31; as early as January 1 for raptors), a qualified biologist will conduct preconstruction surveys for active bird nests no more than 7 days before the start of ground or vegetation disturbance events and every 14 days during project activities.
- Tree trimming and/or shrub trimming/removal will be performed with hand tools.
- If an active nest is identified during preconstruction or construction that may be impacted by project activities, a no-disturbance buffer of 250 feet for raptors and 50 feet for non-raptors will be established immediately. A reduced or enlarged buffer, and other protection measures, will be implemented in accordance with project permit requirements, defined during final design, or in consultation with the appropriate wildlife agency.

AMM-BIO-07: Bat Protection. To protect sensitive bats, including the pallid bat, a qualified biologist will conduct a bat habitat assessment in all project areas that require tree removal. The qualified biologist will identify and document the location of potentially suitable bat roosting habitat prior to construction activities. If bat roosting habitat is observed, the following requirements shall be implemented throughout the construction period:

- Removal of trees that provide suitable bat roosting habitat shall be conducted outside of the bat maternity season (April 15 to August 31) and overwintering season (October 16 to January 15) to the extent feasible.
- Presence/absence surveys shall be conducted 2 to 3 days prior to removal of any trees in suitable bat habitat, at any time of year. If presence/absence surveys are negative, work may proceed with no restrictions. If presence/absence surveys detect bats within trees planned for removal, work should proceed in accordance with the following restrictions:
- If a maternity colony of bats is observed during maternity season (April 15 to August 31), tree removal shall not occur until August 31 or when maternity season has ended based on surveys conducted by a qualified biologist.
- If bats are observed during overwintering season (October 16 to January 15), tree removal shall not occur until January 15 or until bats are no longer present based on surveys conducted by a qualified biologist.
- If bats are present outside of maternity or overwintering seasons, construction shall follow a two-phase tree removal system conducted over 2 consecutive days. On the

first day (in the afternoon), limbs and branches will be removed using chainsaws or other hand tools. Limbs with cavities, crevices, or deep bark fissures will be avoided, and only branches or limbs without those features will be removed. On the second day, the entire tree shall be removed.

AMM-BIO-11: Preconstruction Surveys for San Francisco Dusky-Footed Woodrat. Before the start of construction, an approved biologist will conduct a survey of the project area to determine the location of active and inactive woodrat nests (dens). Any nests detected during the surveys will be recorded and mapped and evaluated for current woodrat activity (including looking for fresh sign such as scat or chewed vegetation). If detected, a 10-foot buffer will be established around active nests for avoidance.

AMM-BIO-12: Potential Trapping and Relocation for San Francisco Dusky-Footed Woodrat. Within 2 weeks of the start of construction, a qualified biologist will conduct a survey of the project area to identify the locations of any woodrat middens in the work area. To the maximum extent possible, a 10-foot equipment exclusion buffer will be established around active and inactive middens that can be avoided; within such buffers, all vegetation will be retained, and nests will remain undisturbed.

For all woodrat nests that cannot be avoided by project activities (i.e., will require relocation), a qualified biologist shall live trap to determine if the nest is in use. Trapping activities should occur prior to April and after mid-July each year to prevent impacts to woodrats rearing young or young woodrats. If a nest is found to be unoccupied or not in use for 3 full days (2 nights of trapping), then it may be removed. The nest shall be relocated, or a pile of replacement sticks shall be placed outside of the development footprint for future colonization or re-use.

Trapped woodrats may be kept in captivity by a qualified biologist until their nests are relocated to suitable habitat outside of the development footprint. Every effort should be made to minimize the time the animal is held in captivity. A CNDDDB form shall be filled out and submitted to CDFW for any San Francisco dusky-footed woodrats that are trapped.

Once trapped, nests shall be torn down and rebuilt surrounding a log based structure, an inverted wooden planter, or similar structure having at least one entrance and exit hole that is slightly buried into the ground to anchor. Any cached food and nest material encountered shall be placed within the new structure during rebuilding. Whenever possible, the structure shall be "over-built" by adding larger branches for predator protection to create an area for the individual to safely emerge outside of the nest. One or more persons shall remain outside the release structure for up to 10 minutes to mimic a predator. Relocated nests are intended to provide a release site and opportunity for the woodrats to relocate to another nest (most woodrats average more than one nest and may or may not remain with a relocated nest), or to colonize the new structure.

Once nests are relocated, any trapped woodrats should be released into the reconstructed nest using a “soft release,” by plugging the individual into the shelter using loose dirt over the entrance. Relocated nests are expected to eventually be re-colonized. A monitoring report should be submitted to CDFW to document use or non/use of relocated nests.

AMM-BIO-13. Preconstruction Surveys for Western Pond Turtle. An approved biologist(s) shall survey the work site no more than 48 hours before the onset of activities for signs of western pond turtles and/or western pond turtle nesting activity (i.e. recently excavated nests, nest plugs) or nest depredation (partially to fully excavated nest chambers, nest plugs, scattered egg shell remains, egg shell fragments). Preconstruction surveys to detect western pond turtles should focus on suitable aerial and aquatic basking habitat such as logs, branches, rootwads, and rip-rap, as well as the shoreline and adjacent warm, shallow waters where pond turtles may be present below the water surface beneath algal mats or other surface vegetation. Preconstruction surveys to detect western pond turtle nesting activity should be concentrated within 402 meters (1,319 feet) of suitable aquatic habitat and should focus on areas along south- or west-facing slopes with bare hard-packed clay, silt soils, or a sparse vegetation of short grasses or forbs. If western pond turtles or their nesting sites are found, the biologist shall contact CDFW to determine whether relocation and/or exclusion buffers and nest enclosures are appropriate. If CDFW approves of moving the animal, the biologist shall be allowed sufficient time to move the western pond turtle(s) from the work site before work activities begin.

2.4.5 Threatened and Endangered Species

This section addresses species that are listed or proposed for listing under the FESA (16 USC Section 1531, et seq.; 50 CFR Part 402) or the California Endangered Species Act (CESA; California Fish and Game Code Section 2050, et seq.). Other special-status habitats and species are discussed in Sections 2.4.1, 2.4.3, and 2.4.4. This section is summarized from the Natural Environment Study and Biological Assessment for the proposed project, which were completed in May and October 2023, respectively (AECOM 2023d, f).

2.4.5.1 Affected Environment

Overview

Based on a site reconnaissance and other general habitat surveys, a review of available databases and literature, and the project team’s familiarity with local flora and fauna, one FESA-species is considered potentially to be present in the BSA: California red-legged frog (*Rana draytonii*).

No CESA-listed species are considered to be present in the BSA. All other species identified in the species lists from USFWS, NOAA Fisheries, and CDFW were eliminated

from further consideration based on a lack of suitable habitat, elevation and range restrictions, absence of observed occurrences, and barriers to habitat access.

On October 3, 2023, the USFWS published a notice of proposed rulemaking to designate the northwestern pond turtle and southwestern pond turtle as threatened species under the FESA (88 FR 68370–68399). The comment period on the proposed rulemaking ends on December 4, 2023.

Western pond turtle is discussed in Section 2.4.4. Caltrans, as the lead federal agency, will consult with the USFWS on western pond turtle under Section 7 of the FESA. The anticipated preliminary effect determination is: “The project *may affect, and is likely to adversely affect,* western pond turtle.” If additional avoidance, minimization, and/or mitigation beyond that described in Section 2.4.4.3 for western pond turtle is needed for FESA purposes, it will be developed in coordination with the USFWS and may include options described in Measure MM-BIO-02 (Section 2.4.5.3).

California Red-Legged Frog

California red-legged frog is federally listed as threatened (61 FR 25813–25833) and is a state species of special concern. California red-legged frogs breed between November and April in aquatic habitats, such as pools, ponds, marshes, springs, sag ponds, dune ponds, and lagoons, and in artificial impoundments, such as stock ponds (USFWS 2002). Eleven to 20 weeks of permanent water is required for larval development (CDFW 2008b).

Upland dispersal habitats with dense vegetation may be important sheltering habitat during winter. During the dry season, California red-legged frogs may live in small mammal burrows and moist leaf litter (Jennings and Hayes 1994) as well as under boulders or rocks, organic debris, and agricultural features (USFWS 2002). California red-legged frogs are seldom found far from water during dry periods. However, during wet weather, individuals may make overland excursions through a variety of upland dispersal habitats (Tatarian 2008). The average dispersal distance for California red-legged frog is 1 mile.

Although no focused surveys for this species have been conducted for the project and California red-legged frog were not detected during field surveys, presence of the species is inferred based on habitat suitability and documented occurrences in the CNDDDB (CDFW 2022c).

The BSA contains aquatic dispersal (non-breeding) habitat and upland dispersal habitat for the California red-legged frog. No breeding habitat is present. Aquatic dispersal (non-breeding) habitats are freshwater habitats that may or may not hold water long enough for the frog to complete its lifecycle but provide for shelter, foraging, predator avoidance, and aquatic dispersal. Four creeks in or adjacent to the BSA have the potential to support aquatic dispersal (non-breeding) habitat for California red-legged frogs: Trout Creek, Limekiln Creek, Los Gatos Creek (outside of but directly adjacent to

the BSA), and Briggs Creek (in the southern end of the BSA). Upland dispersal habitat is considered to be 1 mile from aquatic breeding habitats and includes annual grassland, blue oak woodland, coastal oak woodland, coastal scrub, coastal scrub (non-native), eucalyptus, fresh emergent wetland, mixed chaparral, montane hardwood, and montane riparian habitats within the BSA. The BSA contains approximately 0.54 acre of suitable aquatic non-breeding habitat and 237.67 acres of suitable upland habitat for California red-legged frogs.

Trout Creek on the west side of SR 17 and Los Gatos Creek on the east side of SR 17 both provide suitable aquatic and adjacent upland habitat for the California red-legged frog. However, there is no way for the species to cross SR 17, which has two lanes of fast-moving traffic in each direction that are separated by a concrete median barrier. Trout Creek and Los Gatos Creek are connected by a 333-foot-long, 4-foot-by-4-foot concrete drainage culvert that has both a horizontal and vertical bend where it crosses under the northbound shoulder of SR 17. The culvert is not usable by California red-legged frogs because of its length, the bend that prevents light infiltration and visibility through the culvert, and the lack of an elevated step or bench along the inside surface that would allow frogs and other species to avoid high flows. In addition, three years of camera monitoring showed that a variety of other animals (deer, raccoon, fox, and bobcat) would approach the culvert but not enter it, likely due to the length and lack of visibility to the other side (Pathways for Wildlife 2016).

2.4.5.2 Environmental Consequences

No Build Alternative

The No Build Alternative would not affect threatened or endangered species in the BSA. With the No Build Alternative, SR 17 would remain a barrier for wildlife movement.

Build Alternatives

Construction of the proposed wildlife undercrossing would benefit California red-legged frogs by providing a shorter (90-foot), straight crossing between the Trout Creek and Los Gatos Creek areas that would remain free of drainage flows. The new crossing would allow California red-legged frogs that are currently isolated by SR 17 to access suitable aquatic and upland habitat throughout the BSA, as well as additional habitat in the surrounding areas. The undercrossing would also provide mountain lions, deer, and other animals with connectivity between, and access to, thousands of acres of habitat that SR 17 divides. In combination with the wildlife directional fencing, wildlife escape structures, electrified mats, and sound walls, the undercrossing would also help to reduce wildlife mortality from vehicle collisions on SR 17 in the BSA.

The potential for California red-legged frogs to be killed, injured, or harassed during project construction would be reduced through implementation of the avoidance and minimization measures described in Section 2.4.5.3. However, with both build

alternatives, California red-legged frogs may be injured or killed by heavy equipment or vehicles during tree and vegetation removal, undercrossing construction, overcrossing and connecting trails construction, and regional trail construction or improvement. Injury or mortality may occur if California red-legged frogs are present in the project footprint under leaf litter or in other refugia, or while individuals are dispersing between aquatic habitats. Construction activity, increased human presence, and noise may result in behavior changes of California red-legged frogs if present in the vicinity of the project footprint.

Construction of both build alternatives, including the regional trails outside of the Caltrans ROW, would result in temporary and permanent impacts to California red-legged frog aquatic dispersal (non-breeding) and upland habitat. Temporary and permanent impact acreages for California red-legged frog habitat are detailed in Table 2.4.5-1. The reported acreages are conservative estimates given the suitability of habitat in the BSA for the various life-history stages and needs of this species. Lastly, project activities have the potential to impact movement of California red-legged frog between suitable habitats in the project vicinity.

Table 2.4.5-1: Estimated Direct Impacts to California Red-Legged Frog Habitat

Habitat Type	Temporary Impacts: Build Alternative with Southern Overcrossing	Temporary Impacts: Build Alternative with Northern Overcrossing	Permanent Impacts: Build Alternative with Southern Overcrossing	Permanent Impacts: Build Alternative with Northern Overcrossing
Aquatic dispersal (non-breeding)	0.157	0.157	0.004	0.004
Upland dispersal	25.763	24.144	3.628	3.205

The project could result in indirect impacts such as temporary degradation of California red-legged frog habitat from erosion and sedimentation, accidental spills and pollution, as well as introduction of non-native invasive species.

Lastly, project activities have the potential to impact movement of California red-legged frog between suitable habitats in the project vicinity. Trout Creek and Limekiln Creek may be both temporarily and permanently impacted by project activities. Impacts to aquatic dispersal (non-breeding) habitat could result from staging and construction of the wildlife undercrossing adjacent to Trout Creek along southbound SR 17 (both build alternatives); the Southern Overcrossing to Serenity Trail (Trail No. 1) across Trout Creek (Southern Overcrossing alternative only); and the Manzanita Trail to Limekiln Trail across Limekiln Creek (Trail No. 5; both build alternatives, assuming the Jones Trail to Priest Rock Trail segment is not constructed instead, as noted in Section 1.4.3). Although trail construction or improvement may temporarily halt movement for

California red-legged frogs, trails are not considered barriers for dispersal, and movement would be uninterrupted post-construction.

As the lead federal agency, Caltrans made the following preliminary effect determination:

- The project *may affect, and is likely to adversely affect*, California red-legged frog.

Applicable Project Features

Implementation of the following project features, which are described in Section 1.4.6, would reduce the potential for the impacts to California red-legged frog described above:

- PF-BIO-01 Environmentally Sensitive Area Delineation
- PF-BIO-05 Approved Project Biologist
- PF-BIO-06 Worker Environmental Awareness Training
- PF-BIO-07 Biological Monitor
- PF-BIO-08 Stop Work Authority

2.4.5.3 Avoidance, Minimization, and/or Mitigation Measures

AMM-BIO-01 (Section 2.4.1.3); AMM-BIO-04 (Section 2.4.2.3); AMM-BIO-02 (Section 2.4.4.3); and the measures below will avoid and/or minimize impacts to California red-legged frog.

AMM-BIO-08: California Red-Legged Frog (*Rana draytonii*) Preconstruction Surveys. Preconstruction surveys for the California red-legged frog will be conducted by the agency-approved biologist within 14 calendar days of the initiation of project activities in suitable upland and aquatic habitat before ground-disturbing activities, vegetation removal, and WEF installation.

- Foot surveys will be conducted of potential frog habitat within the project limits and accessible adjacent areas (within at least 20 feet of project limits).
- Potential cover sites (burrows, rocks, soil cracks, vegetation, and other potential refuge habitat) and any areas of disturbed soil for signs of California red-legged frog will be investigated.
- Native vertebrates found in cover sites within the project limits will be documented and, if handling is allowed, relocated to an adequate cover site in the vicinity. Species that cannot be relocated because of special protection status will be addressed in coordination with the appropriate agency(s) with jurisdiction.

AMM-BIO-09: California Red-Legged Frog Monitoring Protocols. During construction in and near potential California red-legged frog habitat, the following protocols will be observed by the agency-approved biologist during construction monitoring:

- WEF installed in California red-legged frog habitat will be checked regularly for potential frog presence, to ensure that it is functioning as intended, and is appropriately maintained. WEF issues will be reported to the Resident Engineer for immediate resolution.
- Within 24 hours before initial ground-disturbing activities, portions of the project footprint where potential California red-legged frog habitat has been identified will be surveyed by the agency-approved biologist(s) to clear the site of frogs moving above ground or taking refuge in burrow openings or under materials that could provide cover.
- Agency-approved project biologist(s) will be present during all initial ground-disturbing activities and vegetation removal in suitable refugia habitats for the California red-legged frog to monitor the removal of the top 12 inches of topsoil.
- If potential aestivation burrows are discovered, the burrows will be flagged for avoidance.
- After a rain event and before construction activities resume, an agency-approved biologist will inspect the work area and all equipment/materials for the presence of California red-legged frog.
- On discovery of a California red-legged frog individual(s) in an active construction area, all work will cease within a 50-foot radius of the frog. The frog will be allowed to leave the site on its own; if the frog(s) does not leave on its own, it will be relocated within 0.25 mile of the construction site and placed in a natural burrow or other suitable location by an agency-approved biologist with the appropriate USFWS 10(a)1(A) handling permit.
- The USFWS will be notified by phone and email within one working day of any California red-legged frog discovery in the project area.

AMM-BIO-10: California Red-Legged Frog Habitat Work Window.

Initial ground disturbance in California red-legged frog upland dispersal habitat, as identified by an agency-approved biologist, will be timed to occur between April 15 and October 15.

Outside the Caltrans ROW, trail work in uplands may happen at any time if pre-construction surveys are completed and California red-legged frog are not found. Agency-approved biologist(s) may also be used to allow trail work to continue assuming all other project conditions are met.

All work in suitable aquatic dispersal (non-breeding) habitat for California red-legged frog, as identified by an agency-approved biologist, will only occur once the aquatic feature no longer holds water or between June 15 and October 15 after installation of WEF.

Mitigation

MM-BIO-02: Mitigation for California Red-Legged Frog. The project is designed to be self-mitigating, and the undercrossing would result in a net benefit to the broader

ecosystem as well as provide opportunities for genetic exchange for California red-legged frog that are precluded by SR 17, which bisects habitat on either side. Furthermore, Midpen is seeking to develop an MCA that could provide compensatory mitigation for some, or all, of the project's impacts on both state and federally⁵ regulated resources.

On-site in-kind habitat restoration will be implemented where practicable to offset permanent impacts. If on-site restoration to offset permanent impacts cannot be achieved because of site constraints and/or limitations, Midpen and Caltrans would coordinate with the regulatory agencies with jurisdiction to determine appropriate compensation. Other compensation options include the Santa Clara Valley Habitat Plan, the Santa Clara County RCIS, and conservation easements with local stakeholders.

The final mitigation requirements, if any, would be determined after selection of a preferred alternative and in coordination with the regulatory agencies.

2.4.6 Invasive Species

This section is summarized from the Natural Environment Study for the proposed project, which was completed in May 2023 (AECOM 2023d).

2.4.6.1 Affected Environment

The California Invasive Plant Council (Cal-IPC) defines invasive plants as plants that are not native to an environment, and once introduced, they establish, quickly reproduce and spread, and cause harm to the environment, economy, or human health. Invasive non-native plants threaten wildlands by displacing native species, hybridizing with native species, altering biological communities and/or altering ecosystem processes (Cal-IPC 2023).

Non-native invasive species were identified during field surveys and documented using the nomenclature and ranking status of the Cal-IPC in Appendix E of the NES (AECOM 2023d). Non-native invasive species were present within natural communities, such as invasive annual grasses in grassland and shrub habitat. In some cases, the habitats were dominated by non-native invasive species, such as eucalyptus (*Eucalyptus* spp.) forests and jubatagrass (*C. jubata*) in non-native perennial grasslands, and French broom (*Genista monspessulana*) in the non-native coastal scrub community.

⁵ Although the Regional Conservation Investment Strategy is a state-led program under CDFW, Midpen is collaborating with both USFWS and CDFW to develop Mitigation Credit Agreement (MCA) credits that would be in partnership with both agencies and that could provide advance mitigation for specific special-status species and actions under potentially both state and federal jurisdiction, including California red-legged frog and western pond turtle.

2.4.6.2 Environmental Consequences

No Build Alternative

The No Build Alternative would not affect the presence or abundance of invasive plant species in the project area.

Build Alternatives

With both build alternatives, construction activities have the potential to introduce or spread invasive species if seeds and other materials are carried into the project area on the wheels and tracks of vehicles and equipment or on the boots of workers. Ground disturbance during construction can also facilitate the spread of existing non-native invasive species within the BSA.

Implementation of PF-BIO-12 (Section 1.4.6) would reduce the potential for project construction to result in the introduction or spread of invasive plant species. PF-BIO-12 includes adherence to EO 13112 (Prevention and Control of Invasive Species), a standard practice required for all Caltrans projects. Landscaping and erosion control would use plant species that are not listed by the California Department of Food and Agriculture as noxious weeds, soil and plant materials would not be allowed in areas dominated by native vegetation, construction practices would be followed to control and prevent the spread of non-native invasive species and fill material would be used from weed-free sources.

2.4.6.3 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are required.

2.5 CUMULATIVE IMPACTS

The project would be constructed in the vicinity of several other past and planned projects, as detailed in Table 2.2.1-1 (Section 2.2.1). For this analysis, these actions are considered in connection to the proposed project for any impacts that could be cumulatively considerable.

Resource areas that would have no adverse effects from the proposed project would not have incremental effects that would be cumulatively considerable (Caltrans 2005). The project is anticipated to have no impacts or less-than-significant impacts on the majority of resource areas identified in this document. The project would have impacts to the following resources that require mitigation:

- Wetlands and other waters
- Threatened and endangered species (California red-legged frog)

Cumulative impacts to these resources were considered in the Natural Environment Study (AECOM 2023d). All past, present, and future projects have gone through or are required to undergo an environmental review to identify, account for, and mitigate for potential significant impacts to wetlands and other waters and California red-legged frog habitat. In addition, each project listed in Table 2.2.1-1 is required to undergo a regulatory agency permit process that includes compensatory mitigation for impacts. The requirement for these projects to provide compensatory mitigation reduces the potential for cumulatively considerable impacts to wetlands and other waters and California red-legged frog habitat.

Both build alternatives are anticipated to result in approximately 0.20 acre of temporary and 0.01 acre of permanent impacts on sensitive wetland communities and other waters of the U.S., as described in Section 2.4.2. The standard project features listed in Section 2.4.2.2 and the avoidance, minimization, and mitigation measures listed in Section 2.4.2.3 would be implemented to reduce the potential for adverse impacts to wetlands and waters. The proposed compensatory mitigation would provide for on-site in-kind habitat restoration or appropriate in-lieu compensation. As a result, the project would not result in cumulative impacts or contribute to cumulatively considerable impacts on wetlands and other waters of the U.S..

The proposed project would have potentially significant direct and indirect impacts to California red-legged frog, which is federally listed as threatened and a state species of special concern. Both build alternatives would have approximately 0.157 acre of temporary impacts and 0.004 acre of permanent impacts to aquatic dispersal habitat for this species. No breeding habitat would be affected. The Build Alternative with Southern Overcrossing would have approximately 25.763 acres of temporary impacts and 3.628 acres of permanent impacts on upland dispersal habitat. The Build Alternative with Northern Overcrossing would have approximately 24.144 acres of temporary impacts and 3.205 acres of permanent impacts on upland dispersal habitat. The impacts are described in detail in Section 2.4.5. The standard project features listed in Section 2.4.5.2 and the avoidance, minimization, and mitigation measures listed in Section 2.4.5.3 would be implemented to reduce the potential for adverse impacts to California red-legged frog. The proposed mitigation would include a potential MCA that could compensate for some, or all, of the project's impacts; on-site in-kind habitat restoration; and/or other appropriate compensation for permanent impacts to California red-legged frog. As a result, the project would not result in cumulative impacts or contribute to cumulatively considerable impacts on this species.

Chapter 3 California Environmental Quality Act (CEQA) Evaluation

3.1 DETERMINING SIGNIFICANCE UNDER CEQA

The project is subject to federal as well as state environmental review requirements because Midpen proposes the use of federal funds from the Federal Highway Administration (FHWA). Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Midpen is the project proponent and the lead agency under CEQA. FHWA's responsibility for environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 United States Code Section 327 (23 USC 327) and the Memorandum of Understanding dated May 27, 2022, and executed by FHWA and Caltrans.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or a lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) as a whole has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require the identification of each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of "mandatory findings of significance," which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

3.2 CEQA ENVIRONMENTAL CHECKLIST

This checklist 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 projects will 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 following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans and Midpen 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 have been considered prior to any significance determinations documented below; see Chapters 1 and 2 for a detailed discussion of these features. The annotations to this checklist are summaries of information contained in Chapter 2 in order to provide the reader with the rationale for significance determinations; for a more detailed discussion of the nature and extent of impacts, please see Chapter 2. This checklist incorporates by reference the information contained in Chapters 1 and 2.

3.2.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:

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?	Less Than Significant 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

CEQA Significance Determinations for Aesthetics

a – d) Less Than Significant Impact. The existing project area landscape is characterized by its natural scenic qualities. These qualities are reinforced by the policies of the Santa Clara County and Los Gatos General Plans (Santa Clara County 1994; Town of Los Gatos 2022a). As stated in Section 2.2.7, both build alternatives may

affect visual resources, primarily through the construction of a new trail overcrossing (either in the northern or southern project area), a wildlife undercrossing, new and improved trail connections, and supporting infrastructure (e.g., wildlife directional fencing, wildlife escape ramps, sound walls and retaining walls).

Both build alternatives were determined to have a moderate visual impact on the project area. The proposed features would be visible to the public from various perspectives, including SR 17, adjacent local roads, and open space facilities. However, these features were determined to be generally compatible with existing visual character and quality. Further, project features and avoidance and minimization measures would be implemented to increase compatibility. As discussed in Section 2.2.7, these would include vegetation preservation and replanting, as well as aesthetic treatment of the trail overcrossing and other structures.

Vegetation replanting would be required for the project, as both build alternatives would require tree removal. As stated in Section 2.4.1, Caltrans and Midpen would replace native and riparian trees removed by the project and erect temporary fencing to protect trees not identified for removal. Caltrans and Midpen would obtain approval from Santa Clara County and Los Gatos to remove any trees subject to their respective ordinances.

Additionally, both build alternatives could introduce minor sources of daytime glare. The overcrossing bridge itself and its fencing could be a source of glare during the day, as these features may reflect sunlight. However, this potential source of glare would be relatively minor.

Based on the discussion above, neither build alternative is anticipated to have a substantial adverse effect on scenic vistas in the project vicinity, substantially damage scenic resources, or substantially degrade the existing visual character or quality of public views of the site and its surroundings. Therefore, the impact would be less than significant.

3.2.2 Agriculture and Forestry Resources

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

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

CEQA Significance Determinations for Agriculture and Forestry Resources

a – e) No Impact. There is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within the project footprint (California Department of Conservation 2018). The project footprint does not contain land zoned for agricultural uses, land under Williamson Act contracts, or land zoned for forest land, timber land, or timberland production (Santa Clara County 2022a,b). There would be no loss or conversion of forest land to non-forest land, or any other changes to the existing environment that would convert farmland to nonagricultural use or forest land to non-forest use. Therefore, the project would have no impact on agriculture and forest resources.

3.2.3 Air Quality

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

Question	CEQA Determination
a) Conflict with or obstruct implementation of the applicable air quality plan?	Less Than Significant 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?	Less Than Significant Impact

CEQA Significance Determinations for Air Quality

a – e) Less Than Significant Impact. The project is in the San Francisco Bay Area Air Basin (SFBAAB) and is within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD) and the California Air Resources Board (CARB). The proposed project would not interfere with any of the control measures described in the BAAQMD’s Clean Air Plan (2017) to plan for and achieve compliance with federal and state ozone standards. The project is also included in the current Regional Transportation Plan (RTP), Plan Bay Area 2050 (ABAG and MTC 2021a; RTP ID No. 21-T08-060), and the 2023 Transportation Improvement Program (TIP; MTC 2022; TIP ID No. SCL210028). The RTP and TIP conform to the State Implementation Plan, which is the state’s plan to attain air quality standards set by the U.S. Environmental Protection Agency (EPA).

The project would not add motor vehicle capacity to SR 17 or other roads, and project operation would not degrade air quality. The project would not interfere with any of the control measures described in the BAAQMD’s Clean Air Plan (2017) to plan for and achieve compliance with federal and state ozone standards. The project is exempt from the requirement to determine air quality conformity, in accordance with 40 Code of Federal Regulations (CFR) 93.126 (Table 2: Bicycle and pedestrian facilities).

The BAAQMD considers construction activities to be typically short-term or temporary in duration; however, criteria pollutant emissions from construction of the build alternatives were estimated for informational purposes. Construction emissions were quantified using the California Emissions Estimator Model (CalEEMod; Version 2022.1.1.13).

The BAAQMD’s current CEQA Guidelines recommend thresholds of significance for project-level criteria air pollutant emissions to assist lead agencies in CEQA determinations. The BAAQMD’s thresholds include levels at which construction emissions of ozone (O₃) precursors (reactive organic gases [ROG] and nitrogen oxides [NO_x]), particulate matter of 10 micrometers in diameter (PM₁₀), and particulate matter of 2.5 micrometers in diameter (PM_{2.5}) could cause significant air quality impacts.

To be conservative, the worst-case construction scenario was assumed, including concurrent construction of the wildlife overcrossing, directional fencing, escape ramps, and associated facilities (Section 1.4.1); one trail overcrossing and associated trails in the Caltrans ROW (Section 1.4.2); and the El Sereno OSP - Future Loop Trail Connector (Trail No. 4; Section 1.4.3), which represents the most intensive regional trail work in terms of construction equipment use and area of disturbance that would take place in one year. The construction area and equipment for the Southern Overcrossing alternative and Northern Overcrossing alternative would be very similar and yield the same model results; therefore, the results shown in Table 3.2.3-1 apply to both build alternatives.

Table 3.2.3-1: Project Construction Emissions and BAAQMD CEQA Threshold (Pounds per Day)

	ROG	NO_x	PM₁₀ Dust	PM₁₀ Exhaust	PM_{2.5} Dust	PM_{2.5} Exhaust
Construction emissions	1.0	8.6	1.2	0.3	0.5	0.3
BAAQMD CEQA thresholds	54	54	BMP	82	BMP	54

Notes: BMP = best management practices

Construction-related emissions would result from operation of trucks and construction equipment as well as wind-blown dust generated by excavation, grading, hauling and other activities. The effects from these activities would vary from day to day as construction progresses.

As shown in Table 3.2.3-1, the daily average emissions during construction of both build alternatives would be below the BAAQMD’s recommended thresholds for ROG, NO_x, and exhaust PM₁₀ and PM_{2.5}. Since the daily average emissions of criteria pollutants and precursors would be below the recommended thresholds, neither of the build alternatives would be expected to result in an air quality violation.

The BAAQMD does not have a quantitative threshold for fugitive dust emissions; however, the BAAQMD considers implementation of BMPs to control fugitive dust PM₁₀ and PM_{2.5} during construction sufficient to reduce potential impacts from dust to a less-than-significant level. Caltrans’ Special Provisions and Standard Specifications include the requirement to minimize or eliminate dust during project construction through the application of dust palliatives.

SO₂ is generated by oxidation during combustion of organic sulfur compounds contained in diesel fuel. Under California law and CARB regulations, off-road diesel fuel used in California must meet the same sulfur and other standards as on-road diesel fuel (not more than 15 ppm sulfur), so SO₂-related issues due to diesel exhaust will be minimal.

Some phases of construction, particularly asphalt paving on SR 17, may result in short-term odors in the immediate area of each paving site(s). Such odors would quickly disperse to below detectable levels as distance from the site(s) increases.

Most of the construction impacts to air quality are short-term in duration and, therefore, will not result in long-term adverse conditions. Implementation of the following project features, which are described in Section 1.4.6, some of which may also be required for other purposes such as stormwater pollution control, will reduce any air quality impacts resulting from construction activities:

- PF-AIR-01. Construction Specifications
- PF-WQ-01. Temporary Water Quality Best Management Practices (BMPs)
- PF-WQ-03. Erosion Control and Water Quality for Trail Construction

With implementation of standard measures, the project would not conflict with or obstruct implementation of the applicable air quality plan, result in a cumulatively considerable net increase of any criteria pollutant, expose sensitive receptors to substantial pollutant concentrations, or result in emissions or odors that would adversely affect a substantial number of people. Impacts would be less than significant.

3.2.4 Biological Resources

Would the project:

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, U.S. Fish and Wildlife Service, or NOAA Fisheries?	Less Than Significant with Mitigation Incorporated
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Less Than Significant Impact

Question	CEQA Determination
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Less Than Significant with Mitigation Incorporated
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?	No 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

CEQA Significance Determinations for Biological Resources

a) Less Than Significant with Mitigation Incorporated. Without mitigation, the project would have potentially significant direct and indirect impacts to California red-legged frog, which is federally listed as threatened and a state species of special concern. The impacts are described in detail in Section 2.4.5. Caltrans has prepared a draft Biological Assessment for formal consultation with USFWS and has made a preliminary effect determination (*may affect, and is likely to adversely affect*, California red-legged frog) pursuant to Section 7 of the FESA. Although both build alternatives would have permanent and temporary impacts on California red-legged frog habitat as shown in Table 2.4.5-1, with implementation of MM-BIO-02 (described in Section 2.4.5.3), the impacts would be less than significant. MM-BIO-02 includes mitigation in the form of a potential MCA that could provide mitigation for some, or all, of the project’s impacts; on-site in-kind habitat restoration; and/or other appropriate compensation for permanent impacts to California red-legged frog.

Section 2.4.4 discusses potential impacts to state species of special concern, candidate species, and fully protected species (pallid bat, San Francisco dusky-footed woodrat, mountain lion, American badger, golden eagle, bald eagle, white-tailed kite, Santa Cruz black salamander, California giant salamander, and western pond turtle). The project features and measures listed in Section 2.4.4 would reduce the potential for impacts to these species. Impacts would be less than significant.

On October 3, 2023, the USFWS published a notice of proposed rulemaking to designate the northwestern pond turtle and southwestern pond turtle as threatened species under the FESA (88 FR 68370–68399). Caltrans, as the lead federal agency, will consult with the USFWS on western pond turtle under Section 7 of the FESA. If additional avoidance, minimization, and/or mitigation beyond that described in Section

2.4.4.3 for western pond turtle is needed for FESA purposes, it will be developed in coordination with the USFWS and may include options described in Measure MM-BIO-02 (Section 2.4.5.3).

b) Less Than Significant Impact. As described in Section 2.4.1, both build alternatives would have impacts on approximately 10 riparian trees, including California bay and coast live oak species. The number of impacted trees will be finalized based on final design.

Temporary and permanent impacts are also anticipated for three sensitive natural communities (brittle leaf–woolly leaf manzanita chaparral, California bay forest and woodland, and California buckeye groves), as described in Section 2.4.1. California bay forest and woodland would be impacted by project impacts within the Caltrans ROW, and all three sensitive natural communities are anticipated to be impacted in areas outside of the Caltrans ROW, either where a new trail would be constructed or where an existing trail would be improved. Replacement planting in the Caltrans ROW will be provided in accordance with PF-BIO-04. Removal of trees or other plantings outside of the Caltrans ROW will be addressed as part of property owner negotiations during the detailed design phase. Riparian trees that are removed will be mitigated at regulatory agency-approved ratios. Implementation of the other measures listed in Section 2.4.1 would reduce the potential for impacts to riparian habitat and sensitive natural communities. Impacts would be less than significant.

c) Less Than Significant with Mitigation Incorporated. Both build alternatives are anticipated to result in approximately 0.20 acre of temporary and 0.01 acre of permanent impacts on sensitive wetland communities and other waters of the U.S., as described in Section 2.4.2. Standard project features and avoidance and minimization measures would be implemented to reduce the potential for impacts to wetlands and waters. With implementation of MM-BIO-01 (Section 2.4.2.3), which provides for on-site in-kind habitat restoration or appropriate in-lieu compensation, impacts would be less than significant.

d) No Impact. Both build alternatives include construction of a wildlife undercrossing of SR 17, which would connect thousands of acres of habitat that are currently fragmented by the highway. Short-term construction disruption and permanent changes in land cover, which are described in Section 2.4.1, would not interfere substantially with wildlife movement or impede use of wildlife nursery sites, including for fish. The proposed wildlife undercrossing would provide long-term benefits to wildlife movement. No impact would occur.

e) No Impact. No natural community conservation plans are currently in effect for the project area. The proposed project is outside of the current boundary of the Santa Clara Valley Habitat Plan; however, it would be consistent with the plan and with the other conservation-related regulations and plans described in Section 2.2.2. No impact would occur.

3.2.5 Cultural Resources

Would the project:

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

CEQA Significance Determinations for Cultural Resources

a) Less Than Significant Impact. One previously recorded resource has been identified in the APE, a historic-era archaeological site that is considered a historic resource for purposes of CEQA. No construction activities would take place in the historic-era archaeological site for either build alternative, and AMM-CUL-1 (Section 2.2.8.3) will be implemented to avoid and minimize the potential for impacts during construction. There are no other historical resources in the APE. The project would have a less-than-significant impact on historical resources as defined in 14 CCR 15064.5.

b) No Impact. An isolated prehistoric artifact was identified during field surveys of the APE. This resource has been evaluated in accordance with 14 CCR 15064.5, using the criteria outlined in Section 5024.1 of the California Public Resources Code, and appears ineligible for listing in the California Register of Historical Resources (CRHR). No impact would occur.

c) No Impact. There are no formal cemeteries or known burial sites in the project area. Neither of the build alternatives is expected to disturb human remains during construction. The project includes PF-CUL-01 (Section 1.4.6) to avoid impacts to human remains if encountered during construction. No impact would occur.

3.2.6 Energy

Would the project:

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?	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

CEQA Significance Determinations for Energy

a) No Impact. The project would not result in a potentially significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation. Direct energy usage for construction is a one-time, necessary commitment for infrastructure projects such as this. The project would not increase motor vehicle travel or operational energy usage (direct or indirect).

b) No Impact. The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. It would support state and local goals to increase active transportation by improving bicycle and pedestrian connections across SR 17, without increasing motor vehicle capacity.

3.2.7 Geology and Soils

Would the project:

Question	CEQA Determination
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	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 waste water disposal systems where sewers are not available for the disposal of waste water?	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Less Than Significant Impact

CEQA Significance Determinations for Geology and Soils

a) - e) No Impact. As described in PF-GEO-02 (Section 1.4.6), Caltrans’ design and construction guidelines incorporate engineering standards that address seismic risks. Project elements will be designed and constructed to meet seismic design requirements for ground shaking and ground motions, as determined for the project vicinity and site conditions. Caltrans also requires additional geotechnical subsurface and design investigations to be performed during the final project design and engineering phase (PF-GEO-01, Section 1.4.6). With implementation of these standards and requirements, no impact would occur.

f) Less Than Significant Impact. There is no record of vertebrate fossils from within the project area or a 1-mile buffer. With both build alternatives, proposed project activities would encounter geologic units that are known to have high paleontological sensitivity. This is discussed further in Section 2.3.4. Caltrans Standard Specification 14-7.03 will be implemented to provide for stopping work, securing the area, and performing further investigation if paleontological resources are encountered during project construction (PF-GEO-03, Section 1.4.6). In addition, AMM-PAL-1 (Section 2.3.4.3) will be implemented during ground-disturbing activities to minimize potential effects on paleontological resources, if present. AMM-PAL-1 would allow for the recovery of fossil remains and associated specimen data and corresponding geologic and geographic site data that otherwise might be lost. Impacts to paleontological resources would be less than significant.

3.2.8 Greenhouse Gas Emissions

Would the project:

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

CEQA Significance Determinations for Greenhouse Gas Emissions

The following information includes results from the Construction Greenhouse Gas Emissions Memo (AECOM 2023g), which was completed in October 2023.

a) Less Than Significant Impact. The project would not change the existing or future motor vehicle capacity of SR 17 within the project limits. The proposed wildlife undercrossing, trail overcrossing, and regional trail connections would result in a negligible increase or no increase in operational greenhouse gas (GHG) emissions. Because the project would not increase the number of travel lanes on SR 17, no

increase in vehicle miles traveled will occur. Therefore, no increase in operational GHG emissions is expected.

Construction-generated GHG would result from on-site construction equipment, workers commuting to and from the project area, and potential traffic delays due to construction. These emissions would be produced at different rates throughout the project construction, depending on the activities involved.

The BAAQMD provides regional guidance for GHG emissions in its 2022 *CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans*. Under the BAAQMD-recommended thresholds, there is no proposed construction-related climate impact threshold at this time.

A construction-related GHG emission analysis was conducted for the project, focusing on carbon dioxide (CO₂), which is the dominant GHG from vehicle emissions, mostly from fossil fuel combustion. Estimates are also provided for carbon dioxide equivalents (CO₂e), which comprise methane (CH₄) and nitrogen dioxide (NO₂) as well as CO₂. CO₂e is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given time, relative to the emissions of 1 ton of CO₂.

Construction emissions were quantified using the California Emissions Estimator Model (CalEEMod; Version 2022.1.1.13). To be conservative, the worst-case construction scenario was assumed, including concurrent construction of the wildlife overcrossing, directional fencing, escape ramps, and associated facilities (Section 1.4.1); one trail overcrossing and associated trails that are partially within the Caltrans ROW (Section 1.4.2); and the El Sereno OSP - Future Loop Trail Connector (Trail No. 4; Section 1.4.3), which represents the most intensive regional trail work in terms of construction equipment use and area of disturbance that would take place in one year. The construction area and equipment for the Southern Overcrossing alternative and Northern Overcrossing alternative would be very similar and yield the same model results; therefore, the same emissions estimates apply to both build alternatives.

The analysis estimated that the project would produce a total of 499.7 metric tons of CO₂ and 501.8 metric tons of CO₂e over the duration of construction.

All construction contracts for the Caltrans ROW include Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and would comply with all CARB emission reduction regulations; and Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions. The project includes PF-AIR-01 (Section 1.4.6), which would reduce the potential for GHG impacts during construction. Together, these standards and measures would reduce potential impacts from project construction, including cumulative impacts. This impact would be less than significant.

b) No Impact. The Santa Clara County General Plan, Town of Los Gatos General Plan, and Town of Los Gatos Sustainability Plan do not contain numeric significance thresholds for construction GHGs. The County is working on a Climate Roadmap 2030, which is anticipated to be issued in Spring 2023, that will outline actions the County and partners will take to reduce GHG (Santa Clara County 2023).

Midpen has adopted a Climate Action Plan to identify goals and strategies to reduce GHG emissions generated by Midpen activities. The Climate Action Plan includes a goal to reduce administrative GHG emissions by 20 percent below the 2016 baseline by 2022, 40 percent by 2030, and 80 percent by 2050 (Midpen 2018). The Climate Action Plan includes multiple strategies for achieving these goals, including increasing electric and alternative fuel vehicles and equipment, increasing vehicle fuel economy, increasing use of electric transportation options, and reducing miles driven.

Neither build alternative would result in a long-term increase in GHG emissions. Both build alternatives are generally consistent with the programs, plans, ordinances, and policies to improve non-automotive access across SR 17 and to local and regional trails and recreational facilities (Section 2.2.2), which would support GHG reduction efforts. Temporary GHG emissions from project construction would be reduced as described in Item a, above. No impacts would occur.

3.2.9 Hazards and Hazardous Materials

Would the project:

Question	CEQA Determination
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less Than Significant Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less Than Significant Impact
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

Question	CEQA Determination
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two nautical 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?	Less Than Significant Impact

CEQA Significance Determinations for Hazards and Hazardous Materials

a) Less Than Significant Impact. Project construction and maintenance activities are expected to involve the routine transport, use, and disposal of hazardous materials (e.g., fuels, paints, and lubricants) that could pose a threat to human health or the environment if not properly managed. Adherence to federal and state regulations during project construction and maintenance would reduce the risk of exposure to hazardous materials and accidental hazardous materials releases. Compliance with existing regulations is mandatory; therefore, neither Build Alternative is expected to create a hazard to construction workers, the public, or the environment through the routine transport, use, disposal, or accidental release of hazardous materials.

b) Less Than Significant Impact. During construction, hazardous materials such as fuels, paints, and lubricants would be used. These materials could pose a threat to human health or the environment if not properly managed. Adherence to federal and state regulations during project construction and maintenance would reduce the risk of exposure to hazardous materials and accidental releases of hazardous materials. Compliance with existing regulations is mandatory. Therefore, construction of the proposed project is not expected to create a hazard to construction workers, the public, or the environment.

Construction and maintenance of both build alternatives could result in the potential disturbance of aurally deposited lead, naturally occurring asbestos, contaminated fill, and herbicide residues. Implementation of PF-HAZ-01 (Section 1.4.6) would avoid or minimize potential impacts associated with hazardous materials. Impacts involving the release of hazardous materials are anticipated to be less than significant.

c) No Impact. There are no existing or proposed schools within 0.25 mile of the project area.

d) No Impact. Neither of the build alternatives are on a site included in a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Regulatory agency databases identified no violations or enforcement actions for eight of

the nine sites reported within 1 mile of the project area. The remaining site, along SR 17 near Alma Bridge Road, had a 2012 report of spilled oil that was contained and placed in drums. None of the sites were determined to have the potential to affect the proposed project area.

e) No Impact. There are no airports within 2 miles of the project, and the project area is not included in an airport land use plan.

f) Less Than Significant Impact. The following plans address emergency response and evacuation in the project area:

- **County of Santa Clara Emergency Operations Plan (Santa Clara County 2022).** This plan describes the County's incident management organization, compliance with relevant statutes and guidelines, community engagement, and components of the incident management structure. The plan covers Santa Clara County, which includes part of the project area (see Figure 2.2.1-1 in Section 2.2.1).
- **County of Santa Clara Operational Area Hazard Mitigation Plan (Santa Clara County 2017).** This plan describes the County's multi-jurisdictional hazard mitigation organizational structure, the risk assessment process, and public outreach efforts. It also includes goals and objectives, as well as an implementation and maintenance strategy. The primary goal of this plan is to use long-term and short-term policies, programs, projects, and other activities to alleviate the death, injury, and property damage that can result from a disaster. Its planning area is also Santa Clara County.
- **Town of Los Gatos Emergency Operation Plan (Town of Los Gatos 2015).** This plan establishes the framework for emergency response in Los Gatos, identifies known hazards, and encourages interagency collaboration in emergency planning and response. Its planning area is the Town of Los Gatos, which includes part of the project area (see Figure 2.2.1-1 in Section 2.2.1).

Neither of the build alternatives would conflict with or interfere with the implementation of the three plans described above. During construction, the contractor would need to implement temporary lane closures on SR 17 in order to construct the wildlife undercrossing and trail overcrossing, as described in Section 1.4.4.6. These closures have the potential to affect ingress and egress through the project area. However, closures would be short-term and emergency access would be maintained at all times. Any closures and alternate travel routes would be coordinated with local emergency responders and law enforcement agencies through the implementation of a TMP (see PF-TR-01 in Section 1.4.6). The TMP would reduce the potential for impacts to emergency response or emergency evacuation. A substantial reduction in emergency response times is not expected. The impact would be less than significant.

g) Less Than Significant Impact. Section 3.2.20 provides a description of fire hazard conditions in and adjacent to the project area. Project features to minimize fire risks would be implemented during construction, such as clearing vegetation from the work area, prohibiting the use of highly flammable chemicals, following locally changing meteorological conditions, and maintaining awareness of the possibility of increased fire danger when work is in progress (PF-WF-01, Section 1.4.6). All construction activities would follow state and federal fire regulations. PF-WF-01 would reduce the project’s potential to expose people or structures to wildland fires. Therefore, this impact would be less than significant.

3.2.10 Hydrology and Water Quality

Would the project:

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 that the project may impede sustainable groundwater management of the basin?	Less Than Significant 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: (i) result in substantial erosion or siltation on- or off-site;	Less Than Significant Impact
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	Less Than Significant 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	Less Than Significant Impact
(iv) impede or redirect flood flows?	Less Than Significant 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

CEQA Significance Determinations for Hydrology and Water Quality

a) Less Than Significant Impact. During construction, temporary water quality impacts have the potential to occur from sediment discharge from disturbed soil areas; construction activities such as grading and excavation near water sources; and use of construction vehicles and equipment. During project construction, the Build Alternative with Southern Overcrossing would result in 12.86 acres of DSA, and the Build Alternative with Northern Overcrossing would result in 11.86 acres of DSA. Construction site BMPs for erosion and sediment control and material management (PF-WQ-01 and PF-WQ-03, Section 1.4.6) and would be specified in the SWPPP prior to construction and monitored during construction.

Permanent impacts to water quality could result from the addition of impervious area, which can prevent runoff from naturally dispersing and infiltrating into the ground. The total amount of net new impervious surface would be 1.34 acres for the Build Alternative with Southern Overcrossing and 0.95 acre for the Build Alternative with Northern Overcrossing. The added impervious area would have a minimal increase in stormwater pollution effects. Runoff from project activities would be directed to stormwater treatment facilities such as biofiltration swales. Pollution and runoff sources are not expected to change. These impacts would be reduced through the implementation of stormwater treatment BMPs (Section 1.4.4.4) and PF-WQ-02 (Section 1.4.6). In addition, the project would require a 401 Water Quality Certification from the RWQCB, which would include requirements to avoid or minimize water quality impacts during and after construction. Therefore, the project would have less-than-significant impacts to water quality and would not violate any water quality standards.

b) Less Than Significant Impact. The project would not involve pumping and/or using groundwater. The project area is not located in any identified groundwater basin. Both build alternatives would add impervious area as noted in Item a, above. While new impervious surface could reduce the available unpaved area where runoff can infiltrate into native soils and recharge aquifers, the additional impervious surface would be minimal in comparison with the total area of the groundwater basin. Therefore, impacts to groundwater supply and recharge would be less than significant.

c) (i), (ii), (iii), and (iv) Less Than Significant Impact. Both build alternatives would increase impervious surfaces as described in Item a, above. As the acreage of the increase is relatively small, no substantial alteration of existing drainage patterns would occur. Neither build alternative is anticipated to alter the course of a stream or river. Project features and avoidance, minimization, and/or mitigation measures for wetlands and other waters (Section 2.4.2) would reduce the potential for impacts to aquatic features.

The project would be designed and implemented to reduce the potential for long-term impacts including erosion, siltation, substantial increases in the rate or amount of runoff, and runoff that would exceed planned drainage systems or create substantial new polluted water runoff. Trash control measures will be included based on

maintenance accessibility, potential impacts to federally listed species habitat, and existing Valley Water and San Jose Water conveyance and delivery systems in the vicinity. Implementation of standard short-term and long-term BMPs (PF-WQ-01 through PF-WQ-03, Section 1.4.6) would reduce the potential for temporary or permanent impacts to drainage patterns.

d) No Impact. The majority of the proposed project area is not within an SFHA. With both build alternatives, wildlife directional fencing and escape ramps are proposed in FEMA SFHA Zone A, which represents areas with a 1% annual chance of flooding (Section 2.3.2). For both alternatives, these project elements would create approximately 1.9 acres of DSA and approximately 0.05 acre of impervious area. No pollutant releases would occur in the event of project inundation. There would be no impact.

e) No Impact. The project is required to adhere to the Clean Water Act, the Porter-Cologne Water Quality Control Act, the Construction General Permit, and other laws and regulations described in the Water Quality Assessment Report (HDR/WRECO 2023b). The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. No impact would occur.

3.2.11 Land Use and Planning

Would the project:

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?	Less Than Significant Impact

CEQA Significance Determinations for Land Use and Planning

a) No Impact. Neither build alternative would physically divide an established community. Both build alternatives would enhance local and regional connectivity through the construction of a trail overcrossing and regional trail connections. Therefore, there would be no impact.

b) Less Than Significant Impact. As discussed in Section 2.2.2 and Table 2.2.2-1, both build alternatives would be generally consistent with all applicable state, regional, and local plans and programs. Additionally, while the project would result in some changes to land use, it would be compatible with the land uses outlined in the Santa Clara County and Los Gatos general plans (Santa Clara County 1994; Town of Los Gatos 2022a).

3.2.12 Mineral Resources

Would the project:

Question	CEQA Determination
a) Result in the loss of availability of a known mineral resource that would be a 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

CEQA Significance Determinations for Mineral Resources

a), b) No Impact. One quarry is in operation to the east of the project area: the Vulcan Materials Company Lexington Quarry at 18500 Limekiln Canyon Road, Los Gatos, CA 95033. The quarry is used to produce construction aggregate materials including gravel and stone. The closest proposed project feature (the Manzanita Trail to Limekiln Trail, Trail No. 5) would be approximately 0.4 mile west of the quarry. No project features would be within designated mineral resource zones (California Department of Conservation 1987, 1996). Neither of the build alternatives would result in the loss of availability of a known mineral resource or the loss of availability of a locally important mineral resource recovery site. No impact would occur.

3.2.13 Noise

Would the project result in:

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?	Less Than Significant 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 nautical 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

CEQA Significance Determinations for Noise

a) Less Than Significant Impact.

Short-Term Impacts

Project construction would result in temporary, intermittent noise over the construction period, which would vary by project component. The approximate construction durations are currently anticipated to be as follows, as described in Section 1.4.4.6.

- Wildlife undercrossing (both build alternatives): 60 working days
- Southern Overcrossing bridge (Build Alternative with Southern Overcrossing): 130 working days
- Northern Overcrossing bridge (Build Alternative with Northern Overcrossing): 150 working days
- Trails in the Caltrans ROW (both build alternatives): 100 working days (for either Southern or Northern Overcrossing)
- Improved existing or new regional trails (both build alternatives: A total of approximately 5 years, which may not be consecutive).

Construction-related noise is subject to the general plan policies and ordinances of the Town of Los Gatos and Santa Clara County. Relevant policies and code sections are as follows:

Los Gatos 2040 General Plan (Town of Los Gatos 2022)

- ENV-20.1: Road Construction Noise
 - Ensure that the construction of roadways or roadway improvements consider noise level standards for scheduling and construction methods to the maximum extent feasible.
- ENV-20.3: Noise Control Measures
 - Require that stringent noise control measures accompany construction of new County, State, and Federal roads and highways by constructing aesthetically pleasing sound walls, berms, and dense landscaping where appropriate.

Los Gatos Municipal Code Chapter 16 – Noise (Town of Los Gatos n.d.)

- Between the hours of 8:00 a.m. to 6:00 p.m. weekdays, and 9:00 a.m. to 4:00 p.m. Saturdays, construction, alteration or repair activities which are authorized by a valid Town permit or as otherwise allowed by Town permit, shall be allowed if they meet at least one of the following noise limitations:

- No individual piece of equipment shall produce a noise level exceeding eighty-five (85) dBA⁶ at twenty-five (25) feet. If the device is located within a structure on the property, the measurement shall be made at distances as close to twenty-five (25) feet from the device as possible.
- The noise level at any point outside of the property plane shall not exceed eighty-five (85) dBA.
- Construction, alteration or repair activities shall be prohibited outside those hours and on Sundays and legal holidays with the following exceptions:

(3) At any time before commencement of or during construction activity, the chief building official may modify the permitted hours of construction upon twenty-four (24) hours written notice to the contractor, applicant, developer or owner. The chief building official can reduce or increase the allowable hours of construction activity. In approving modified hours, the chief building official may specifically designate and/or limit the activities permitted during the modified hours. If the hours of construction activity are modified, then the general contractor, applicant, developer or owner may be asked to erect a sign at a prominent location on the construction site to advise subcontractors and material suppliers of the working hours. The contractor, owner or applicant shall immediately produce upon request any written order or permit from the chief building official pursuant to this section upon the request of any member of the public, the police or Town staff.

- Exemptions for safety devices, emergencies, and Town maintenance.

Santa Clara County General Plan (Santa Clara County 1995)

- Policy C-HS 25: Noise impacts from public and private projects should be mitigated.
 - Implementation Recommendations:
 - C-HS(i) 23: Project design review should assess noise impacts on surrounding land uses.
 - C-HS(i) 24: Where necessary, construct sound walls or other noise mitigations.
 - C-HS(i) 25: Prohibit construction in areas which exceed applicable interior and exterior standards, unless suitable mitigation measures can be implemented.

⁶ The acronym dBA stands for A-weighted decibels. Human hearing is limited not only to the range of audible frequencies, but also in the way it perceives sound pressure levels. To approximate the frequency response of the human ear, a series of adjustments is usually applied to the sound measured by a sound level meter. The adjustments, or weighting network, are frequency dependent. The A-scale approximates the frequency response of the average young ear when listening to most everyday sounds. When people make relative judgments of the loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds (Caltrans 2013).

- C-HS(i) 26: Require project-specific noise studies to assess actual and projected dB noise contours for proposed land uses likely to generate significant noise.

Santa Clara County Code of Ordinances (Santa Clara County n.d.)

- Section B11-154(6). Construction/Demolition
 - a. Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between weekdays and Saturday hours of 7:00 p.m. and 7:00 a.m., or at any time on Sundays or holidays, that the sound therefrom creates a noise disturbance across a residential or commercial real property line, except for emergency work of public service utilities or by variance. This section will not apply to the use of domestic power tools as specified in Subsection 11.
 - b. Where technically and economically feasible, construction activities will be conducted in a manner that the maximum noise levels at affected properties will not exceed those listed in the following schedule:
 - i. Mobile equipment. Maximum noise levels for nonscheduled, intermittent, short term operation (less than ten days) of mobile equipment:
 - [For Single- and Two-Family Dwelling Residential Areas]* 75 dBA daily, except Sundays and legal holidays, 7:00 a.m. – 7:00 p.m.
 - [For Single- and Two-Family Dwelling Residential Areas]* 50 dBA daily, 7:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays
 - ii. Stationary equipment. Maximum noise levels for repetitively scheduled and relatively long-term operation (periods of ten days or more) of stationary equipment are as follows:
 - [For Single- and Two-Family Dwelling Residential Areas]* 60 dBA daily, except Sundays and legal holidays, 7:00 a.m. – 7:00 p.m.
 - [For Single- and Two-Family Dwelling Residential Areas]* 50 dBA daily, 7:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays

In addition to the local policies and ordinances described above, Caltrans' 2018 Standard Specifications apply to project construction activities in the State ROW. Standard Specification 14-8.02 requires construction contractors to control and monitor noise resulting from work activities, and sets a limit of 86 dBA L_{max} at 50 feet from the job site from 9 PM to 6 AM. L_{max} is the maximum instantaneous noise level during a specific period of time. The L_{max} may also be referred to as the "peak (noise) level."

Table 3.2.13-1 lists the types of equipment that would be used for construction of the wildlife undercrossing and regional trail overcrossing in the Caltrans ROW. This equipment is expected to generate noise levels of up to 85 dBA at a distance of 50 feet.

Table 3.2.13-1: Construction Equipment Noise

Equipment	Maximum Noise Level (dBA at 50 feet, L_{max})
Scrapers, bulldozer, graders, cranes	85
Excavators	85
Jackhammers, Chainsaws	85
Heavy and Dump Trucks	84
Tractors	84
Compactors, wheeled loader	80
Backhoes	80
Scarifier	85
Concrete Pumps	82
Pavers	85
Auger drill rig (cast-in-drilled-hole [CIDH] piles)	85
Pneumatic Tools	85
All other equipment more than 5 horsepower	85

Source: FHWA 2006 (from Caltrans 2013)

The loudest construction equipment that would be used for trail improvements and new trail construction would be excavators and bulldozers, which both have a maximum noise level of 85 dBA at 50 feet (Table 3.2.13-1).

As shown in Figure 2.2.1-1 (Section 2.2.1), the wildlife undercrossing, Northern Overcrossing bridge and trail connections, Southern Overcrossing bridge and part of the Southern Overcrossing trail connections, and some areas of improved existing or new regional trails are within the Town of Los Gatos sphere of influence. Chapter 16 of the Los Gatos Municipal Code limits construction noise to 85 dBA at 25 feet, or at any point outside of the property plane, between the hours of 8:00 a.m. and 6:00 p.m. on weekdays and 9:00 a.m. to 4:00 p.m. on Saturdays. The majority of the proposed construction would take place within the Caltrans ROW and other large properties where a resident or trail user would not be within 25 feet of construction equipment. Therefore, the construction noise limit of 85 dBA at any point outside of the property plane (i.e., the property where the work is taking place) is considered the most applicable threshold for purposes of this analysis.

Part of the Southern Overcrossing trail connections and some areas of improved existing or new regional trails are within unincorporated areas of Santa Clara County. Section B11-154(6) of the Santa Clara County Code of Ordinances limits construction noise as follows:

- 7:00 a.m.–7:00 p.m. daily except for Sundays and legal holidays – 75 dBA for mobile equipment and 60 dBA for stationary equipment
- 7:00 p.m.–7:00 a.m. daily and all day on Sundays and legal holidays – 50 dBA for both mobile and stationary equipment

Typically, work within the Caltrans ROW (shown on Figure 1.4-1) is not subject to local noise ordinances; however, Caltrans will work with the contractor to meet the local requirements where feasible.

In some locations within the Town of Los Gatos sphere of influence, daytime construction work could exceed the limit set in the Los Gatos Municipal Code. The equipment listed in Table 3.2.13-1 would generate noise levels of up to 85 dBA at a distance of 50 feet. Construction of the wildlife undercrossing, both the Southern and Northern Overcrossing bridges, and the Southern Overcrossing trail would be 50 feet or more from the outer edge of the Caltrans ROW; therefore, construction noise would not exceed the 85 dBA limit outside of the property plane. Part of the Northern Overcrossing trail, the Northern Overcrossing to Serenity Trail (Trail No. 2), and the Manzanita Trail to Limekiln Trail (Trail No. 5) would involve construction on private property; and other proposed trail work (the El Sereno OSP – Future Loop Trail Connector, Trail No. 4; the Alma Bridge Road to Manzanita Trail, Trail No. 7; and the Los Gatos Creek Trail to Jones Trail, Trail No. 8; and the Southern Overcrossing to Los Gatos Creek Trail, Trail No. 9) would be entirely within Midpen or Valley Water property. At those locations, it is possible that construction noise levels with both build alternatives could exceed the 85 dBA limit where trail work is less than 50 feet from the property boundaries. The temporary construction noise impact would be limited to small areas (up to 50 feet long and a maximum of 20 feet in width) for short durations, and additional noise reduction would result from ground absorption and topographic shielding (Caltrans 2013) from the vegetated, hilly terrain. Although daytime construction work within the Town of Los Gatos sphere of influence could exceed the 85 dBA limit in small areas for short durations, the temporary noise increase would not be substantial. Temporary, short-term impacts would be less than significant.

Daytime construction work is not anticipated to exceed the limits set in the Santa Clara County Code of Ordinances. Construction in unincorporated Santa Clara County would be limited to trail work for the Southern Overcrossing trail connections and some areas of improved existing or new regional trails (the Southern Overcrossing to Serenity Trail, Trail No. 1; the Jones Trail to Priest Rock Trail, Trail No. 6; and the Alma Bridge Road to Manzanita Trail, Trail No. 7). Trail construction would typically use mobile equipment, defined in the code as intermittent, short-term operation (less than ten days in a single location), which has a limit of 75 dBA from 7:00 a.m.–7:00 p.m. daily except for Sundays and legal holidays. The closest residences to a trail (on Vina Drive and Montevina Road, near the Southern Overcrossing trail connection) would be a minimum of 150 feet from the nearest construction area. Sound levels decrease at a rate of 6 dBA for each doubling of the distance from the noise source (Caltrans 2013). Construction noise from the loudest equipment (85 dBA at 50 feet, as shown in Table 3.2.13-1) would decrease to 79 dBA at 100 feet, 73 dBA at 200 feet, and accordingly, 76 dBA at 150 feet. This calculation does not account for additional noise reduction that would result from ground absorption and topographic shielding (Caltrans 2013) from the vegetated, hilly terrain along SR 17. Therefore, daytime construction work within

unincorporated Santa Clara County is not anticipated to result in a substantial temporary noise increase in excess of the Santa Clara County Code of Ordinances. Temporary, short-term impacts would be less than significant.

Measure AMM-NOI-01 is proposed in order to further avoid or minimize temporary noise generated during project construction in the Town of Los Gatos sphere of influence and unincorporated Santa Clara County.

AMM-NOI-1. Noise Controls Outside of the Caltrans ROW.

- Limit construction outside of the Caltrans ROW to the days and hours set in Los Gatos Municipal Code Chapter 16 and Santa Clara County Code of Ordinances Section B11-154(6), to the maximum extent feasible. If construction is necessary outside of those days and hours, Midpen and/or VTA will provide advance notification to surrounding residents.
- Powered equipment for regional trail construction (vehicles, heavy equipment, and hand equipment such as chainsaws) will be equipped with adequate mufflers maintained in good condition. Best available noise control techniques (e.g., mufflers, intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds) will be used for all equipment and trucks used for regional trail construction, as necessary.
- Staging areas for regional trail construction will be located as far as possible from residences.

Nighttime construction would be required for the wildlife undercrossing and both alternatives for the trail overcrossing bridge, as described in Section 1.4.4.6. Nighttime construction would be limited to the Caltrans ROW. Nighttime work may conflict with the limits set in Los Gatos Municipal Code Chapter 16 and Santa Clara County Code of Ordinances Section B11-154(6). Caltrans is the owner and operator of SR 17. As such, work within the Caltrans ROW is not subject to local noise ordinances, although Caltrans will work with the contractor to meet the local requirements where feasible. To comply with the Caltrans Standard Specifications, Section 14-8.02 (PF-NOI-01, Section 1.4.6), the contractor will be required to implement a construction noise monitoring program for work in the Caltrans ROW and provide additional noise controls where practical and feasible. Temporary, short-term impacts would be less than significant.

Long-Term Impacts

The project would not introduce a source of substantial new noise. The proposed trail overcrossing and new trail connections would allow pedestrians, bicyclists, equestrians, and potentially dogs on leash to access areas that lack existing trails. The trail overcrossing and new trail connections would not result in a substantial permanent increase in noise because trail use would be intermittent and trail users would not remain in fixed locations for extended periods. In addition, use of the trail overcrossing and other trails would be limited to the operating hours for Lexington Reservoir County

Park (8 AM to sunset) or Midpen's open space preserves (one-half hour before official sunrise until one-half hour after official sunset), depending on location. All entry points to the overcrossing would have signage notifying users of the hours of operation. Therefore, use of the trail overcrossing and new trail connections would not result in an increase in nighttime noise levels.

No noise from the wildlife undercrossing of SR 17 is anticipated. As noted in Section 1.4.1.3, sound walls are proposed along both sides of SR 17 to shield views and noise from highway traffic for animals approaching and exiting the undercrossing. The total height of the walls would be 8 feet or less, which would shield animals from vehicle noise⁷ and avoid the potential for noise "reflection" outside of the highway corridor⁸ (AECOM 2023h). The walls would have aesthetic treatment such as color and texture, consistent with Los Gatos General Plan Policy ENV-20.3.

The project would not generate a substantial permanent increase in noise. Therefore, the long-term impact of the project would be less than significant.

b) Less than Significant Impact.

Short-Term Impacts

Construction activities have the potential to result in short-term groundborne vibration. Vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. The construction activity with the highest potential to generate vibration would be the use of an auger drill rig to drill holes for cast-in-drilled-hole (CIDH) piles. These piles would be needed to support the proposed trail overcrossing bridge, for both build alternatives.

The Los Gatos Municipal Code does not include vibration thresholds. The Santa Clara County Code of Ordinances defines the vibration perception threshold as the minimum ground or structure-borne vibrational motion necessary to cause a normal person to be aware of the vibration by direct means as, but not limited to, sensation by touch or visual observation of moving objects (Santa Clara County, n.d.). It presumes the perception threshold to be a motion velocity of 0.01 inches per second (in/sec) over the range of 1 to 100 hertz.

⁷ Vehicle noise on SR 17 would be higher in elevation than the undercrossing and the western and eastern approach areas. Most vehicle noise is low in height--0 to 3.3 feet above the roadway pavement (National Cooperative Highway Research Program 2017).

⁸ The Caltrans Technical Noise Analysis Supplement (Caltrans 2013) provides guidance for calculating noise reflection from barriers, including parallel barriers, in Section 5.1.7. Parallel sound walls are not considered to cause reflective noise if the ratio of horizontal distance between walls to average wall height is at least 10:1, in accordance with Caltrans Highway Design Manual Chapter 1100-4. According to the current design, the distance between the sound walls is 80.96 feet. Limiting the height of the sound walls to a maximum of 8 feet would achieve the 10:1 ratio.

The Caltrans Transportation and Construction Vibration Guidance Manual sets the threshold for “barely perceptible” human response to continuous or frequent intermittent vibration at 0.01 in/sec (Caltrans 2020b). Additionally, it sets a threshold for structure response (i.e., architectural damage) to vibration at 0.08 in/sec for the most fragile structures, such as historic buildings. Older residential structures have a threshold of 0.3 in/sec, and newer residential structures have a threshold of 0.5 in/sec.

Project construction would require the use of an auger drill rig in order to drill holes and install CIDH piles, also referred to as caisson drilling. According to the Federal Transit Administration (FTA 2018), the vibration level associated with the use of caisson drilling is 0.089 inches per second (in/sec) peak particle velocity (PPV) and 87 vibration decibels (VdB) at 25 feet.

The closest sensitive receptors to the project area are the residences west of SR 17 near the proposed Southern Overcrossing. There is one potential sensitive receptor near the proposed Northern Overcrossing (the private property discussed in Section 2.2.2); however, this property would likely need to be acquired if the Build Alternative with Northern Overcrossing is selected.

The residences nearest to the proposed Southern Overcrossing bridge are approximately 700 feet away from the overcrossing site. Using FTA’s recommended procedure for applying a propagation adjustment to the reference vibration level of caisson drilling (0.089 in/sec), predicted worst-case vibration levels at the nearest sensitive receptors would be approximately 0.0006 in/sec. The predicted worst-case vibration levels are below the Caltrans threshold for a barely perceptible human response, which is 0.01 in/sec, and the Santa Clara County Code of Ordinances threshold, also 0.01 in/sec. The worst-case vibration levels are also well below the structural response threshold for even the most fragile buildings, which is 0.08 in/sec.

Based on the discussion above, vibration generated during construction is not anticipated to affect nearby structures or cause excessive human annoyance. Therefore, short-term impacts would be less than significant.

Long-Term Impacts

The project is not anticipated to result in long-term excessive groundborne vibration or groundborne noise, as it would not increase road capacity or include features that would generate appreciable ground vibration. Use of the proposed undercrossing, trail overcrossing bridge, and trails would not generate appreciable ground vibration. Therefore, there would be no long-term impacts.

c) No Impact. The California Department of Forestry and Fire Protection (CAL FIRE) Alma Helitack Station is approximately 0.5 mile south of the southern project limits, just off of Rundell Way. The Helitack Station houses helicopters, a helicopter landing pad, and other vehicles and facilities to support emergency response. Other than the CAL

FIRE facility, the project is not located within the vicinity of a private airstrip or airport land use plan, nor is it within two miles of a public airport or public use airport. The project would not construct any features that would expose people to excessive aviation-related noise levels. No impact would occur.

3.2.14 Population and Housing

Would the project:

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?	Less Than Significant Impact

CEQA Significance Determinations for Population and Housing

a) No Impact. Neither build alternative proposes to construct new homes or businesses, and neither would result in direct unplanned growth. While the project would improve transportation infrastructure and regional connectivity, it would only do so for non-motorized modes of transportation (e.g., pedestrians and bicyclists). This is not considered a growth-inducing impact. Therefore, there would be no impact.

b) Less Than Significant Impact. As discussed in Section 2.2.4, the Build Alternative with Northern Overcrossing would require access to, or full acquisition of, one private residential property. The relocation of current occupants would be needed if full acquisition is required. The access agreement or property acquisition would not displace a substantial number of people or residences, and no replacement housing would need to be constructed. Therefore, the impact would be less than significant.

3.2.15 Public Services

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 following public services:

Question	CEQA Determination
a) Fire protection?	No Impact
b) Police protection?	No Impact
c) Schools?	No Impact
d) Parks?	No Impact
e) Other public facilities?	No Impact

CEQA Significance Determinations for Public Services

a)-e) No Impact. The project would not involve construction of new housing or other land uses that could increase the local population and demand for governmental facilities and services, such as fire protection, police protection, schools, or parks. Law enforcement, fire, and emergency services would be maintained during project construction. A TMP would be implemented to maintain access for emergency services and minimize construction-related delays to project area residents and the traveling public (PF-TR-01, Section 1.4.6). Therefore, the project would not result in adverse physical impacts associated with the provision of new or physically altered governmental facilities or need for new or physically altered governmental facilities.

Both build alternatives include a regional trail overcrossing bridge, trail connections to existing or proposed trails in the Caltrans ROW, and new or improved existing trail segments that are outside of the Caltrans ROW. These project elements would increase access to multiple local and regional trails, parks, and open space preserves, as described in Sections 1.4.3 and 2.2.3, and could increase the number of recreational users at these surrounding parks. However, the project would be consistent with provisions for improving recreation access in the Santa Clara County Countywide Trails Master Plan, Santa Clara County General Plan, Town of Los Gatos Bicycle and Pedestrian Master Plan, Midpen’s 2014 Vision Plan, and other plans described in Section 2.2.2. Therefore, the proposed recreational facilities are not anticipated to require additional new or physically altered existing recreation facilities, the construction of which could cause significant environmental impacts, to maintain performance objectives for those facilities. There would be no impact.

3.2.16 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?	Less Than Significant 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?	Less Than Significant Impact

CEQA Significance Determinations for Recreation

a) Less Than Significant. Both build alternatives include a regional trail overcrossing bridge, trail connections to existing or proposed trails in the Caltrans ROW, and new or improved existing trail segments that are outside of the Caltrans ROW. These project elements would increase access to multiple local and regional trails, parks, and open space preserves, as described in Sections 1.4.3 and 2.2.3, and could increase the number of recreational users at these surrounding parks. However, the project would be consistent with provisions for improving recreation access in the Santa Clara County Countywide Trails Master Plan, Santa Clara County General Plan, Town of Los Gatos Bicycle and Pedestrian Master Plan, Midpen’s 2014 Vision Plan, and other plans described in Section 2.2.2. Therefore, the project is not expected to substantially increase the demand for or use of other parks and open space facilities, such that new or expanded facilities would be required. This impact would be less than significant.

b) Less Than Significant. One of the primary goals of the project is to provide additional recreational facilities and opportunities in the project area. Environmental effects of the proposed recreational facilities are discussed in Chapter 2 and this CEQA checklist. The project features described in Section 1.4.6 and avoidance, minimization, and/or mitigation measures would address potential impacts. The project would not require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. This impact would be less than significant.

3.2.17 Transportation

Would the project:

Question	CEQA Determination
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	No Impact
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	No 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

CEQA Significance Determinations for Transportation

a) – c) No Impact. Both build alternatives are generally consistent with the programs, plans, ordinances, and policies discussed in Section 2.2.2. The project is also consistent with CEQA Guidelines Section 15064.3, subdivision (b), which relates to induced demand and vehicle miles traveled. The project would not increase motor vehicle capacity on SR 17 or other roads in the project area, as described in Section 2.2.6.2;

therefore, it would not induce demand or increase vehicle miles traveled. Project elements in the Caltrans ROW would adhere to design standards to ensure optimal safety for the traveling public (Section 1.4.4.5), and neither build alternative would introduce geometric design features or incompatible uses that would substantially increase hazards on SR 17 or other project area roads. The proposed wildlife undercrossing, directional fencing, and escape ramps would support a reduction in wildlife-vehicle collisions on SR 17 in the project area, a documented roadkill hotspot (Section 1.3.2). The wildlife directional fencing and other fencing/railings associated with the trail overcrossing bridge and trails in the Caltrans ROW would also serve to restrict recreation users from the highway corridor. No impact would occur.

d) Less Than Significant Impact. Project construction would require temporary lane closures and a single nighttime full-highway closure of SR 17, as described in Section 1.4.4.6. However, emergency access would be maintained at all times. Any closures and alternate travel routes would be coordinated with local emergency responders and law enforcement agencies through the implementation of a TMP (see PF-TR-01, Section 1.4.6). Implementation of the TMP would reduce the potential for impacts to emergency access. The impact would be less than significant.

3.2.18 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	Less Than Significant 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.	Less Than Significant Impact

CEQA Significance Determinations for Tribal Cultural Resources

a), b) Less Than Significant Impact. As described in Section 2.2.8, a search of the Sacred Lands File did not identify any Native American cultural resources in the APE,

and no responses were received to the November 23, 2022, notifications that identified Native American cultural resources in the APE that would be impacted by the project.

Subsurface construction activities associated with both build alternatives have the potential to affect previously undiscovered unique Tribal Cultural Resources. As described in Section 1.4.6, the project would implement PF-CUL-01 and stop all construction activities within and around the immediate discovery area, if previously unidentified cultural resources are unearthed. If human remains are discovered during excavation, all work within 60 feet of the discovery will halt and Caltrans' OCS staff will be called. Caltrans OCS staff will assess the remains and will contact the County Coroner as per California PRC Sections 5097.98, 5097.99, and Section 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 will assign a Most Likely Descendant. Caltrans will consult with the Most Likely Descendant on treatment and reburial of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

In addition to PF-CUL-01, the following measures are proposed to further avoid and minimize any potential impacts to unknown Tribal Cultural Resources.

AMM-TCR-01: Construction Training. Prior to construction, all construction staff will participate in archaeological awareness and Tribal Cultural Resources sensitivity training conducted by a qualified cultural resources specialist. The training will include information about the possibility of encountering cultural resources (including Tribal Cultural Resources), the appearance and types of resources that could be encountered during the project, and will describe the appropriate protocol to be followed if resources are discovered during construction.

AMM-TCR-02: Tribal Consultation for Previously Undiscovered Tribal Cultural Resources. In the event that previously undiscovered Tribal Cultural Resources are discovered, Tamien Nation and the Muwekma Ohlone Indian Tribe of the San Francisco Bay Area Region will be solicited within areas identified as highly sensitive for Tribal Cultural Resources, as determined through consultation with Tamien Nation and/or Native American groups that have expressed interest in the project as of November 29, 2023.

While the project would not cause a substantial adverse change in the significance of a known Tribal Cultural Resource and, therefore, impacts to any potential Tribal Cultural Resources are less than significant, implementing AMM-TCR-01, AMM-TCR-02, and PF-CUL-01 would avoid or reduce impacts to potential undiscovered unique Tribal Cultural Resources by providing for resource avoidance or protection in place where possible, and recommendations about treatment of resources in accordance with tribal cultural values when avoidance or protection is not feasible. The impact would be less than significant.

3.2.19 Utilities and Service Systems

Would the project:

Question	CEQA Determination
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Less Than Significant 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

CEQA Significance Determinations for Utilities and Service Systems

a) Less Than Significant Impact. Both build alternatives would include permanent water quality and stormwater treatment facilities (PF-WQ-02, Section 1.4.6) and accommodate relocation of an existing 12-inch San Jose Water pipeline. Both alternatives would also require replacement of existing overhead utility poles that carry electrical and telephone lines as well as proposed fiber optic lines that would be installed in the shoulder of SR 17 before construction of this project (Section 2.2.5.2). Final verifications of utilities would be performed during the project's detailed design phase, and any needed relocations would be coordinated with the affected utility owner. Construction or relocation of these facilities would adhere to all applicable requirements, and impacts would be less than significant.

b) – e) No Impact. The build alternatives would not require new or expanded water entitlements or affect public utilities for wastewater treatment. The build alternatives would not generate or require solid waste disposal in excess of state or local standards, or in excess of the capacity of local infrastructure. Construction waste would be disposed at a certified facility based on the waste type and would not affect landfill

capacity. The build alternatives would comply with statutes and regulations related to solid waste management and reduction.

3.2.20 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?	Less Than Significant 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?	Less Than Significant 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?	Less Than Significant Impact

CEQA Significance Determinations for Wildfire

The California Department of Forestry and Fire Protection (CAL FIRE) publishes maps of fire hazard severity in state responsibility areas (SRAs) and local responsibility areas (LRAs) (CAL FIRE 2007). These maps also show wildfire risk within SRAs and LRAs based on fuel loading, slope, fire weather, and other relevant factors including areas where winds have been identified by the Office of the State Fire Marshal as a major cause of wildfire spread (CAL FIRE 2022).

The unincorporated portions of the project area are in SRAs with fire hazard severity that ranges from moderate to very high. The immediate area between Lexington Reservoir and SR 17 is considered to have moderate severity. The area west of SR 17 is considered to have high severity, and the areas to the north and east of the reservoir are considered to have very high severity. The LRA adjacent to the project area is within the City of Los Gatos. This area is considered to have very high severity. As evidenced by the fire hazard severity classifications for the nearby SRAs and LRA, the project area has a generally very high risk of wildfire.

a) Less than Significant Impact. Emergency response and evacuation plans for the project area are described in Section 3.2.9, Item f.

Neither of the build alternatives would conflict with or interfere with the implementation of these plans described. During construction, the contractor would need to implement temporary lane closures on SR 17 in order to construct the wildlife undercrossing and trail overcrossing, as described in Section 1.4.4.6. These closures have the potential to temporarily affect ingress and egress through the project area. However, closures would be short-term and emergency access would be maintained at all times. Any closures and alternate travel routes would be coordinated with local emergency responders and law enforcement agencies through the implementation of a TMP (see PF-TR-01, Section 1.4.6). The TMP would reduce the potential for impacts to emergency response or emergency evacuation. A substantial reduction in emergency response times is not expected. In addition, the proposed trail improvements could improve access for emergency response to a wildland fire in the project area. The impact would be less than significant.

b) Less than Significant Impact. Both build alternatives would modify slopes in the project area through construction of the wildlife undercrossing of SR 17, trail connections to either the Southern Overcrossing or Northern Overcrossing, and new and improved existing regional trails. Changes to the existing slopes and other project activities would not exacerbate wildfire risk or expose occupants to wildfire or related pollutants. Project features to minimize fire risks would be implemented during construction, such as clearing vegetation from the work area, prohibiting the use of highly flammable chemicals, following locally changing meteorological conditions, and maintaining awareness of the possibility of increased fire danger when work is in progress (see PF-WF-01, Section 1.4.6). All construction activities would follow state and federal fire regulations. Further, neither build alternative would impact SR 17's existing alignment or ability to act as a firebreak. Therefore, the impact would be less than significant.

c) Less than Significant Impact. The project involves constructing a wildlife undercrossing, a trail overcrossing, and trail connections. None of the project components would require the installation or maintenance of new infrastructure that would exacerbate fire risk. Both build alternatives would require replacement of existing overhead utility poles as well as fiber optic lines that would be installed before construction of this project, as described in Section 2.2.5. All utility relocations would be performed in compliance with state and federal fire regulations. Project features to minimize fire risks would be implemented during construction, such as clearing vegetation from the work area, prohibiting the use of highly flammable chemicals, following locally changing meteorological conditions, and maintaining awareness of the possibility of increased fire danger when work is in progress (see PF-WF-01, Section 1.4.6). Therefore, the impact would be less than significant.

d) Less Than Significant Impact. Implementation of standard practices for erosion control and other measures would reduce the project's potential to result in downslope or downstream flooding or landslides (see PF-WQ-01 through PF-WQ-03, Section 1.4.6). These measures are incorporated into the project design as a matter of Caltrans

practice and are not mitigation. The proposed project would not expose the public to a risk of post-fire slope instability or drainage changes.

3.2.21 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?	Less Than Significant 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?	No Impact

CEQA Significance Determinations for Mandatory Findings of Significance

a) Less Than Significant Impact. Both build alternatives would have potential impacts on special-status species and their habitats as well as wetlands and waters of the U.S.; however, impacts would not substantially reduce the number or range of habitat or wildlife at a population level. Additionally, the project would not eliminate a plant or animal community, or substantially reduce the number or range of any rare or endangered plant or animal. The project would not eliminate any examples of major periods of California history or prehistory. Because the project would have impacts on special-status species and wetlands and waters that would be less than substantial at population or community levels, impacts would be less than significant.

b) No Impact. The project has been evaluated for cumulative impacts as described in Section 2.5. The project would not result in incremental effects to any resource that would be cumulatively considerable. The project would not contribute to cumulatively considerable impacts.

c) No Impact. Both build alternatives would result in construction impacts that could affect human beings (e.g., construction noise and traffic delays), but these impacts would be short-term and not substantially adverse. Therefore, there would be no impact.

Chapter 4 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 to 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 been accomplished through a variety of formal and informal methods, including interagency coordination meetings, public meetings, public notices, and Project Development Team (PDT) meetings. This chapter summarizes the results of Caltrans' and Midpen's efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

4.1 Public Participation

4.1.1 Public Outreach

Following the passage of Measure AA in 2014, Midpen embarked on a two-stage feasibility study of alternatives for potential combined or separate wildlife and trail crossings of SR 17. In 2016, Midpen published the Preliminary Alternatives Report, which identified and evaluated four crossing locations and configurations (Midpen 2016). The report was made available to the public and presented at a public workshop in Los Gatos on August 2, 2016. A total of 37 people attended the meeting and 36 comments were received during the public comment period, which closed on September 6, 2016.

Midpen also began stakeholder outreach for the project starting in 2016 and initiated the Caltrans PSR-PDS process in 2017. These efforts are summarized in Sections 4.1.2 and 4.1.3, below.

In 2018, a total of five alternative crossing locations and eight configurations were identified to be advanced into the PSR-PDS and included in the Revised Alternatives Report (described in Section 1.9.1). Midpen held two public meetings to provide information about the project's background, goals, and potential crossing alternatives and trail routes. The first, on November 7, 2018, coincided with the beginning of the public review period for the Draft Revised Alternatives Report. A total of 71 people attended the meeting and 96 comments were received during the public comment period on the report, which closed on December 7, 2018. The second, on July 9, 2019, coincided with the beginning of the public review period for the Draft Regional Trail Connections Study. A total of 56 people attended the public workshop and a total of 165 comments were received during the 27-day public review period.

Following consideration of public, stakeholder, partner, and Caltrans input, Midpen approved the Revised Alternatives Report and the Regional Trail Connections Study in 2019.

In January 2023, Midpen held two public meetings to provide a status update, discuss the background and project alternatives, outline the next steps in the project process, and provide opportunities to ask questions and receive feedback. The first was in-person on January 24, 2023, at the Los Gatos Adult Recreation Center at 208 East Main Street in Los Gatos. The second, a virtual meeting, was held on January 31. The meetings were noticed through the following means:

- Postcards – Approximately 850 postcards mailed to property owners and tenants in the vicinity of project components.
- E-Blast – Emails (including two reminders) to members of the public who had signed up for project notifications through Midpen’s website or at a previous project event.
- Fliers – Fliers posted around the Town of Los Gatos, including at the meeting location, on a local poster board, at the library, in store windows, and at a local bike shop.
- Website announcement – Information posted to Midpen’s project web page.
- Social media announcements – Issued for both meetings on Midpen social media accounts.

Public outreach for the project will continue through the environmental, detailed design, and construction stages.

4.1.2 Stakeholder Meetings

In addition to the public meetings and PDT meetings, Midpen staff met with representatives from the following local agencies and organizations:

- Bay Area Ridge Trail Council (regularly scheduled quarterly meetings)
- CAL FIRE (November 3, 2022)
- CDFW (October 31, 2017; September 1, 2020; January 22, 2021; March 9, 2022)
- National Parks Service – Juan Bautista de Anza Trail (October 12, 2022)
- Peninsula Open Space Trust (November 6, 2017; February 22, 2018; October 19, 2018)

- Safe on 17 Task Force (September 14, 2016)
- San Jose Water (February 18, 2016; May 6, 2016; March 8, 2017; April 18, 2017; November 14, 2023; November 22, 2022; January 5, 2023; August 28, 2023)
- Santa Clara County FireSafe Council (November 3, 2022)
- Santa Clara County Parks (April 19, 2016; October 3, 2016; March 16, 2017; November 29, 2017; February 22, 2018; October 19, 2018; November 1, 2022)
- Santa Clara County Planning Department (October 19, 2018)
- Santa Clara County Roads and Airports (May 2, 2016; October 3, 2016; March 16, 2017; October 31, 2022)
- Santa Clara Valley Open Space Authority (October 25, 2022)
- Town of Los Gatos (April 19, 2016; October 31, 2022)
- Valley Water (May 2, 2016; March 16, 2017; October 19, 2018; October 25, 2022)
- VTA (May 3, 2016)
- Vulcan Materials (October 10, 2022)

The purpose of these meetings was to discuss potential project alternatives; opportunities, constraints, and concerns; and partnering/funding opportunities. Communications with local agencies and organizations, stakeholders, and potentially affected property owners will continue throughout the project.

4.1.3 Project Development Team Meetings

Midpen conducted initial meetings with Caltrans starting in 2016 and began the PSR-PDS process in February 2017. The PSR-PDS was completed in 2020 and included five alternative crossing locations and eight configurations, as described in Section 1.9.1.

PDT meetings provide the forum for coordination, issue resolution, and information feedback between Caltrans, Midpen, and VTA. PDT meetings have taken place regularly since August 2020 and will continue throughout the remainder of the environmental and project approval process. The PDT represents various fields of expertise, including design, environmental review, traffic operations, ROW, and project management. Accordingly, the PDT convenes to review the project status, address issues as they arise, and provide overall direction throughout the project development process.

4.1.4 Environmental Document Meetings

During the public review period for this IS/EA, the public will have a minimum of 30 days to comment on the document. During that time, public outreach will be conducted, and public comments will be accepted. Project information will be made available on Midpen's project web page and by other means including postal mail, e-mail, fliers, and social media. A minimum of one public meeting will be held. A link to join the meeting will be provided on the project web page.

See the cover sheet of this document for information on the public meeting and review period.

4.2 Consultation and Coordination with Public Agencies

4.2.1 Federal Agencies

4.2.1.1 NOAA Fisheries

A National Oceanic and Atmospheric Administration Fisheries Service (NOAA Fisheries) species list was obtained for the project on February 7, 2023, and most recently updated on October 24, 2023 (Appendix D). Consultation with NOAA Fisheries under Section 7 of the FESA is not anticipated because the project will not affect any listed species that fall within NOAA Fisheries jurisdiction, since no fish habitat is present in the BSA (Section 2.4.1).

4.2.1.2 U.S. Army Corps of Engineers

The proposed project is anticipated to affect waters of the U.S. as defined in Section 404 of the Clean Water Act, as described in Section 2.4.2. A preliminary jurisdictional wetland delineation has been prepared (AECOM 2023e), and an application for a Section 404 permit will be submitted to the USACE during the project design phase.

4.2.1.3 U.S. Fish and Wildlife Service

Caltrans and Midpen met with USFWS and subject matter experts from various public agencies periodically to discuss the potential development of an MCA for the project, including on September 1, 2020.

A USFWS species list was created for the project on July 7, 2022, most recently updated on October 5, 2023 (Appendix D), and used to identify target species for reconnaissance-level surveys for terrestrial plants and animals. The project will require consultation with the USFWS under Section 7 of the FESA, as described in Section 2.4.5. A Biological Assessment for the project will be submitted to the USFWS to initiate consultation under Section 7.

4.2.2 Tribal Entities

In May 2022, the Native American Heritage Commission (NAHC) was contacted to request a search of the Sacred Lands File for Native American cultural resources in or near the APE. The NAHC responded with a list of interested tribes or individuals.

Native American consultation is described further in Section 2.2.8.

4.2.3 State Agencies

4.2.3.1 California Department of Fish and Wildlife

Caltrans and Midpen met with CDFW and subject matter experts from various public agencies periodically to discuss the potential development of an MCA for the project, including on June 23, 2020; September 1, 2020; January 22, 2021; April 29, 2021; June 30, 2021; and July 9, 2021. Discussions with CDFW regarding the potential MCA will continue.

A Section 1600 Lake or Streambed Alteration Agreement with CDFW is necessary when a project would alter the flow, bed, channel, or bank of a stream or lake. The proposed project would include work at Trout Creek. A 1600 permit application will be submitted to the CDFW during the detailed design phase.

4.2.4 Regional Agencies

4.2.4.1 San Francisco Bay Regional Water Quality Control Board

Pursuant to Section 401 of the CWA, a joint "Application for 401 Water Quality Certification and/or Report of Waste Discharge" will be submitted to the RWQCB during the detailed design phase. The project will implement any general Waste Discharge Requirements issued by the RWQCB.

4.2.5 Circulation, Review, and Comment on the Draft Environmental Document

Public input on the project will be solicited during the review period for this IS/EA, which will last a minimum of 30 days. The public will be notified of the availability of the IS/EA by a number of methods, including postings on the Caltrans and Midpen websites and a mailed announcement. During the review period, Caltrans and Midpen will hold a public meeting to share information about the project and collect comments on the IS/EA from interested parties. The review period and instructions for submitting comments are included on the first page of this document. All formal comments will be addressed and responses published in the Final IS/EA.

If the Final IS/EA is approved, an MND and a Finding of No Significant Impact will be signed and included with the Final IS/EA.

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Chapter 7 References

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Appendix A Section 4(f)

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 United States Code (USC) 303, declares that “it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.”

Section 4(f) specifies that the Secretary of Transportation may approve a transportation program or project . . . “requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

- There is no prudent and feasible alternative to using that land; and
- The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.”

Section 4(f) further requires coordination with the Department of the Interior and, as appropriate, the involved offices of the Department of Agriculture and the Department of Housing and Urban Development in developing transportation projects and programs that use lands protected by Section 4(f). If historic sites are involved, then coordination with the State Historic Preservation Officer (SHPO) is also needed.

Responsibility for compliance with Section 4(f) has been assigned to Caltrans pursuant to 23 USC 326 and 327, including determinations and approval of Section 4(f) evaluations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

This appendix provides a discussion of properties in the project area that may qualify for consideration under Section 4(f). No wildlife and waterfowl refuges exist in the project area; therefore, they will not be discussed further.

Project Description

The Midpeninsula Regional Open Space District (Midpen), in cooperation with the California Department of Transportation (Caltrans) and the Santa Clara Valley Transportation Authority (VTA), proposes to construct a wildlife undercrossing and a separate regional multi-use trail overcrossing of State Route (SR) 17 near Lexington Reservoir, south of the Town of Los Gatos in Santa Clara County. The Highway 17 Wildlife and Regional Trail Crossings and Trail Connections Project (project) would

include new trails adjacent to the overcrossing and in other locations throughout the project area.

The proposed project area extends along SR 17 from the Bear Creek Road overcrossing in unincorporated Santa Clara County to 0.7 mile south of the Main Street overcrossing in Los Gatos. The project's post mile (PM) limits are PM 4.1 to 5.8. Chapter 1 provides a detailed description of the project.

The purpose of the project is to improve wildlife passage, habitat connectivity, and regional trail connections in the vicinity of SR 17 in the project area. The project is needed to address wildlife mortality and motorist safety from animal-vehicle collisions on SR 17 in the project area, to maintain healthy wildlife populations by improving habitat connectivity, and to provide more efficient non-automotive recreational access across SR 17, including to regional multi-use trails.

The proposed project includes the following primary components:

1. A wildlife undercrossing of SR 17 with wildlife directional fencing, wildlife escape structures, electrified mats, and sound walls. The wildlife undercrossing would provide mountain lions, deer, and other animals with access to thousands of acres of habitat that SR 17 divides. The wildlife undercrossing would be a concrete arched culvert or a single-span, pre-cast concrete slab unit bridge. The directional fencing would be approximately 12-foot-high chain link or similar fencing to direct animals to the undercrossing and deter them from entering the highway. Wildlife escape ramps—one-way ramp structures made of earthen berms, wood, or metal—would be placed at intervals along the fencing to allow animals on the highway to escape from the fenced area. Sound walls of up to approximately 8 feet in height and 230 feet in length would be constructed along both sides of SR 17 above the undercrossing to shield animals from views and noise of traffic.
2. Two alternatives for a regional trail overcrossing, only one of which would be constructed. The overcrossing would provide efficient non-automotive recreation access across a 2.2-mile segment of SR 17 where none exists. The overcrossing would consist of a 16-foot-wide bridge over SR 17 and new trails in the Caltrans right-of-way (ROW) to connect to existing or proposed trails. The trails would generally range in width from 4 to 6 feet, have typical grades of up to 8 percent, and have uniform dirt or aggregate surfaces to the maximum extent feasible. The overcrossing may also have seating, equestrian mounting blocks, signage, and interpretive elements.
3. New trails or improved existing trail or road segments that are outside of the Caltrans ROW. Together with the overcrossing and connecting trails, the proposed additional trail segments would connect multiple parks and open space preserves and close gaps in local, regional, and national trail systems. The trails would generally range in width from 4 to 6 feet, have typical grades of up to 8 percent,

and have uniform dirt or aggregate surfaces to the maximum extent feasible. Not all proposed trail segments would be constructed; the final selection will be based on the regional trail overcrossing alternative chosen, site conditions, constructability, and other considerations.

The alternatives are the Build Alternative with Southern Overcrossing, the Build Alternative with Northern Overcrossing, and the No Build Alternative. Chapter 1 provides a detailed description of the project.

Construction of the wildlife undercrossing, regional trail overcrossing, and associated elements listed in items 1 and 2 above could start in early 2027 and take two construction seasons (generally considered to be April through October). Work on the trails outside of the Caltrans ROW (item 3 above) would be phased and prioritized based on the availability of funding and the ability to secure access rights from multiple public and private landowners. Construction of the regional trails could take a total of approximately five years, over a period of multiple non-consecutive years.

The wildlife undercrossing, wildlife directional fencing, wildlife escape ramps, both trail overcrossing alternatives, seating, equestrian mounting blocks, signage, and interpretive elements would be within the Caltrans ROW. Some trail segments would be constructed in the ROW to connect the trail overcrossing alternatives with existing regional trails.

The project would require temporary construction, maintenance, and utility easements; access rights or easements; and potential property acquisition from private property owners as well as agencies that have jurisdiction over lands within or adjacent to the project area, including the Santa Clara County Parks and Recreation Department (County Parks), Santa Clara Valley Water District (Valley Water), San Jose Water Company (San Jose Water), County of Santa Clara Roads and Airports Department, and the Town of Los Gatos.

The proposed project has federal funding. As such, it is subject to Section 4(f).

Section 4(f) Properties

The following publicly owned parks and recreation areas, trails, and historic properties that qualify for consideration under Section 4(f) and are present in, or within 0.25 mile of, the project area. The parks, recreation areas, and trails are shown in Chapter 1, Figure 1.4-2.

No wildlife or waterfowl refuges are present in, or within 0.25 mile of, the project area and are therefore not discussed further.

Parks, Recreation Areas, and Trails

Lexington Reservoir County Park is a 950-acre facility that offers hiking, horseback riding, on-leash dog walking, and biking on designated paved and unpaved trails; picnic tables, restrooms, and parking; access to the reservoir and trailheads. No swimming or wading, but fishing, rowing, and non-gas-powered and electric motor boating is allowed at this facility (County Parks 2022a). This county park contains segments of the following locally and regionally important trails:

- Los Gatos Creek Trail, which extends for 11 miles from Lexington Reservoir to Meridian Avenue in San Jose (Town of Los Gatos 2022c).
- Bay Area Ridge Trail (Ridge Trail), envisioned as a continuous 550-mile trail for hikers, mountain bicyclists, and equestrians along ridgelines overlooking San Francisco Bay.
- Juan Bautista de Anza National Historic Trail (Anza Trail), envisioned as a 1,200-mile trail from Nogales, Arizona, to the Bay Area that retraces the approximate route followed in 1775-1776 by Spanish commander Juan Bautista de Anza II, who led an expedition from Mexico to establish a presidio and mission near San Francisco Bay (National Park Service 2022).

In addition to Lexington Reservoir County Park, the following are considered publicly owned parkland that would qualify for consideration under Section 4(f).

- Sanborn County Park is a 3,453-acre facility that offers hiking on over 22 miles of trails; biking on designated trails; picnicking, day use for large gatherings, restrooms, and parking; hike-in and RV camping. Leashed dogs are permitted only on specified trails. No swimming is allowed in this park, which also contains a Ridge Trail segment (County Parks 2022b).
- El Sereno Open Space Preserve (OSP) is a 1,614-acre facility that has 7 miles of trails for hiking, biking, and on-leash dog walking, as well as horseback riding on designated trails (Midpen 2021a). This preserve contains a shared segment of the Ridge Trail and Anza Trail.
- St. Joseph's Hill OSP has 273 acres and has 4.2 miles of trails for hiking, biking, on-leash dog walking, and horseback riding on designated trails (Midpen 2021b, 2021c).
- Sierra Azul OSP is a 19,438-acre facility with 26 miles of trails for hiking, biking, and horseback riding on designated trails. Leashed dogs are permitted only on specified trails (Midpen 2021d). This preserve contains a shared segment of the Ridge Trail and Anza Trail.

- Novitiate Park has 8 acres and offers hiking, biking, on-leash dog walking, and horseback riding on designated trails. The park provides access to St. Joseph’s Hill and Sierra Azul OSPs and Lexington Reservoir County Park (Town of Los Gatos 2022c).

Historic Properties

One historic property has been identified within the cultural resource Area of Potential Effects, as determined by Caltrans 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, and 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*. The property is a historic-era archaeological site that is presumed eligible for the NRHP (Section 2.2.8). As such, the site is considered a Section 4(f) resource.

Section 4(f) *De Minimis* Determination

Section 6009(a) of the Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users amended Section 4(f) legislation at 23 USC 138 and 49 USC 303 to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). This amendment provides that once the U.S. Department of Transportation (USDOT) determines that a transportation use of Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a *de minimis* impact on that property, an analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete. The Federal Highway Administration (FHWA)’s final rule on Section 4(f) *de minimis* findings is codified in 23 Code of Federal Regulations (CFR) 774.3 and CFR 774.17.

Responsibility for compliance with Section 4(f) has been assigned to the Department pursuant to 23 USC 326 and 327, including *de minimis* impact determinations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

The following discusses Section 4(f) resources where *de minimis* impacts from the proposed project are anticipated.

Potential Use of the Section 4(f) Resource

Both of the build alternatives would require construction work adjacent to Lexington Reservoir County Park, which County Parks operates under lease from Valley Water. The Build Alternative with Southern Overcrossing could also require work adjacent to the County Park for the eastern bridge landing and trail connection near Alma Bridge Road. The anticipated permanent impact areas adjacent to Lexington Reservoir County

Park are already fenced off and restricted from public recreation access because of its proximity to water conveyance facilities. Therefore, the project would not require the direct permanent acquisition of Lexington Reservoir County Park recreational facilities.

Use of designated Lexington Reservoir County Park parking lots for construction staging and access is not proposed. However, temporary closures of a section of the Los Gatos Creek Trail could be necessary for construction equipment and vehicle access to the east side of the wildlife undercrossing area. The trail section is approximately 900 feet long and extends between two existing service roads, one on the west side of the spillway and one connecting to the east side of SR 17, as shown in Figure A-1, below. If possible, temporary barriers will be placed to separate trail users from construction vehicles and activities; however, short-term full closures of the trail section may be needed to ensure the safety of pedestrians, cyclists, and equestrians during construction.



Figure A-1: Detail of Potential Los Gatos Creek Closure Area (see Figure 1.4-1 for complete legend)

Establishment of a temporary trail detour route along the potential trail closure area may be infeasible due to special-status species habitat and steep topography. An alternative trail connection is available between East Main Street in Los Gatos and Alma Bridge Road, via the Flume Trail and Jones Trail through Novitiate Park and St. Joseph's Hill OSP. However, the distance (approximately 2 miles) is greater than that of the Los Gatos Creek Trail in the same area (approximately 1.75 miles), and sections of the

Flume Trail and Jones Trail have steeper topography than the Los Gatos Creek Trail, which may limit some trail uses. Although the actual temporary trail closure area would be small, the closure could effectively render the Los Gatos Creek Trail between East Main Street in Los Gatos and Alma Bridge Road temporarily unusable for some trail users.

With both build alternatives, a Traffic Management Plan (TMP) would be developed during the detailed design phase to address access disruptions during project construction for motorists, bicyclists, and pedestrians (Section 1.4.6, PF-TR-01). The TMP would include outreach to inform local jurisdictions, agencies, project neighbors, and the public of the times and locations of upcoming construction, including potential short-term closures of the Los Gatos Creek Trail.

***De Minimis* Determination**

Temporary closures of an approximately 900-foot section of the Los Gatos Creek Trail could be necessary during project construction. The temporary closures could take place periodically over the 60-day construction period for the undercrossing. Once construction of the undercrossing is completed, the trail would be reopened. The duration of the trail closure would be substantially shorter than the overall construction period of two construction seasons (generally considered April through October) during the two-year period anticipated to complete the wildlife undercrossing and trail overcrossing. Temporary construction activities have the potential to interfere with the activities or purposes of the Los Gatos Creek Trail for some trail users. However, in the long term, the transportation use of the Section 4(f) resource, together with any impact avoidance, minimization, and mitigation or enhancement measures incorporated into the project, would not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f). The use would qualify as a *de minimis* impact.

Visitors to the Los Gatos Creek Trail and parts of Lexington Reservoir within view or earshot of construction would be exposed to the periodic sights and sounds of construction equipment, earthwork, and structural work in the area of the wildlife undercrossing and both the Southern Overcrossing and Northern Overcrossing. With both alternatives, park visitors may also encounter construction equipment and personnel on Alma Bridge Road, which provides access to the Los Gatos Creek Trail as well as trails in St. Joseph's Hill and Sierra Azul OSPs. Temporary, short-term closures of the informal parking area along Alma Bridge Road near the southern terminus of the Jones Trail could be required for construction access and staging. The TMP (Section 1.4.6, PF-TR-01) would include notifications about any temporary changes in parking from project construction.

Temporary noise and visual impacts would be intermittent over the two construction seasons (generally considered April through October) during the two-year period anticipated to complete the wildlife undercrossing and trail overcrossing. The project

design includes several standard Caltrans measures to reduce construction noise and dust, which would minimize construction-related impacts on park visitors.

After construction, the wildlife undercrossing would not be highly visible to visitors at Lexington Reservoir County Park. The western opening of the undercrossing would be within the fenced and gated Caltrans and San Jose Water property along southbound SR 17, which is not publicly accessible. The eastern opening of the undercrossing, the sound wall above it along northbound SR 17, and the associated directional fencing and wildlife escape ramps would be most visible to park visitors on sections of the Los Gatos Creek Trail in the vicinity of the dam spillway, as described further in Section 2.2.7.2. These project components would be visually consistent with nearby water operations infrastructure and utilities, which include the concrete dam spillway, overhead electrical and telephone lines, and fencing. The undercrossing and associated facilities would be relatively smaller than the existing water infrastructure and therefore less visually prominent.

Neither the Southern Overcrossing alternative nor the Northern Overcrossing alternative (including the bridge and trail connections) would be highly visible from most locations in Lexington Reservoir County Park due to hilly topography and areas of dense tree screening. Like the wildlife undercrossing, these project components would be visually consistent with nearby water operations and utility infrastructure. The section of the Los Gatos Creek Trail closest to the Northern Overcrossing alternative location is in Caltrans and San Jose Water ROW, outside of the County Park boundary.

With the exception of the potential short-term, temporary closure of the Los Gatos Creek Trail, temporary construction activities would not result in adverse changes to the activities, features, or attributes of Lexington Reservoir County Park. Construction would not affect the Ridge Trail or Anza Trail segments in the County Park. The proposed action would not permanently use the Lexington Reservoir County Park property or adversely affect the activities and features that qualifies it for protection under Section 4(f). Therefore, no "use" would occur.

Measures to Minimize Harm

As noted above, with both build alternatives, a TMP will be developed during the detailed design phase to address access disruptions to the Los Gatos Creek Trail and other parts of Lexington Reservoir County Park during project construction (Section 1.4.6, PF-TR-01). The TMP will include outreach to inform local jurisdictions, agencies, neighbors, and the public of the times and locations of upcoming construction, including short-term closures and detours. Implementation of the TMP during construction would reduce the potential for inconvenience to Los Gato Creek Trail users and for other visitors to Lexington Reservoir County Park from temporary closures and detours.

Other standard measures that address construction noise and dust (Section 1.4.6, PF-NOI-01 and PF-AIR-01) would also reduce the potential for short-term, temporary impacts to trail users and park visitors.

Additional minimization measures may be added in coordination with County Parks.

Consultation and Coordination

Prior to making Section 4(f) approvals, coordination with County Parks is required regarding activities, features, and attributes that qualify the Los Gatos Creek Trail and Lexington Reservoir County Park as a Section 4(f) resource. Caltrans will request concurrence from County Parks on the *de minimis* finding under Section 4(f) prior to National Environmental Policy Act (NEPA) approval and after public review and comment concerning the effects of the project, in accordance with 23 CFR 774.13(g)(2).

Resources Evaluated Relative to the Requirements of Section 4(f): No-Use Determinations

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 USC 303, declares that “it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.”

This section of the document discusses parks, recreational facilities, wildlife refuges, and historic properties found within or next to the project area that do not trigger Section 4(f) protection because: 1) they are not publicly owned, 2) they are not open to the public, 3) they are not eligible historic properties, or 4) the project does not permanently use the property and does not hinder the preservation of the property.

Non-Section 4(f) Properties

The project area contains portions of the Anza Trail. The Anza Trail is envisioned as a 1,200-mile trail from Nogales, Arizona, to the Bay Area that retraces the approximate route followed in 1775-1776 by Spanish commander Juan Bautista de Anza II, who led an expedition from Mexico to establish a presidio and mission near San Francisco Bay (National Park Service 2022). Lexington Reservoir County Park, El Sereno OSP, and Sierra Azul OSP contain portions of the Anza Trail.

The Anza Trail is a formally designated National Historic Trail per 16 USC 1244(b)(17) and, as such, is exempt from Section 4(f) (23 CFR 774.13[f][2]).

Section 4(f) Properties

Parks and Recreation Areas

The project would not require the temporary or permanent use of Sanborn County Park, El Sereno OSP, Sierra Azul OSP, and Novitiate Park. These publicly owned facilities are not expected to experience temporary construction-related noise, air, or visual effects because of their distance from the project construction areas and the visual shielding provided by trees and hills. The project would have no long-term effects on Sanborn County Park, El Sereno OSP, Sierra Azul OSP, and Novitiate Park.

The Jones Trail in St. Joseph's Hill OSP is roughly parallel to, and approximately 0.20 mile east of, SR 17. From south to north, this trail extends from Alma Bridge Road in Lexington Reservoir County Park through St. Joseph's Hill OSP to the end of Jones Road in Los Gatos. With both alternatives, trail users on the Jones Trail within view or earshot of project construction could experience the periodic sights and sounds of construction equipment, earthwork, and structural work. Temporary noise and visual impacts would be intermittent over the two construction seasons. Temporary construction activities would not result in adverse changes to the activities, features, or attributes of the Jones Trail.

After construction, trail users on some sections of the Jones Trail would have views to the west of the project facilities. Figure A-2 shows a view of the southern and central part of the project area from the Jones Trail. In this view, the wildlife undercrossing, sound wall, wildlife fencing, and escape ramps would be visible on the far right just below SR 17, and the Southern Overcrossing alternative bridge and trail connections would be visible on the center left. The Northern Overcrossing alternative bridge and trail connections would also be visible from a section of the Jones Trail slightly farther to the north. From vantage points on the Jones Trail, the project elements would be noticeable but not visually dominant. The project would not result in adverse changes to the activities, features, or attributes of the Jones Trail or other facilities in St. Joseph's Hill OSP.



Figure A-2. View of the southern and central project area, looking west/southwest from the Jones Trail

These properties are Section 4(f) properties, but no “use” will occur. Therefore, the provisions of Section 4(f) do not apply.

The proposed project also includes improvements to existing trails and the construction of new trail segments that are outside of the Caltrans ROW. The improved and new trail segments are intended to connect multiple parks and open space preserves and close gaps in local, regional, and national trail systems. Trail construction would involve work in Lexington Reservoir County Park, operated by County Parks; and El Sereno, St. Joseph’s Hill, and Sierra Azul OSPs , operated by Midpen. The trail work would also include connections with the Los Gatos Creek Trail, Ridge Trail, and Anza Trail within those properties. Temporary, short-term closures of informal parking areas along Alma Bridge Road for St. Joseph’s Hill and Sierra Azul OSPs could be required for trail construction access and staging. The TMP (Section 1.4.6, PF-TR-01) would include notifications about any temporary changes in parking from project construction.

The proposed trail improvements would be solely for the purpose of enhancing the recreational activities and features of those properties. As such, a Section 4(f) “use”

would not occur (23 CFR 774.13[g][1]; FHWA 2022). Midpen, as the project sponsor, concurs with this determination. Written concurrence from County Parks, the official with jurisdiction over Lexington Reservoir County Park, will be obtained prior to NEPA approval, in accordance with 23 CFR 774.13(g)(2).

Historic Properties

No construction activities would take place in the historic-era archaeological site, and the cultural resources finding for both build alternatives is No Adverse Effect with Standard Conditions – Environmentally Sensitive Areas (Caltrans 2023a). The property is a Section 4(f) property, but no “use” will occur. Therefore, the provisions of Section 4(f) do not apply.

Appendix B Title VI/Non-Discrimination Policy Statement

CALIFORNIA STATE TRANSPORTATION AGENCY

GAVIN NEWSOM, GOVERNOR

California Department of Transportation

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September 2022

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."

Caltrans will make every effort to ensure nondiscrimination in all of its services, programs and activities, whether they are federally funded or not, and that services and benefits are fairly distributed to all people, regardless of race, color, or national origin. In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a non-discriminatory manner.

Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 639-6392 or visit the following web page: <https://dot.ca.gov/programs/civil-rights/title-vi>.

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 PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 879-6768 (TTY 711); or at Title.VI@dot.ca.gov.

A handwritten signature in black ink, appearing to read 'Tony Tavares'.

TONY TAVARES
Director

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

Appendix C Avoidance, Minimization and/or Mitigation Summary

In order to be sure that all of the environmental measures identified in this document are executed at the appropriate times, the following mitigation program (as articulated on the proposed Environmental Commitments Record [ECR] that follows) would be implemented. During project design, avoidance, minimization, and/or mitigation measures will be incorporated into the project’s final plans, specifications, and cost estimates, as appropriate. All permits will be obtained prior to implementation of the project. During construction, environmental and construction/engineering staff will ensure that the commitments contained in this ECR are fulfilled. Following construction and appropriate phases of project delivery, long-term mitigation maintenance and monitoring will take place, as applicable. As the following ECR is a draft, some fields have not been completed, and will be filled out as each of the measures is implemented. Note: Some measures may apply to more than one resource area. Duplicative or redundant measures have not been included in this ECR.

Table C-1: Draft Environmental Commitments Record

Measure	IS/EA Section	Responsible Party	Timing
<i>Avoidance and Minimization Measures (for Less-Than-Significant CEQA Impacts)</i>			
AMM-VIS-01: Aesthetic Treatment of Trail Overcrossing. The trail overcrossing (northern or southern) shall be architecturally treated to blend with the surrounding environment. These treatments may include decorative fencing and color and texture for concrete elements. The design will be finalized during the detailed design phase and will be context sensitive.	2.2.7.3	Midpen, VTA, and Caltrans	Plans, Specifications, and Estimates (PS&E)
AMM-VIS-02: Aesthetic Treatment of Sound and Retaining Walls. The proposed sound walls adjacent to the wildlife undercrossing, as well as any retaining walls required for the project, will be architecturally treated to blend with the surrounding environment. The design will be finalized during the detailed design phase and will be context sensitive.	2.2.7.3	Midpen, VTA, and Caltrans	PS&E
AMM-VIS-03: Aesthetic Treatment of Wildlife Escape Ramps. If metal components are used for the proposed wildlife escape ramps, those components will include a matte finish, paint and/or stain to reduce glare and blend with the environment.	2.2.7.3	Midpen, VTA, and Caltrans	PS&E
AMM-CUL-01: Environmentally Sensitive Area Action Plan. To ensure avoidance of the previously determined eligible site, the site will be designated as an ESA for the duration of project construction in accordance with the requirements set forth in the Environmentally Sensitive Area Action Plan (AECOM 2023b). The requirements include	2.2.8.3	VTA, Caltrans, and Construction Contractor	PS&E and construction

Measure	IS/EA Section	Responsible Party	Timing
delineating the ESA on all project plans, conducting a preconstruction meeting with construction personnel to ensure that the ESA is properly understood, and coordinating/monitoring ESA installation by the contractor. In addition, an archaeologist will conduct field reviews of the ESA to ensure that it remains intact and is not compromised.			
<p>AMM-PAL-01: Paleontological Mitigation Plan. Implementation of the following measures will avoid potential impacts to sensitive paleontological resources, if present.</p> <ul style="list-style-type: none"> • Update and finalize the Paleontological Mitigation Plan once project design is nearly complete. The final plan will be implemented during construction. • Include a specification in the construction contract stating that paleontological monitoring will occur in accordance with the Paleontological Mitigation Plan. 	2.3.4.3	VTA and Caltrans	PS&E, preconstruction, construction
<p>AMM-BIO-01: Preconstruction Biological Survey. Before the start of the project, an agency-approved biologist will conduct a survey in the project area for special-status plant and wildlife species. If special-status species are discovered, the appropriate buffer will be implemented. If any listed species are discovered that could be impacted by project activities, Caltrans will consult with state and federal regulators with jurisdiction or CNPS as appropriate, if translocation and/or relocation of affected plant(s) or animal(s) would be considered as an option.</p>	2.4.1.3	VTA and Caltrans	Preconstruction
<p>AMM-BIO-02: Wildlife Species Relocation. When special-status wildlife species are present and it is determined that they could be injured or killed by construction activities, the agency-approved biologist, in coordination with the appropriate state and federal wildlife agencies, will identify appropriate methods for capture, handling, exclusion, and/or relocation of individuals that could be affected. Actions that could harm or kill individual state fully protected species or listed species that are in the project area will be avoided or delayed until the species leaves the affected area.</p>	2.4.4.3	VTA and Caltrans	Construction
<p>AMM-BIO-03: Nesting Bird Protection. To protect nesting birds, including those protected by the Migratory Bird Treaty Act (MBTA), the following measures will be implemented:</p> <ul style="list-style-type: none"> • During the bird nesting season (typically February 1 through August 31; as early as January 1 for raptors), a qualified biologist will conduct preconstruction surveys for active bird nests no more than 7 days before the start of ground or vegetation disturbance events and every 14 days during project activities. • Tree trimming and/or shrub trimming/removal will be performed with hand tools. <p>If an active nest is identified during preconstruction or construction that may be impacted by project activities, a no-disturbance buffer of 250 feet for raptors and 50 feet for</p>	2.4.4.3	VTA and Caltrans	Preconstruction, construction

Measure	IS/EA Section	Responsible Party	Timing
non-raptors will be established immediately. A reduced or enlarged buffer, and other protection measures, will be implemented in accordance with project permit requirements, defined during final design, or in consultation with the appropriate wildlife agency.			
<p>AMM-BIO-04: Wetland Protection. To protect wetlands, the following measures will be implemented:</p> <ul style="list-style-type: none"> • Wetlands will be flagged and avoided to the maximum extent practicable for all construction activities, including access and staging. • Work will occur outside of the wet-weather season (October 31 to April 15) to the maximum extent practicable in and adjacent to delineated wetlands. • Whenever feasible, wetlands and waters will be spanned using plates or bridge structures to avoid travel in wetlands and waters entirely. • If construction activities cannot avoid work in wetlands during wet-weather season, then high-density polyethylene or plywood marsh mats will be used where heavy vehicles must traverse wetlands. 	2.4.2.3	VTA and Caltrans	Preconstruction, construction
<p>AMM-BIO-05: Special-Status Plant Avoidance. Conduct protocol-level special-status plant surveys during the appropriate phenotypic period in advance of construction. Fence and/or flag known populations of special-status plants for avoidance prior to the onset of construction. In areas where protocol-level special-status plant surveys were not conducted due to inaccessible terrain, conduct preconstruction special-status plant surveys within suitable habitat before construction occurs in those areas. If special-status plant species are discovered during preconstruction surveys, fence the populations for avoidance.</p>	2.4.3.3	VTA and Caltrans	Preconstruction
<p>AMM-BIO-06: Special-Status Plant Monitoring. If fencing and/or flagging is not practical to install around known populations of special-status plants due to the size or location of the plant/population or presence of physical hazards, ground-disturbing work near special-status plant species will proceed under supervision of a project biologist.</p>	2.4.3.3	VTA and Caltrans	Preconstruction, construction
<p>AMM-BIO-07: Bat Protection. To protect sensitive bats, including the pallid bat, a qualified biologist will conduct a bat habitat assessment in all project areas that require tree removal. The qualified biologist will identify and document the location of potentially suitable bat roosting habitat prior to construction activities. If bat roosting habitat is observed, the following requirements shall be implemented throughout the construction period:</p> <ul style="list-style-type: none"> • Removal of trees that provide suitable bat roosting habitat shall be conducted outside of the bat maternity season (April 15 to August 31) and overwintering season (October 16 to January 15) to the extent feasible. • Presence/absence surveys shall be conducted 2 to 3 days prior to removal of any trees in suitable bat habitat, at 	2.4.4.3	VTA and Caltrans	Preconstruction, construction

Measure	IS/EA Section	Responsible Party	Timing
<p>any time of year. If presence/absence surveys are negative, work may proceed with no restrictions. If presence/absence surveys detect bats within trees planned for removal, work should proceed in accordance with the following restrictions:</p> <ul style="list-style-type: none"> • If a maternity colony of bats is observed during maternity season (April 15 to August 31), tree removal shall not occur until August 31 or when maternity season has ended based on surveys conducted by a qualified biologist. • If bats are observed during overwintering season (October 16 to January 15), tree removal shall not occur until January 15 or until bats are no longer present based on surveys conducted by a qualified biologist. • If bats are present outside of maternity or overwintering seasons, construction shall follow a two-phase tree removal system conducted over 2 consecutive days. On the first day (in the afternoon), limbs and branches will be removed using chainsaws or other hand tools. Limbs with cavities, crevices, or deep bark fissures will be avoided, and only branches or limbs without those features will be removed. On the second day, the entire tree shall be removed. 			
<p>AMM-BIO-08: California Red-Legged Frog Preconstruction Surveys. Preconstruction surveys for the California red-legged frog will be conducted by the agency-approved biologist within 14 calendar days of the initiation of project activities in suitable upland and aquatic habitat before ground-disturbing activities, vegetation removal, and WEF installation.</p> <ul style="list-style-type: none"> • Foot surveys will be conducted of potential frog habitat within the project limits and accessible adjacent areas (within at least 20 feet of project limits). • Potential cover sites (burrows, rocks, soil cracks, vegetation, and other potential refuge habitat) and any areas of disturbed soil for signs of California red-legged frog will be investigated. <p>Native vertebrates found in cover sites within the project limits will be documented and, if handling is allowed, relocated to an adequate cover site in the vicinity. Species that cannot be relocated because of special protection status will be addressed in coordination with the appropriate agency(s) with jurisdiction.</p>	2.4.5.3	VTA and Caltrans	Preconstruction
<p>AMM-BIO-09: California Red-Legged Frog Monitoring Protocols. During construction in and near potential California red-legged frog habitat, the following protocols will be observed by the agency-approved biologist during construction monitoring:</p> <ul style="list-style-type: none"> • WEF installed in California red-legged frog habitat will be checked regularly for potential frog presence, to ensure that it is functioning as intended, and is appropriately maintained. WEF issues will be reported to the Resident Engineer for immediate resolution. 	2.4.5.3	VTA and Caltrans	Construction

Measure	IS/EA Section	Responsible Party	Timing
<ul style="list-style-type: none"> • Within 24 hours before initial ground-disturbing activities, portions of the project footprint where potential California red-legged frog habitat has been identified will be surveyed by the agency-approved project biologist(s) to clear the site of frogs moving above ground or taking refuge in burrow openings or under materials that could provide cover. • Approved project biologist(s) will be present during all initial ground-disturbing activities and vegetation removal in suitable refugia habitats for the California red-legged frog to monitor the removal of the top 12 inches of topsoil. • If potential aestivation burrows are discovered, the burrows will be flagged for avoidance. • After a rain event and before construction activities resume, an agency-approved biologist will inspect the work area and all equipment/materials for the presence of California red-legged frog. • On discovery of a California red-legged frog individual(s) in an active construction area, all work will cease within a 50-foot radius of the frog. The frog will be allowed to leave the site on its own; if the frog(s) does not leave on its own, it will be relocated within 0.25 mile of the construction site and placed in a natural burrow or other suitable location by an agency-approved biologist with the appropriate USFWS 10(a)1(A) handling permit. The USFWS will be notified by phone and email within one working day of any California red-legged frog discovery in the project area. 			
<p>AMM-BIO-10: California Red-Legged Frog Habitat Work Window. Initial ground disturbance in California red-legged frog upland dispersal habitat, as identified by an agency-approved biologist, will be timed to occur between April 15 and October 15.</p> <p>Outside the Caltrans ROW, trail work in uplands may happen at any time if preconstruction surveys are completed and California red-legged frog are not found. Agency-approved biologist(s) may also be used to allow trail work to continue assuming all other project conditions are met.</p> <p>All work in suitable aquatic dispersal (non-breeding) habitat for California red-legged frog, as identified by an agency-approved biologist, will only occur once the aquatic feature no longer holds water or between June 15 and October 15 after installation of WEF.</p>	2.4.5.3	VTA and Caltrans	Construction
<p>AMM-BIO-11: Preconstruction Surveys for San Francisco Dusky-Footed Woodrat. Before the start of construction, an approved biologist will conduct a survey of the project area to determine the location of active and inactive woodrat nests (dens). Any nests detected during the surveys will be recorded and mapped and evaluated for current woodrat activity (including looking for fresh sign such as scat or chewed vegetation). If detected, a 10-foot buffer will be established around active nests for avoidance.</p>	2.4.4.3	VTA and Caltrans	Preconstruction

Measure	IS/EA Section	Responsible Party	Timing
<p>AMM-BIO-12: Potential Trapping and Relocation for San Francisco Dusky-Footed Woodrat. Within 2 weeks of the start of construction, a qualified biologist will conduct a survey of the project Area to identify the locations of any woodrat middens in the work area. To the maximum extent possible, a 10-foot equipment exclusion buffer will be established around active and inactive middens that can be avoided; within such buffers, all vegetation will be retained, and nests will remain undisturbed.</p> <p>For all woodrat nests that cannot be avoided by project activities (i.e., will require relocation), a qualified biologist shall live trap to determine if the nest is in use. Trapping activities should occur prior to April and after mid-July each year to prevent impacts to woodrats rearing young or young woodrats. If a nest is found to be unoccupied or not in use for 3 full days (2 nights of trapping), then it may be removed. The nest shall be relocated, or a pile of replacement sticks shall be placed outside of the development footprint for future colonization or re-use. Trapped woodrats may be kept in captivity by a qualified biologist until their nests are relocated to suitable habitat outside of the development footprint. Every effort should be made to minimize the time the animal is held in captivity. A CNDDDB form shall be filled out and submitted to CDFW for any San Francisco dusky-footed woodrats that are trapped. Once trapped, nests shall be torn down and rebuilt surrounding a log based structure, an inverted wooden planter, or similar structure having at least one entrance and exit hole that is slightly buried into the ground to anchor. Any cached food and nest material encountered shall be placed within the new structure during rebuilding. Whenever possible, the structure shall be "over-built" by adding larger branches for predator protection to create an area for the individual to safely emerge outside of the nest. One or more persons shall remain outside the release structure for up to 10 minutes to mimic a predator. Relocated nests are intended to provide a release site and opportunity for the woodrats to relocate to another nest (most woodrats average more than one nest and may or may not remain with a relocated nest), or to colonize the new structure. Once nests are relocated, any trapped woodrats should be released into the reconstructed nest using a "soft release," by plugging the individual into the shelter using loose dirt over the entrance. Relocated nests are expected to eventually be re-colonized. A monitoring report should be submitted to CDFW to document use or non/use of relocated nests.</p>	2.4.4.3	VTA and Caltrans	Preconstruction
<p>AMM-BIO-13: Preconstruction Surveys for Western Pond Turtle. An approved biologist(s) shall survey the work site no more than 48 hours before the onset of activities for signs of western pond turtles and/or western pond turtle</p>	2.4.4.3	VTA and Caltrans	Preconstruction

Measure	IS/EA Section	Responsible Party	Timing
<p>nesting activity (i.e. recently excavated nests, nest plugs) or nest depredation (partially to fully excavated nest chambers, nest plugs, scattered egg shell remains, egg shell fragments). Preconstruction surveys to detect western pond turtles should focus on suitable aerial and aquatic basking habitat such as logs, branches, rootwads, and rip-rap, as well as the shoreline and adjacent warm, shallow waters where pond turtles may be present below the water surface beneath algal mats or other surface vegetation. Preconstruction surveys to detect western pond turtle nesting activity should be concentrated within 402 meters (1,319 feet) of suitable aquatic habitat and should focus on areas along south- or west-facing slopes with bare hard-packed clay, silt soils, or a sparse vegetation of short grasses or forbs. If western pond turtles or their nesting sites are found, the biologist shall contact CDFW to determine whether relocation and/or exclusion buffers and nest enclosures are appropriate. If CDFW approves of moving the animal, the biologist shall be allowed sufficient time to move the western pond turtle(s) from the work site before work activities begin.</p>			
<p>AMM-NOI-1: Noise Controls Outside of the Caltrans ROW.</p> <ul style="list-style-type: none"> • Limit construction outside of the Caltrans ROW to the days and hours set in Los Gatos Municipal Code Chapter 16 and Santa Clara County Code of Ordinances Section B11-154(6), to the maximum extent feasible. If construction is necessary outside of those days and hours, Midpen and/or VTA will provide advance notification to surrounding residents. • Powered equipment for regional trail construction (vehicles, heavy equipment, and hand equipment such as chainsaws) will be equipped with adequate mufflers maintained in good condition. Best available noise control techniques (e.g., mufflers, intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds) will be used for all equipment and trucks used for regional trail construction, as necessary. • Staging areas for regional trail construction will be located as far as possible from residences. 	3.2.13	Midpen and VTA	Construction
<p>AMM-TCR-01: Construction Training. Prior to construction, all construction staff will participate in archaeological awareness and Tribal Cultural Resources sensitivity training conducted by a qualified cultural resources specialist. The training will include information about the possibility of encountering cultural resources (including Tribal Cultural Resources), the appearance and types of resources that could be encountered during the project, and will describe the appropriate protocol to be followed if resources are discovered during construction.</p>	3.2.18	Midpen, VTA, Caltrans	PS&E, Construction
<p>AMM-TCR-02: Tribal Consultation for Previously Undiscovered Tribal Cultural Resources. In the event</p>	3.2.18	Midpen, VTA, Caltrans	PS&E, Construction

Measure	IS/EA Section	Responsible Party	Timing
<p>that previously undiscovered Tribal Cultural Resources are discovered, Tamien Nation and the Muwekma Ohlone Indian Tribe of the San Francisco Bay Area Region will be solicited within areas identified as highly sensitive for Tribal Cultural Resources, as determined through consultation with Tamien Nation and/or Native American groups that have expressed interest in the project as of November 29, 2023.</p>			
<p>Mitigation Measures (for Potentially Significant CEQA Impacts)</p>			
<p>MM-BIO-01: Mitigation for Wetlands and Waters. The project is designed to be self-mitigating, and the wildlife undercrossing would result in a net benefit to the broader ecosystem. Furthermore, Midpen is seeking to develop a mitigation credit agreement (MCA) that could provide compensatory mitigation for some, or all, of the project’s impacts on both state and federally regulated resources. On-site in-kind habitat restoration will be implemented where practicable to offset permanent impacts. If on-site restoration to offset permanent impacts cannot be achieved because of site constraints and/or limitations, Midpen and Caltrans would coordinate with the regulatory agencies with jurisdiction to determine appropriate compensation. The final mitigation requirement, if any, would be determined after selection of a preferred alternative and in coordination with the regulatory agencies.</p>	2.4.2.3	VTA and Caltrans	PS&E
<p>MM-BIO-02: Mitigation for California Red-Legged Frog. The project is designed to be self-mitigating, and the undercrossing would result in a net benefit to the broader ecosystem as well as provide opportunities for genetic exchange for California red-legged frog that are precluded by SR 17, which bisects habitat on either side. Furthermore, Midpen is seeking to develop an MCA that could provide compensatory mitigation for some, or all, of the project’s impacts on both state and federally regulated resources. On-site in-kind habitat restoration will be implemented where practicable to offset permanent impacts. If on-site restoration to offset permanent impacts cannot be achieved because of site constraints and/or limitations, Midpen and Caltrans would coordinate with the regulatory agencies with jurisdiction to determine appropriate compensation. Other compensation options include the Santa Clara Valley Habitat Plan, the Santa Clara County RCIS, and conservation easements with local stakeholders. The final mitigation requirements, if any, would be determined after selection of a preferred alternative and in coordination with the regulatory agencies.</p>	2.4.5.3	VTA and Caltrans	PS&E

Appendix D Required Consultation/Concurrence Documentation

This appendix includes the following consultation and correspondence regarding the proposed project:

- U.S. Fish and Wildlife Service species list
- National Marine Fisheries Service species list



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To:

October 05, 2023

Project Code: 2023-0041604

Project Name: Highway 17 Wildlife Crossing and Regional Trail Connections

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

PROJECT SUMMARY

Project Code: 2023-0041604
Project Name: Highway 17 Wildlife Crossing and Regional Trail Connections
Project Type: Species Habitat Preservation/Restoration/Creation
Project Description: Project to provide wildlife undercrossing for habitat connectivity and regional trail connections along State Route 17 in Santa Clara County.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@37.21602475,-122.03140825647384,14z>



Counties: Santa Clara County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 15 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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

BIRDS

NAME	STATUS
California Condor <i>Gymnogyps californianus</i> Population: U.S.A. only, except where listed as an experimental population There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
California Least Tern <i>Sterna antillarum browni</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
Marbled Murrelet <i>Brachyramphus marmoratus</i> Population: U.S.A. (CA, OR, WA) There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4467	Threatened

AMPHIBIANS

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (Central CA DPS) There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened
Foothill Yellow-legged Frog <i>Rana boylei</i> Population: Central Coast Distinct Population Segment (Central Coast DPS) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5133	Proposed Threatened

FISHES

NAME	STATUS
Tidewater Goby <i>Eucyclogobius newberryi</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/57	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate
Mount Hermon June Beetle <i>Polyphylla barbata</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3982	Endangered
Zayante Band-winged Grasshopper <i>Trimerotropis infantilis</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1036	Endangered

FLOWERING PLANTS

NAME	STATUS
Ben Lomond Spineflower <i>Chorizanthe pungens var. hartwegiana</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7498	Endangered
Ben Lomond Wallflower <i>Erysimum teretifolium</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7429	Endangered
Metcalf Canyon Jewelflower <i>Streptanthus albidus ssp. albidus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4186	Endangered
Robust Spineflower <i>Chorizanthe robusta var. robusta</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9287	Endangered
Santa Clara Valley Dudleya <i>Dudleya setchellii</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3207	Endangered

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: AECOM

Name: Kim Roeland

Address: 888 SW 5th Ave, Suite 600

City: Portland

State: OR

Zip: 97204

Email: kim.roeland@aecom.com

Phone: 8583539313

From: Roeland, Kim
Sent: Tuesday, October 24, 2023 11:55 AM
To: nmfs.wcrca.specieslist@noaa.gov
Subject: Caltrans - Highway 17 Wildlife and Regional Trail Crossings and Trail Connections Project

Project Name: Highway 17 Wildlife and Regional Trail Crossings and Trail Connections Project
Project Contact: Kim Roeland, AECOM, kim.roeland@aecom.com, 858-353-9313
Project Description: Project will install wildlife undercrossing on Highway 17 near Lexington Reservoir, Sant Clara County, in order to provide valuable ecological connectivity within the biologically diverse Santa Cruz Mountains. Project also includes pedestrian overcrossing and trail connections for benefits to the regional trail system.
Delegated State Agency: Caltrans District 4

Quad Name **Castle Rock Ridge**

Quad Number **37122-B1**

ESA Anadromous Fish

- SONCC Coho ESU (T) -
- CCC Coho ESU (E) - **X**
- CC Chinook Salmon ESU (T) -
- CVSR Chinook Salmon ESU (T) -
- SRWR Chinook Salmon ESU (E) -
- NC Steelhead DPS (T) -
- CCC Steelhead DPS (T) - **X**
- SCCC Steelhead DPS (T) -
- SC Steelhead DPS (E) -
- CCV Steelhead DPS (T) -
- Eulachon (T) -
- sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

- SONCC Coho Critical Habitat -
- CCC Coho Critical Habitat - **X**
- CC Chinook Salmon Critical Habitat -
- CVSR Chinook Salmon Critical Habitat -
- SRWR Chinook Salmon Critical Habitat -
- NC Steelhead Critical Habitat -
- CCC Steelhead Critical Habitat - **X**
- SCCC Steelhead Critical Habitat -
- SC Steelhead Critical Habitat -
- CCV Steelhead Critical Habitat -
- Eulachon Critical Habitat -
- sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

- Range Black Abalone (E) -
- Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

- Black Abalone Critical Habitat -

ESA Sea Turtles

- East Pacific Green Sea Turtle (T) -
- Olive Ridley Sea Turtle (T/E) -
- Leatherback Sea Turtle (E) -
- North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

- Blue Whale (E) -

Fin Whale (E) -

Humpback Whale (E) -

Southern Resident Killer Whale (E) -

North Pacific Right Whale (E) -

Sei Whale (E) -

Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Essential Fish Habitat

Coho EFH - **X**

Chinook Salmon EFH - **X**

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult Monica DeAngelis

monica.deangelis@noaa.gov

562-980-3232

MMPA Cetaceans -

MMPA Pinnipeds -

Kim Roeland

Conservation and Climate Adaptation Planner

M +1-858-353-9313

kim.roeland@aecom.com

(she/her)

AECOM

888 SW 5th Ave

Suite 600

Portland, OR 97204, United States

aecom.com

Appendix E List of Technical Studies

The following studies and/or technical analyses have been prepared and are incorporated by reference into this Initial Study/Environmental Assessment and are available upon request.

Aquatic Resources Delineation Report (AECOM 2023e)

Biological Assessment (AECOM 2023f)

Construction Greenhouse Gas Emissions Memo (AECOM 2023g)

Historic Properties Survey Report (includes Archaeological Survey Report and Environmentally Sensitive Area Action Plan) (AECOM 2023b)

Location Hydraulic Study (HDR/WRECO 2023a)

Natural Environment Study (AECOM 2023d)

Noise Considerations for Proposed Wildlife Undercrossing (AECOM 2023h)

Paleontological Evaluation Report and Mitigation Plan (Cogstone Resource Management 2023)

Phase I Environmental Site Assessment (Hoexter Consulting 2019)

Storm Water Data Report (HDR/WRECO 2023)

Structures Preliminary Geotechnical Reports (AECOM 2023c)

Visual Impact Assessment (AECOM 2023a)

Water Quality Assessment Report (HDR/WRECO 2023b)

Appendix F List of Acronyms and Abbreviations

A

AB 2344 - Assembly Bill 2344
ABAG - Association of Bay Area Governments
ADL - Aerially Deposited Lead
AMM - Avoidance and/or Minimization Measures
Anza Trail - Juan Bautista de Anza National Historic Trail
APE - Area of Potential Effects

B

BAAQMD – Bay Area Air Quality Management District
BGEPA – Bald and Golden Eagle Protection Act
BMP - Best Management Practices
bp – before present
BSA – Biological Study Area

C

Caltrans - California Department of Transportation
CAL FIRE - California Department of Forestry and Fire Protection
Cal/OSHA - California Occupational Safety and Health Administration
CARB - California Air Resources Board
CCR - California Code of Regulations
CDFW - California Department of Fish and Wildlife
CEQA - California Environmental Quality Act
CESA - California Endangered Species Act
CFR - Code of Federal Regulations
CGP – Construction General Permit
CGS - California Geological Survey
CHP - California Highway Patrol
CIDH – cast in drilled hole
CNDDDB – California Natural Diversity Database
CNPS – California Native Plant Society
CNRA - California Natural Resources Agency
County Parks - Santa Clara County Parks
CRLF – California Red Legged Frog
CWA – Clear Water Act

D

dBA – A-weighted decibels

DSA - disturbed soil area

E

ECHO - Enforcement and Compliance History Online

ESA - Environmentally Sensitive Areas

F

FESA - Federal Endangered Species Act

FHWA - Federal Highway Administration

FONSI - Finding of No Significant Impact

FTA - Federal Transit Administration

FR – Federal Register

I

I-280 - Interstate 280

in/sec – inch per second

K

kV - kilovolt

KV - Key view

L

Lenihan Dam - James J. Lenihan Dam

L_{max} - Maximum instantaneous noise level

M

MCA

Midpen - Midpeninsula Regional Open Space District

MM - Mitigation Measures

Mitigated ND – Mitigated Negative Declaration

MMRP - Mitigation Monitoring and Reporting Plan

MMBN - Middle Mile Broadband Network

N

NAHC - Native American Heritage Commission

NEPA - National Environmental Policy Act

NES – Natural Environment Study

NOA – Naturally Occurring Asbestos

NOAA Fisheries – National Oceanic and Atmospheric Administration, National Marine Fisheries Service

NO_x – nitrogen oxides

NPDES - National Pollutant Discharge Elimination System

NRHP - National Register of Historic Places

O

O₃ - ozone

OCRS - Caltrans' Office of Cultural Resource Studies

OSP - Open Space Preserve(s)

P

PA&ED - Project Approval and Environmental Document

PM_{2.5} - particulate matter of 2.5 micrometers in diameter

PM₁₀ - particulate matter of 10 micrometers in diameter

PCA - Priority Conservation Areas

PDT - Project Development Team

PER – Paleontological Evaluation Report

PF - Project Features

PG&E - Pacific Gas and Electric Company

PM - Post Mile

PMP – Paleontological Mitigation Plan

PPV – peak particle velocity

PRC - California Public Resources Code

PS&E - Plans, Specifications, and Estimates

PSR-PDS - Project Study Report-Project Development Support

R

RCIS - Regional Conservation Investment Strategy

Ridge Trail - Bay Area Ridge Trail

ROG - reactive organic gases

ROW - Right-of-Way

RTP - Bay Area Regional Transportation Plan

RWQCB - San Francisco Bay Regional Water Quality Control Board

S

San Jose Water - San Jose Water Company

Santa Cruz Metro - Santa Cruz Metropolitan Transit District

SR 17 - State Route 17

SCVURPPP - Santa Clara Valley Urban Runoff Pollution Prevention Program

SWPP - Stormwater Pollution Prevention Plan

SWRCB – State Water Resources Control Board

T

TDM - Transportation Demand Management

TIP - Transportation Improvement Program

TMDL – Total Maximum Daily Loads

TMP - Transportation Management Plan

TSM - Transportation System Management

U

UCSC - University of California, Santa Cruz
USACE - U.S. Army Corps of Engineers
USC - United States Code
USEPA – United States Environmental Protection Agency
USDOT - United States Department of Transportation
USFS - United States Department of Agriculture Forest Service
USFWS - United States Fish and Wildlife Service
U & M - Use and Management Plan

V

Valley Water - Santa Clara Valley Water District
VdB – vibration decibels
VTA - Santa Clara Valley Transportation Authority

W

WDRs - Waste discharge requirements