OLD MOUNTAIN VIEW-ALVISO ROAD
BRIDGE REPLACEMENT
AT CALABAZAS CREEK

Initial Study/Draft
Mitigated Negative Declaration

Federal Aid No. BHLS-5213 (040)

Prepared for:

City of Sunnyvale

March 2016

Draft Mitigated Negative Declaration

OLD MOUNTAIN VIEW-ALVISO ROAD BRIDGE REPLACEMENT AT CALABAZAS CREEK PROJECT (Federal Aid No. BHLS-5213 (040))

Pursuant to: Division 13, Public Resources Code

Project Description

The City of Sunnyvale Public Works Department (the "City") is proposing to replace the existing five-span Old Mountain View – Alviso Road Bridge over Calabazas Creek in the Cities of Sunnyvale and Santa Clara, California. The existing bridge is located on Old Mountain View-Alviso Road between Reamwood Avenue in the City of Sunnyvale on the west and Patrick Henry Drive in the City of Santa Clara on the east.

Determination

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

The City 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 agricultural lands, mineral resources, population and housing, and public services.

- The proposed project would not have significant effects associated with aesthetics, air quality, cultural resources, geology and soils, greenhouse gas emissions, land use, recreation, transportation, utilities, and cumulative impacts.

- The proposed project would not have significant adverse effects related to biological resources, hazardous materials, water quality, or noise because the following mitigation measures would reduce potential effects to less than significant levels (additional details

regarding these mitigation measures can be found in the Initial Study prepared for the project):

Biological Resources

MM BIO-1.1: Dewatering or diversion and any other work requiring access within the low-flow channel shall occur during the dry season only (15 June to 15 October, with the potential for extensions beyond this period, in consultation with the California Department of Fish & Wildlife [CDFW] and the National Marine Fisheries Service [NMFS], if dry weather permits). During this time, creek flows are expected to be at annual lows and steelhead, salmon, sturgeon, and smelt are not expected to be present within the site.

MM BIO-1.2: If activities in a flowing stream are unavoidable, the work area shall be dewatered (e.g., using coffer dams), and any stream flow shall be diverted around the work area by a barrier, temporary culvert, or a new channel capable of permitting upstream and downstream fish movement. Construction of the barrier or the new channel shall begin in the downstream area and continue in an upstream direction, and the flow shall be diverted only when construction of the diversion is completed. This will occur at low tide, when water depth and volume within the diversion area will be minimal and the number of fish that may occur within the area to be dewatered will be very low (if any).

MM BIO-1.3: A qualified biologist shall be present during construction of the creek diversion and dewatering of the channel to ensure that impacts to fish are minimized.

MM BIO-1.4: During demolition and construction activities, netting and other structures shall be installed under the bridge to prevent debris from entering the channel, as such debris could degrade water quality and potentially injure fish.

MM BIO-1.5: To avoid and minimize impacts to fish resulting from pressure waves created during pile driving, the following measures will be implemented:

- Pile driving work shall be limited to the period 15 June to 15 October as described above.

- All pile driving within tidal aquatic or wetland habitat within the creek channel shall be done within a dewatered work area to reduce the acoustic impact area.
- At the start of pile driving activity each day, the contractor shall perform a "soft start" where a pile is initially struck softly several times, then gradually struck with greater force, to allow any fish in close proximity to the pile driving location to move far enough away that they will not be injured by pressure waves.

MM BIO-2.1: Permanent impacts to aquatic and coastal brackish marsh wetland habitat shall be compensated at a 3:1 ratio by entering into a purchase agreement for mitigation bank credits at the San Francisco Bay Wetland Mitigation Bank. The project has already been approved for inclusion in the service area of the bank.

MM BIO-2.2: Construction equipment shall not be operated in the live stream channel.

MM BIO-2.3: Standard erosion control and slope stabilization measures shall be required for work performed in any area where erosion could lead to sedimentation of a waterbody.

MM BIO-2.4: Silt fencing shall be installed between any activities conducted within the banks of the creek, or just above the edge of top-of-bank, to prevent dirt or other materials from entering the channel.

MM BIO-2.5: No debris, soil, silt, sand, bark, slash, sawdust, cement, concrete, washings, petroleum products or other organic or earthen material shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into Waters of the U.S. and State.

MM BIO-2.6: Machinery shall be refueled at least 60 feet from any aquatic or wetland habitat, and a spill prevention and response plan shall be implemented.

MM BIO-2.7: Water from dewatering of the work areas shall not be pumped or allowed to flow into the creek until the water is clear. The method shall be the responsibility of the contractor but shall be a standard practice such as using sediment basins outside of the channel or portable settling bins, and must successfully filter the water until clear.

MM BIO-2.8: Post-construction Best Management Practices (BMPs) shall be implemented as necessary to prevent a long-term increase in runoff, as well as to prevent hydrological modification of Calabazas Creek as required by the regulatory permits obtained by the project applicant. All post-construction BMPs shall be implemented and functioning prior to completion of the proposed project. The type and design of all BMPs shall conform to Provision C.3 of the Municipal Regional Stormwater Permit (Order No. R2-2009-0074) for the San Francisco Bay Area.

MM BIO-3.1: If feasible, proposed project activities shall be scheduled to avoid the avian nesting season. If such activities are scheduled to take place outside the nesting season, all impacts on nesting birds, including raptors, protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code, would be avoided. The nesting season for most birds in Santa Clara County typically extends from 1 February through 31 August, although in most years a majority of birds have finished nesting by 1 August.

MM BIO-3.2: If proposed project activities will not be initiated until after the start of the nesting season, potential nesting substrate (e.g., bushes, trees, grasses, and other vegetation) that is scheduled to be removed by the proposed project, if any, may be removed prior to the start of the nesting season (e.g., prior to 1 February) to reduce the potential for initiation of nests. If it is not feasible to schedule vegetation removal during the nonbreeding season, or where vegetation cannot be removed (e.g., in areas immediately adjacent to the site), then pre-construction surveys for nesting birds shall be conducted as described below. It is not recommended to remove sensitive and/or regulated wetland vegetation prior to construction, because of the potential water quality impacts such activities could enact.

MM BIO-3.3: If it is not possible to schedule proposed project activities between 1 September and 1 February, then pre-construction surveys for nesting birds shall be conducted by a qualified biologist to ensure that no nests will be disturbed during proposed project implementation. These surveys shall be conducted no more than 48 hours prior to the initiation of proposed project activities. During this survey, a qualified biologist shall inspect all potential nesting habitats (e.g., trees, shrubs, grasslands, and structures) within 300 feet of impact areas for raptor nests and within 100 feet of impact areas for nests of non-raptors.

MM BIO-3.4: If an active nest (i.e., a nest with eggs or young, or any completed raptor nest attended by adults) is found sufficiently close to work areas to be disturbed by these activities, the biologist, in consultation with CDFW, shall determine the extent of a disturbance-free buffer zone to be established around the nest (typically 300 feet for raptors and 50-100 feet for other species), to ensure that no nests of species protected by the MBTA and California Fish and Game Code will be disturbed during proposed project implementation. Because the majority of the site is already subject to disturbance by vehicles and pedestrians, activities that will be prohibited from occurring within the buffer zone around a nest will be determined on a case-by-case basis. In general, activities prohibited within such a buffer while a nest is active will be limited to new construction-related activities (i.e., activities that were not ongoing when the nest was constructed) involving significantly greater noise, human presence, or vibrations than were present prior to nest initiation.

MM BIO-3.5: If necessary to avoid impacts to active nests (i.e., nests containing eggs or young), nest starts may be removed on a regular basis (e.g., every second or third day), starting in late January or early February, or measures such as exclusion netting or slippery panels may be placed over nesting sites on the existing bridges to prevent active nests from becoming established. Any netting installed for nest deterrence shall be installed appropriately by an experienced deterrence technician, under the supervision of a qualified biologist, and shall be inspected and maintained regularly to avoid the entrapment or entanglement of birds.

Hazards and Hazardous Materials

MM HAZ-1.1: Prior to construction, a soil investigation shall be conducted by a qualified professional to assess the potential presence and extent of agricultural pesticides in the site's shallow soils. Testing shall be completed to provide adequate vertical and lateral characterization, and shall conform to State and local guidelines and regulations. Results of the soil investigation shall be submitted to the Public Works Departments of the Cities of Sunnyvale and Santa Clara. If lead, pesticide, herbicide, and/or arsenic concentrations are below regulatory screening levels for commercial/industrial development and for construction worker health, then no further action would be needed.

MM HAZ-1.2: If contaminant concentrations are identified above commercial/industrial and construction worker screening levels, then a soil management plan (SMP) shall be developed that identifies management practices for characterizing the impacted soil that may be encountered during site development activities. The SMP shall be reviewed and approved by the Cities of Sunnyvale and Santa Clara prior to construction, and included in the construction bid package to ensure implementation by the contractor. The SMP shall include the following elements:

- Procedures for transporting and disposing the waste material generated during removal activities.
- Procedures for stockpiling soil on-site.
- Provisions for collecting additional soil samples in previously inaccessible areas to confirm the extent of soil contamination, following demolition activities.
- Confirmation soil sampling to verify achievement of remediation goals.
- Procedures to ensure that fill and cap materials are verified as clean.
- Truck routes, and/or staging and loading procedures and record keeping requirements.

MM HAZ-1.3: In addition, if contaminant concentrations are identified above commercial/industrial and construction worker screening levels, a health and safety plan (HSP) shall be prepared to provide general health and safety guidance such that construction activities can be conducted in a safe

manner. The HSP shall be reviewed and approved by both Cities prior to construction, and included in the construction bid package to ensure implementation by the contractor. The construction contractor shall be responsible for the health and safety of their employees during construction activities, and this HSP shall be kept on-site during all construction activities. The contractors must verify that all on-site personnel are qualified, trained, and prepared to implement the HSP and safely perform the planned site work. Field personnel will be required to indicate in writing that they have read and understand the provisions of the HSP.

A project-specific training program shall also be instituted prior to site work. Attendees at meetings shall be documented by signature. The project-specific training shall include a discussion of the following:

- The health effects (acute and chronic) of the chemical and physical hazards that may be encountered at the project.
- Proper control measures for the chemical and physical hazards that may be encountered.
- The importance of dust control at the site.
- Proper personal hygiene procedures.
- Dust removal on equipment and personnel.
- Emergency procedures.
- Proper management of impacted soil.

MM HAZ-2.1: To determine the presence of asbestos-containing materials, a visual inspection/pre-demolition survey and, if needed, sampling, shall be conducted by a State Certified Asbestos Contractor prior to the demolition of the existing bridge.

MM HAZ-2.2: If asbestos is detected, then the following measures shall be implemented:

- All potentially friable asbestos-containing materials shall be removed in accordance with local, state, and federal guidelines prior to building demolition or renovation that may disturb the materials. All demolition activities shall be undertaken in accordance with Cal/OSHA standards contained in Title 8 of the CCR, Section 1529, to protect workers from exposure to asbestos.

- A registered asbestos abatement contractor shall be retained to remove and dispose of asbestos-containing materials identified in the asbestos survey performed for the site in accordance with the standards stated above.
- Materials containing more than one (1) percent asbestos are also subject to Bay Area Air Quality Management District (BAAQMD) regulations. Removal of materials containing more than one (1) percent asbestos shall be completed in accordance with BAAQMD requirements.

Hydrology and Water Quality

MM HYD-1.1: Implementation of the following measures shall be required of the contractor and incorporated into the construction bid package:

- Construction equipment shall not be operated in the live stream channel;
- Standard erosion control and slope stabilization measures shall be required for work performed in any area where erosion could lead to sedimentation of a waterbody;
- Silt fencing shall be installed between any activities conducted within the banks of the creek, or just above the edge of top-of-bank, to prevent dirt or other materials from entering the channel;
- Debris, soil, silt, sand, bark, slash, sawdust, cement, concrete, washings, petroleum products or other organic or earthen material shall not be allowed to enter into or be placed where it may be washed by rainfall or runoff into Waters of the U.S. and State;
- Machinery shall be refueled at least 60 feet from any aquatic or wetland habitat, and a spill prevention and response plan shall be implemented;
- Water from dewatering of the work areas shall not be pumped or allowed to flow into the creek until the water is clear. The method would be the responsibility of the contractor but would be a standard practice such as using sediment basins outside of the channel or portable settling bins. The method must successfully filter the water until clear; and,
- Post-construction Best Management Practices (BMPs) shall be implemented as necessary to prevent a long term increase in

runoff, as well as to prevent hydrological modification of Calabazas Creek as required by the regulatory permits obtained by the project applicant. All post-construction BMPs shall be implemented and functioning prior to completion of the proposed project. The type and design of all BMPs shall conform to Provision C.3 of the Municipal Regional Stormwater Permit (Order No. R2-2009-0074) for the San Francisco Bay Area.

Noise

MM NOI-1.1: Limit construction activities to 7:00 AM to 6:00 PM Monday through Friday, and 8:00 AM to 5:00 PM on Saturdays. Construction shall not be allowed on Sundays or federal holidays.

MM NOI-1.2: Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.

MM NOI-1.3: Prepare a construction schedule identifying the major noise-generating construction activities. The project specifications shall include a procedure for contractors to notify adjacent affected properties prior to the major noise-generating construction activities.

MM NOI-1.4: Designate a "disturbance coordinator" working for the contractor who will be responsible for responding to any complaints about construction noise or vibration. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem.

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1.0 INTRODUCTION

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared to conform to the requirements of the California Environmental Quality Act (CEQA), the CEQA Guidelines (Title 14, California Code of Regulations §15000 et seq.), and the regulations and policies of the Cities of Sunnyvale and Santa Clara). The purpose of this IS/MND is to provide objective information regarding the environmental consequences of the proposed project to the public, as well as to the decision-makers who will be reviewing and considering the project.

This IS/MND and related technical reports evaluate the potential environmental effects that could result from replacement of the Old Mountain View-Alviso Road Bridge over Calabazas Creek, which is located on the City of Sunnyvale/City of Santa Clara border. A more detailed description of the proposed project is provided in *Section 2.0, Project Description*, below. The City of Sunnyvale is the Lead Agency under CEQA and has prepared this IS/MND to address the impacts of implementing the proposed project. The City of Santa Clara is a Responsible Agency under CEQA and will rely on this environmental impact analysis as part of its decision-making process pertaining to this project.

The environmental approval process, which is regulated by CEQA Statutes and Guidelines, includes circulation of this IS/MND for public and agency review for a 30-day period, beginning on April 1st, 2016. All documents referenced in this IS/MND are available for public review at the City offices, 456 West Olive Avenue, Sunnyvale, CA 94088, during normal business hours. Any individual, group, or agency, wishing to comment on the project may submit written comments to the following address by no later than 5:00 pm on May 2nd, 2016:

City of Sunnyvale, Department of Public Works (Attn: Humza Javed)
603 All America Way, P.O. Box 3707
Sunnyvale, CA 94088-3707

The contents of this document comply with the CEQA Guidelines. This includes a description of the proposed project and an analysis of its environmental impacts under 18 subject areas (e.g. Air Quality, Cultural Resources, Transportation and Traffic, etc.). For each subject area, a checklist is included along with a corresponding discussion of impacts, as well as one of four impact conclusions: "Potentially Significant Impact," "Less Than Significant with Mitigation Incorporation," "Less than Significant Impact," and "No Impact." If a significant impact is identified, mitigation is presented to offset any potentially significant impacts. The right-hand column in the checklist lists the source(s) for the answer to each question. The sources cited are identified at the end of the checklist.

2.0 PROJECT DESCRIPTION

The project consists of the replacement of the existing Old Mountain View-Alviso Road Bridge over Calabazas Creek, which is on the City of Sunnyvale-City of Santa Clara border.

2.1 BACKGROUND

The existing bridge is located on Old Mountain View-Alviso Road between Reamwood Avenue in the City of Sunnyvale on the west and Patrick Henry Drive in the City of Santa Clara on the east. The structure spans Calabazas Creek, a segment of the Calabazas Creek Trail, and the Santa Clara Valley Water District's (SCVWD) maintenance access paths. The existing bridge was constructed in the mid-1960s and is a narrow, five span structure that is approximately 32 feet in total width and 113 feet in length, with four sets of piers in the creek channel. One of the existing bridge piers is located within the low-flow channel of Calabazas Creek. The bridge has two 14-foot traffic lanes, no sidewalks and four foot high barriers/floodwalls along each edge. The barriers/floodwalls on the bridge tie directly into the existing floodwall system along Calabazas Creek.

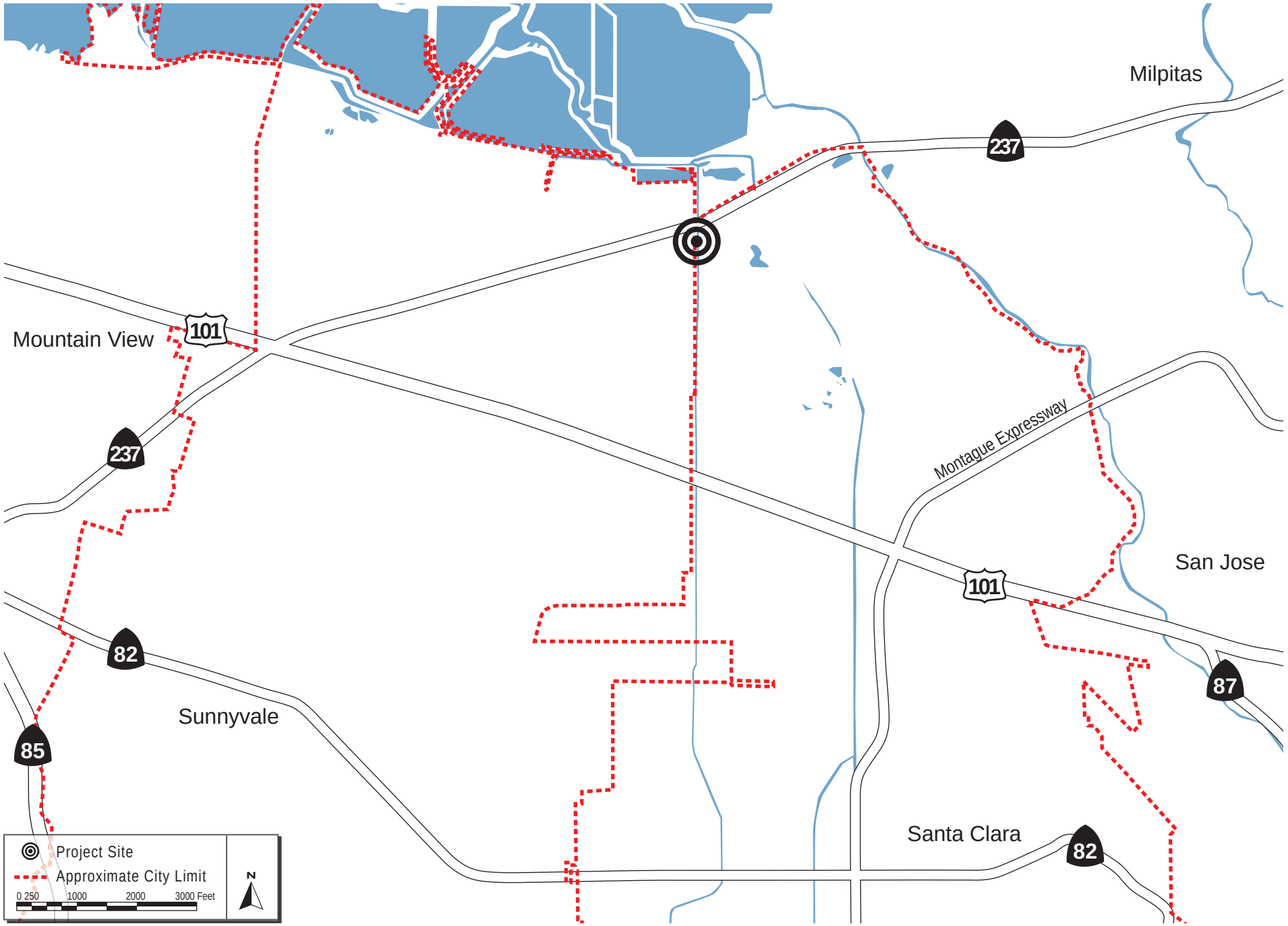
Based on ongoing inspections, the existing bridge structure is listed as "structurally deficient" on the Caltrans Local Agency Bridge List as it does not meet current seismic and design criteria. The purpose of the project, therefore, is to address this deficiency by constructing a new bridge that complies with the latest seismic safety and highway bridge design standards.

2.2 PROJECT SITE AND VICINITY

Calabazas Creek flows under the existing Old Mountain View-Alviso Road Bridge in a south-to-north direction. The Calabazas Creek Trail is located along the east side of the creek and passes under the bridge. The SCVWD's maintenance paths are located along both the east and west sides of the creek. Commercial and light industrial uses surround the site along Old Mountain View-Alviso Road. Farther north of the project site is State Route (SR) 237.

2.3 PROJECT CHARACTERISTICS

The proposed project includes construction of a replacement bridge and roadway approaches that comply with current seismic safety and highway design standards to correct existing structural and roadway deficiencies at the project site.



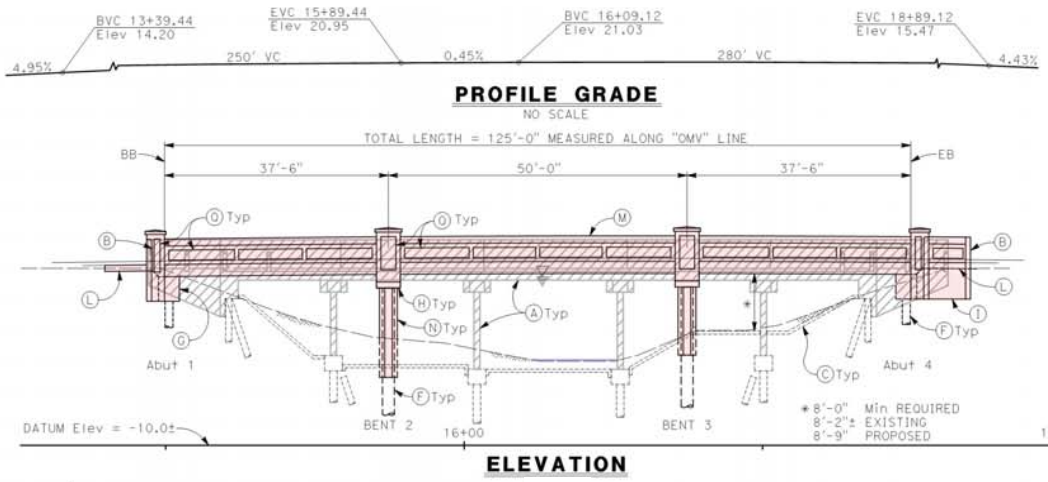
REGIONAL MAP

FIGURE 1

VICINITY MAP

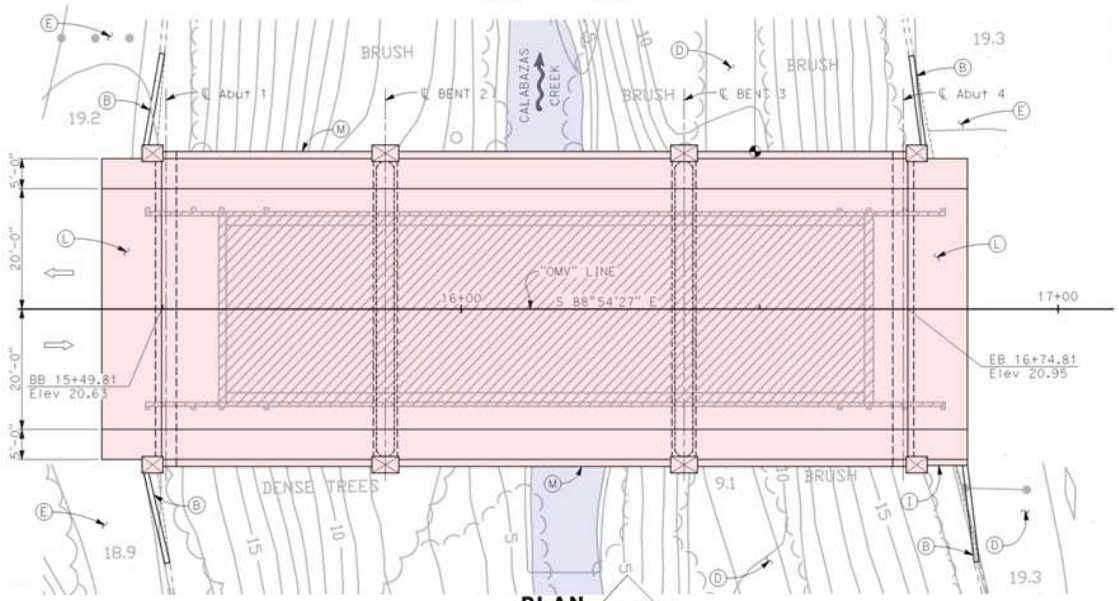
FIGURE 2

AERIAL PHOTOGRAPH AND SURROUNDING LAND USES FIGURE 3

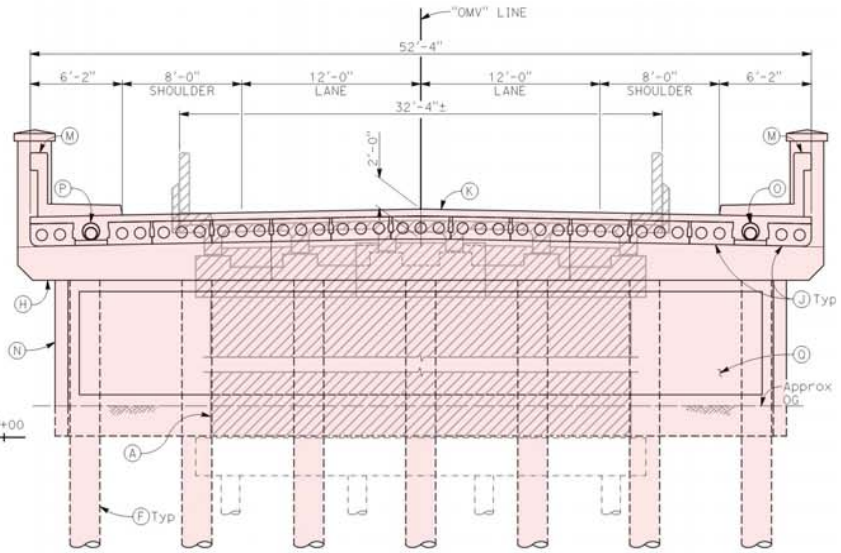


PROFILE GRADE
NO SCALE

ELEVATION



PLAN



TYPICAL SECTION

LEGEND:

- Indicates Bridge Removal
- Indicates Existing Structure
- Indicates Traffic Direction
- Indicates Point of Minimum Vertical Clearance
- Indicates Flow Direction
- Indicates Water Surface (Design Flood)

GENERAL DEVELOPMENT PLAN FIGURE 4

2.3.1 Replacement Bridge Structure

The project would construct a new bridge on Old Mountain View-Alviso Road over Calabazas Creek. The replacement bridge would be constructed on the same alignment as the existing bridge and would consist of a three span bridge approximately 125 feet in length and 52 feet in width. The bridge would include two 12-foot traffic lanes, two 8-foot shoulders/bike lanes, two 5-foot sidewalks and two 1-foot barriers. Temporary construction work within the creek for the replacement bridge would be limited to approximately 50 feet on each side of the new bridge. One tree within the riparian corridor adjacent to the southwest corner of the existing bridge would be removed as a result of the new bridge construction.

The project would also incorporate a 10-inch potable waterline interconnect across the bridge between the cities of Sunnyvale and Santa Clara. The bridge superstructure would be designed to accommodate a 14-inch steel casing to contain the waterline. The casing would be located within a reinforced gap between the precast concrete voided slabs and would be cast integral with the slabs as part of the concrete overlay pour. Likewise, the project would include a 14-inch steel casing in the bridge superstructure to accommodate future utility connections between the two cities. Details would be similar to the casing housing the 10-inch waterline. Photo 1 below shows a typical cross-section of the proposed bridge, with the two utility casings indicated on the north and south sides of the bridge.

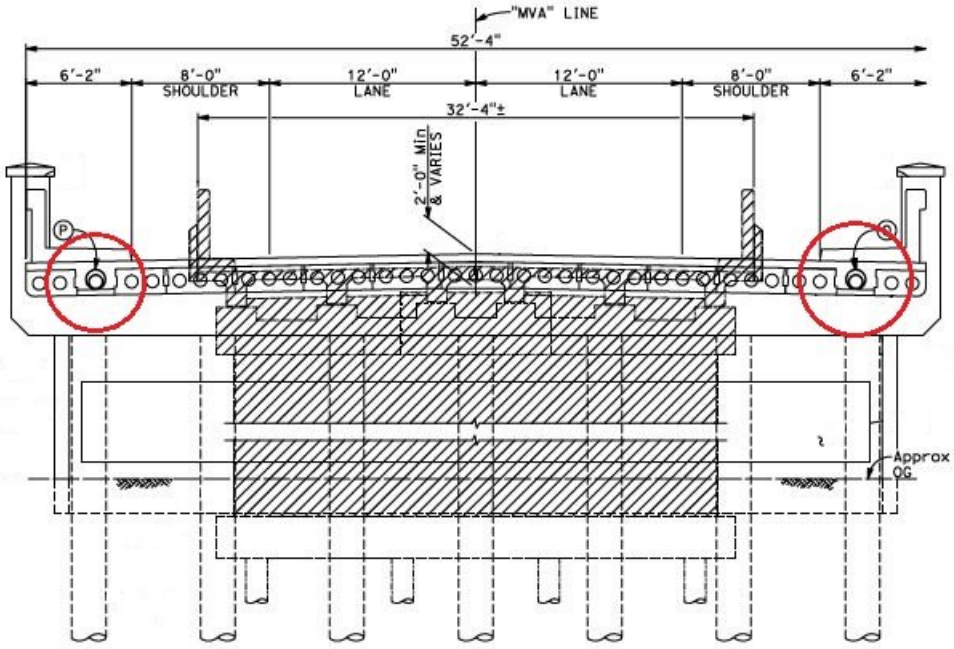


Photo 1: Typical Bridge Cross-section with Utility Casings Indicated

2.3.2 Roadway Modifications

The roadway profile on each side of the replacement bridge would be raised slightly to accommodate 100-year flows in Calabazas Creek and appropriate site distances along Old Mountain View-Alviso Road. Short retaining walls (less than four feet in height) would be provided along the edge of the roadway starting at each corner of the new bridge structure to accommodate the profile change and roadway widening.

Old Mountain View-Alviso Road would be widened on the City of Sunnyvale side of the bridge from the westerly end of the new bridge to Reamwood Avenue, a distance of approximately 0.1 miles. The widened roadway would include the construction of sidewalks and will match the width of the new bridge. This work would require the removal of two eucalyptus trees from property on the north side of Old Mountain View-Alviso Road near Reamwood Avenue. Replacement trees will be planted as part of the project. The project has been designed to avoid the removal of trees along the south side of Old Mountain View-Alviso Road.

The existing roadway on the City of Santa Clara side of the bridge is wider than the proposed bridge width of 50-feet and consists of two 12-foot lanes, one 12-foot center turn lane, two six-foot bike lanes, and two five-foot sidewalks. Therefore, no roadway widening would be needed on the Santa Clara side. However, minor improvements would be necessary to accommodate the re-profiling. None of the proposed work on Old Mountain View-Alviso Road would result in the relocation of the existing driveways that serve the surrounding businesses.

2.3.3 Improvements to the Surrounding Trail/Maintenance Paths

The widening and profile change of Old Mountain View-Alviso Road would necessitate minor modifications to the existing Calabazas Creek Trail and the SCVWD's maintenance paths. Modifications would consist of shifting the conform location of the trails to clear the new longer bridge structure, and reconstruction of a portion of the existing floodwalls to match the new bridge structure.

2.3.4 Construction Schedule and Equipment

In order to minimize the duration of construction, as well as to reduce the footprint of the project and its effects on Calabazas Creek, Old Mountain View-Alviso Road and the Calabazas Creek Trail would be closed to vehicular, bicycle and pedestrian traffic during demolition of the existing bridge and approach road, and construction of the new bridge and approach roadway. Specifically, Old Mountain View-Alviso Road would be closed to thru traffic between Reamwood Avenue on the west and Patrick Henry Drive on the east. Traffic would be detoured

to Tasman Drive via Reamwood Avenue and Patrick Henry Drive. The Calabazas Creek Trail would be closed between Tasman Drive on the south and SR 237 on the north. Trail users would be detoured along the surrounding surface streets similar to vehicular and bicycle traffic. The detour would include Patrick Henry Drive, Tasman Drive and Reamwood Avenue. Appropriate detour signage would be provided.

It is anticipated that the road and trail closure would extend for approximately two to three months during bridge construction. Trail closure would extend for another one to two months after the roadway is reopened to vehicular traffic.

Bridge piers and abutments would be constructed using driven steel pipe piles to facilitate top down construction and minimize work within the creek banks. The depth of drilling/excavation for the piles would be approximately 40-50 feet. Retaining walls would be supported on shallow spread footings to minimize encroachment into the creek. Precast elements would be utilized for the superstructure, abutments and bent caps to reduce construction time and road closure durations. Depth of excavation for retaining walls would vary between approximately two to four feet and excavation for roadway widening and sidewalk construction would extend to a depth of approximately two feet.

Construction activities would be conditioned such that work within the banks of the creek channel - including demolition of the existing bridge and construction of new abutments, piers, superstructure, retaining walls, floodwalls and reconstruction of existing slope paving - would be scheduled during the dry season (i.e., June 15th to October 15th). Work within the low-flow channel, including any necessary dewatering, would also be restricted to June 15th to October 15th. Temporary diversion of the creek channel low-flows between existing piers 2 and 4 would be required for demolition of the existing bridge and construction of the new bridge.

Construction of the proposed project facilities is expected to commence in spring 2017. Construction work would typically be done within normal City working hours, weekdays between the hours of 7:00 AM and 6:00 PM., and possibly Saturdays between 8:00 AM and 5:00 PM. Typically there would be no construction activity on Sundays or national holidays when City offices are closed.

Construction equipment used for the proposed project would likely include, but is not limited to, scrapers, bulldozers, backhoe loaders, concrete trucks, cranes, pile driving equipment and asphalt/paving/concrete equipment.

2.3.5 Staging Areas and Access

Staging areas for construction equipment and other materials would be at locations along Old Mountain View-Alviso Road that would minimize hauling distances and long-term disruption. The proposed staging areas for the construction materials and equipment would be located on the paved SCVWD's maintenance access paths that pass under the bridge (unpaved SCVWD access paths would not be used as staging areas). The City would review and approve any other designated areas within the project area proposed by the contractor for staging.

Access for the bridge structure would be provided via the Calabazas Creek Trail and the SCVWD's maintenance paths adjacent to the project site.

2.3.6 Easements

Construction of the project would require temporary construction easements from a number of parcels located along Old Mountain View-Alviso Road to the west and east of the bridge. The easements would allow for construction of sidewalks and retaining walls, utility relocations, and other construction activities to support the project. The parcels from which easements would be required are listed in Table 1.

Table 1 Parcels From Which Easements Will Be Required

Assessor's Parcel Number	Site Address
104-52-024	5450 Bayfront Plaza, Santa Clara
104-50-016	5440 Patrick Henry Drive, Santa Clara
104-02-123	1293 Old Mountain View-Alviso Rd, Sunnyvale
104-02-124	1283 Old Mountain View-Alviso Rd, Sunnyvale
104-31-037	1296 Reamwood Avenue, Sunnyvale
104-31-062	1290 Reamwood Avenue, Sunnyvale
104-31-063	1290 Reamwood Avenue, Sunnyvale

None of the easements would affect buildings or parking facilities on the parcels.

2.4 APPROVALS REQUIRED

The project would require the following approvals and discretionary actions by the City of Sunnyvale (CEQA Lead Agency) and City of Santa Clara (CEQA Responsible Agency):

- Adoption of the Initial Study/Mitigated Negative Declaration
- Adoption of the Mitigation Monitoring and Reporting Program
- Project approval

Based on the project description, the following agency permits are anticipated to be necessary:

- U.S. Army Corps of Engineers (Corps) Section 404 Nationwide Permit
- Regional Water Quality Control Board (RWQCB) Section 401 Water Quality Certification
- California Department of Fish and Wildlife (CDFW) Streambed Alteration Permit 1601
- SCVWD Encroachment Permit for Construction

3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED AND CITY'S MITIGATION DETERMINATION

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

DETERMINATION:

On the basis of this Initial Study:

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

Signature	Date 03/18/16
Printed Name HUMZA JAVED	

4.0 ENVIRONMENTAL CHECKLIST, DISCUSSION, AND MITIGATION MEASURES

4.1 AESTHETICS

AESTHETICS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒	1-3
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐	1-4
3) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐	1-3
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒	1-3

Discussion

1) *Have a substantial adverse effect on a scenic vista?* **[No Impact]**

The project will replace an existing bridge with a new bridge of similar scale and function at the same location. The project includes slight increases in the roadway profile to accommodate 100-year flows in Calabazas Creek and to provide appropriate sight distances along Old Mountain View-Alviso Road. There are no scenic vistas in the vicinity of the site that could be affected by this slight increase in the roadway profile.

2) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?* **[Less Than Significant Impact]**

The project is not located within a state scenic highway and construction of the new bridge would not affect any historic buildings. Only three trees, a red willow adjacent to the southwest corner of the bridge and two eucalyptus trees on the north side of the roadway west of the bridge, would be removed by the project. No other scenic resources would be affected

by the project. Based on the minimal impacts to trees and other natural resources, the proposed bridge replacement would not result in substantial damage to scenic resources.

3) *Substantially degrade the existing visual character or quality of the site and its surroundings?* **[Less Than Significant Impact]**

The project area is a developed urban environment characterized by 1-4 story office and light industrial buildings as well as parking structures, landscape trees, utility lines, and the nearby SR 237. Calabazas Creek is a noticeable feature in the area owing both to the vegetation along the creek as well as to the fact that the creek inherently provides a 150-foot wide strip of open space in an otherwise developed urban environment. Connecting the office/industrial areas of northern Sunnyvale and Santa Clara, which are divided by Calabazas Creek, is the Old Mountain View – Alviso Road Bridge: a nondescript two-lane concrete vehicle bridge with no sidewalks or shoulders. The existing bridge is shown in Photo 1 below.

Photo 2: Westward View of Existing Bridge From Old Mountain View-Alviso Road

The proposed bridge would be similar in color, style, and materials to the current bridge. As shown in Photo 2 below, the proposed bridge will be constructed with grey concrete similar to the current bridge. Architectural treatments will be included along the barriers and bent structures, neither of which will be substantially greater in scale than the existing bridge.

Construction of a replacement bridge at this location would not have any effect on the visual character of the project area. Impacts to vegetation in Calabazas Creek would be for the most part temporary, and minimal permanent impacts would be mitigated as described in *Chapter 4.4, Biological Resources*. Therefore, the proposed project would not have a substantial impact to the visual quality of the project area.

Photo 3: Visual Simulation of the Proposed Old Mountain View – Alviso Road Bridge

4) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?* **[No Impact]**

The project will not create any new source(s) of light or glare. The proposed bridge is wider and longer than the existing structure, but those elements of the design would not affect light or glare.

References

California Department of Transportation (Caltrans). *Scenic Highway Program.* Accessed January 17, 2016. Available at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/scenic_hwy.htm

4.2 AGRICULTURAL AND FORESTRY RESOURCES

AGRICULTURAL RESOURCES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) 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?	☐	☐	☐	☒	5
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	1,6
3) 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 Codes section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒	6
4) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒	1
5) 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?	☐	☐	☐	☒	1

Discussion

1-5) *See above.* **[No Impact]**

The project site is not designated as agricultural lands in any applicable plan or policy. The Santa Clara County Important Farmlands Map (2012) depicts that there is no Farmland of Statewide Importance within the project area. The proposed bridge replacement would not result in or induce the conversion of farmland or forest land to non-agricultural or non-forest

uses. For these reasons, the proposed project would not result in a loss of agricultural or forestry land, or in impacts to agricultural or forestry resources.

References

City of Santa Clara. *Zoning Ordinance*

City of Sunnyvale. *Zoning Ordinance.*

California Department of Conservation, Division of Land Resource Protection. *Santa Clara County Important Farmland 2012*. Map. August 2014.

4.3 AIR QUALITY

AIR QUALITY					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒	1,7
2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐	1,8
3) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?	☐	☐	☐	☒	1,8
4) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒	1
5) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐	1

Discussion

1) *Conflict with or obstruct implementation of the applicable air quality plan*? **[No Impact]**

No air quality plans are directly applicable to this project as it is limited to the replacement of an existing bridge with a new bridge of similar capacity and function at the same location. In operation, the proposed bridge would not be a source of air emissions.

2) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?* **[Less than Significant Impact]**

Over the long-term (i.e., operational phase), the project would have no effect on air quality as it is limited to the replacement of an existing bridge with a new bridge of similar size and function. The number of vehicle trips in the area would not change if the project is implemented.

Construction activities associated with the proposed project would generate air pollution from the following construction activities: (1) site preparation; (2) construction workers traveling to and from the construction site; (3) delivery of construction supplies to the construction site and hauling of debris from the construction site; and (4) fuel combustion by on-site construction equipment. Demolition of the existing structure would also be a source of dust. These construction activities would create dust and exhaust emissions from equipment and vehicles. Coarse particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), and diesel exhaust would be the pollutants of greatest concern. Construction activities would temporarily affect local air quality, causing a temporary increase in particulate dust and other emissions.

The proposed project would include the following Best Management Practices for dust control, which are identified in the Bay Area Air Quality Management District's *CEQA Air Quality Guidelines*. These measures are considered standard for development projects in the City of Sunnyvale and are required as part of the project specifications.

Standard Measures:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day or covered.

- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

- All vehicle speeds on unpaved roads shall be limited to 15 mph.

- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage explaining this rule shall be provided for construction workers at all access points.

- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

- Post a publicly visible sign with the telephone number and name of an individual working for the construction contractor who can be contacted regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Implementation of these standard dust control measures would minimize the project's temporary air emissions. Construction of the proposed bridge would not violate any air quality standards.

3) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?* **[No Impact]**

As stated above, the project would not result in any long-term air quality impacts. Therefore, by definition, there would be no cumulative air quality effects.

4) *Expose sensitive receptors to substantial pollutant concentrations?* **[No Impact]**

The project area consists entirely of commercial offices and light industrial uses. There are no sensitive receptors within 1,000 feet of the site.

5) *Create objectionable odors affecting a substantial number of people?* **[Less than Significant Impact]**

Construction activities could produce occasional odors from diesel equipment exhaust. However, the construction of the proposed project would be of short duration and these potential odors are not expected to frequently or significantly affect local populations. Surrounding land uses are commercial offices with ventilation and climate control systems.

References

Bay Area Air Quality Management District (BAAQMD). *Bay Area 2010 Clean Air Plan.* September 15, 2010.

BAAQMD. *CEQA Air Quality Guidelines*. Updated May 2011 and 2012.

4.4 BIOLOGICAL RESOURCES

BIOLOGICAL RESOURCES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐	1,9
2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐	1,9
3) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐	1,9
4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?	☐	☒	☐	☐	1,9
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐	1,5

BIOLOGICAL RESOURCES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒	1-3

The analysis in this section is based in part on a Natural Environment Study prepared for the project by *H.T. Harvey & Associates* in June 2015. This report is attached as Appendix A of this Initial Study.

Discussion

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

Threatened and Endangered Species

A biological resource study was prepared to determine if the project would impact any threatened or endangered species. Reconnaissance surveys for special-status plants conducted in June and September 2014 found that none of the seven protected plant species with the potential to occur in the area are present on-site.

A number of special-status animal species occur within the site vicinity, but do not occur on the site because it lacks suitable habitat or is outside the range of the species. It is unlikely for special-status fish species to occur within this portion of Calabazas Creek due to the degraded water quality, the number of upstream fish barriers, and the lack of pools and good hiding cover. Nevertheless, there are no barriers to fish passage between the project area and the San Francisco Bay, so it is possible for a number of special-status species to occur on the site as foragers. Five special-status animal species could potentially occur within the site as visitors, including California Coast steelhead, Central Valley Fall-run Chinook salmon, North American green sturgeon, longfin smelt, and western pond turtle. Only one special-status species could potentially breed on the site, the San Francisco common yellowthroat.

Fish Passage

The new bridge has been designed with longer spans so that only two piers would be placed in tidal aquatic habitat within the creek, instead of the existing four piers which would be permanently removed, thus reducing the risk of constricted stream flows. The bridge deck would be elevated to accommodate the 50- and 100-year storm events, further reducing obstructions within the channel during high flows. The proposed project would not line the stream bed with concrete or other man-made materials or otherwise alter bed and bank roughness. This would help maintain the velocity of the stream under the bridge and allow the stream to adjust vertically in response to dynamic flow rates. The length of the stream channel that would be covered by the bridge is greater; however, the increased width of the new bridge would not introduce any new impediments to fish passage. Temporary impacts related to dewatering would be minor as these are scheduled to occur in the dry season, when fish passage is expected to be minimal. In operation, the proposed bridge would not cause new or more substantial impacts to fish or fish passage than the current bridge.

Construction Impacts

Construction of the bridge would occur during the dry season when water levels in Calabazas Creek are low. Although few impacts to fish are expected because of this seasonal restriction, construction of the proposed bridge could cause significant degradation of water quality from erosion and equipment spills. Pile driving the bridge pilings into the creek bed could also result in significant impacts to any fish found in the creek.

Impact BIO-1: Construction of the proposed bridge could cause significant impacts to fish and other special-status species that occupy aquatic and/or wetland habitats. **(Significant Impact)**

The proposed project would implement the following measures to reduce potential construction-related impacts to special-status species, including fish:

MM BIO-1.1: Dewatering or diversion and any other work requiring access within the low-flow channel shall occur during the dry season only (15 June to 15 October, with the potential for extensions beyond this period, in consultation with the California Department of Fish & Wildlife [CDFW] and the National Marine Fisheries Service [NMFS], if dry weather permits). During this time, creek flows are expected to be at annual lows and steelhead, salmon, sturgeon, and smelt are not expected to be present within the site.

MM BIO-1.2: If activities in a flowing stream are unavoidable, the work area shall be dewatered (e.g., using coffer dams), and any stream flow shall be diverted around the work area by a barrier, temporary culvert, or a new channel capable of permitting upstream and downstream fish movement. Construction of the barrier or the new channel shall begin in the downstream area and continue in an upstream direction, and the flow shall be diverted only when construction of the diversion is completed. This will occur at low tide, when water depth and volume within the diversion area will be minimal and the number of fish that may occur within the area to be dewatered will be very low (if any).

MM BIO-1.3: A qualified biologist shall be present during construction of the creek diversion and dewatering of the channel to ensure that impacts to fish are minimized.

MM BIO-1.4: During demolition and construction activities, netting and other structures shall be installed under the bridge to prevent debris from entering the channel, as such debris could degrade water quality and potentially injure fish.

MM BIO-1.5: To avoid and minimize impacts to fish resulting from pressure waves created during pile driving, the following measures will be implemented:

- Pile driving work shall be limited to the period 15 June to 15 October as described above.
- All pile driving within tidal aquatic or wetland habitat within the creek channel shall be done within a dewatered work area to reduce the acoustic impact area.
- At the start of pile driving activity each day, the contractor shall perform a "soft start" where a pile is initially struck softly several times, then gradually struck with greater force, to allow any fish in close proximity to the pile driving location to move far enough away that they will not be injured by pressure waves.

The above-described measures were reviewed by the NMFS. In a letter dated 11 January 2016, the NMFS concurred that the proposed project would not adversely affect special status fish species, a conclusion based in part on the implementation of these avoidance and minimization measures. Implementation of these measures would minimize construction impacts to any species that might be present in the area at the time of construction. In addition to the water quality measures described in response 2) below, these measures would reduce potential impacts to special-status species to less than significant levels.

Source: H.T. Harvey & Associates. Natural Environment Study, June 2015.

HABITAT IMPACTS MAP

FIGURE 5

2) *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 with Mitigation]**

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

As shown in Table 2 below, the proposed project would result in permanent and temporary impacts to approximately 0.10 acres of wetlands and 0.08 acres of tidal aquatic habitat. The project would also require removal of one red willow tree within the riparian corridor adjacent to the southwest corner of the existing bridge. Impacts to ruderal grassland, landscaped, and developed habitats are not considered significant because none of those habitat types provide substantial biological value and they are abundant regionally.

Table 2 Permanent and Temporary Habitat Impacts

Habitat Type	Temporary Impact (acres)	Permanent Impact (acres)	Total (acres)
Coastal Brackish Marsh Wetland	0.08	0.02	0.10
Tidal Aquatic	0.08	<0.01*	0.08
Ruderal Grassland	0.39	0.16	0.55
Landscaped	0.86	0.31	1.18
Developed	1.99	0.27	2.26
Total	**3.33**	**0.84**	**4.17**

***This does not reflect the benefit associated with the removal of 260 square feet of hardscape from aquatic and wetland habitat. See text for details.

The proposed project would result in less than 0.01 acres (153 square feet) of permanent impacts to tidal aquatic habitat, but would remove 260 square feet of hardscape from the aquatic and wetland habitat under the existing bridge. In effect, the project would result in a long-term increase in tidal aquatic habitat.

Permanent impacts to approximately 0.02 acres of coastal brackish marsh wetland habitat would also occur due to the installation of new bridge supports. From a biological perspective, the permanent impacts to the aquatic and wetland habitats located along the existing bridge are not expected to substantially impact the functions or values of this portion of Calabazas Creek. Not only is the disturbance area relatively small, but the impacted area represents a very small fraction of these habitats within the total watershed. Furthermore, the proposed project would also remove four existing bridge supports from the channel, replacing them with

two sets of bridge supports that would be located outside of the low-flow portion of the channel. This would ultimately reduce the amount of hardscape and structures contributing to constricted or obstructed flows within the channel in the site.

Temporary impacts to tidal aquatic and coastal brackish marsh wetland habitat would occur because of the temporary dewatering and temporary construction-related access required within the channel. All fills placed to set up the dewatering system (e.g. cofferdams, etc.), would be temporary in nature, and would only be placed between 15 June and 15 October, and would be fully removed from the channel within one season. Aquatic and wetland habitat similar to the existing habitat is expected to rapidly re-establish after the dewatering measures are removed and water is returned to the area around the columns and within the work area.

Water quality within the creek also has the potential to be impacted during construction through erosion from upland staging areas, and from improper dewatering in work areas.

Impact BIO-2: Replacement of the existing bridge would result in permanent and temporary impacts to coastal brackish marsh wetland and tidal aquatic habitat. Construction also has potential to impact water quality within Calabazas Creek. **(Significant Impact)**

The project applicant intends to implement construction site best management practices, including temporary soil stabilization and sediment control, non-stormwater management, and waste management. In addition, the following measures would be implemented to compensate for, avoid, and minimize impacts to sensitive habitats:

MM BIO-2.1: Permanent impacts to aquatic and coastal brackish marsh wetland habitat shall be compensated at a 3:1 ratio by entering into a purchase agreement for mitigation bank credits at the San Francisco Bay Wetland Mitigation Bank. The project has already been approved for inclusion in the service area of the bank.

MM BIO-2.2: Construction equipment shall not be operated in the live stream channel.

MM BIO-2.3: Standard erosion control and slope stabilization measures shall be required for work performed in any area where erosion could lead to sedimentation of a waterbody.

MM BIO-2.4: Silt fencing shall be installed between any activities conducted within the banks of the creek, or just above the edge of top-of-bank, to prevent dirt or other materials from entering the channel.

MM BIO-2.5: No debris, soil, silt, sand, bark, slash, sawdust, cement, concrete, washings, petroleum products or other organic or earthen material shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into Waters of the U.S. and State.

MM BIO-2.6: Machinery shall be refueled at least 60 feet from any aquatic or wetland habitat, and a spill prevention and response plan shall be implemented.

MM BIO-2.7: Water from dewatering of the work areas shall not be pumped or allowed to flow into the creek until the water is clear. The method shall be the responsibility of the contractor but shall be a standard practice such as using sediment basins outside of the channel or portable settling bins, and must successfully filter the water until clear.

MM BIO-2.8: Post-construction Best Management Practices (BMPs) shall be implemented as necessary to prevent a long-term increase in runoff, as well as to prevent hydrological modification of Calabazas Creek as required by the regulatory permits obtained by the project applicant. All post-construction BMPs shall be implemented and functioning prior to completion of the proposed project. The type and design of all BMPs shall conform to Provision C.3 of the Municipal Regional Stormwater Permit (Order No. R2-2009-0074) for the San Francisco Bay Area.

Implementation of these mitigation measures would compensate for the permanent loss of wetland and aquatic habitats, and would minimize temporary impacts to sensitive habitats and water quality. With inclusion of these measures, the proposed project would not result in significant impacts to sensitive habitats.

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

As detailed in Response 1) above, the proposed project would not line the stream bed with concrete or other man-made materials or otherwise alter bed and bank roughness. This would help maintain the velocity of the stream under the bridge and allow the stream to adjust vertically in response to dynamic flow rates. The length of the stream channel that would be covered by the bridge is greater; however, the increased width of the new bridge would not introduce any new impediments to fish passage. In operation, the proposed bridge would not cause new or more substantial impacts to fish passage than the current bridge.

The Migratory Bird Treaty Act and California Fish and Game Code protect migratory birds, including their eggs, nests, and young. The project site offers suitable breeding habitat for one special-status bird species, the San Francisco common yellowthroat. In addition, other birds that are not special-status species could occur on the site. Demolition of the existing bridge and construction of the new bridge could impact migratory and nesting birds. Operation of the new bridge would not result in new or greater long-term impacts than the existing bridge does.

Impact BIO-3: Demolition of the existing bridge and construction of the new bridge could impact migratory and nesting birds, resulting in violations of the Migratory Bird Treaty Act and/or the California Fish and Game Code. **(Significant Impact)**

The following mitigation measures would be implemented to address potential impacts to migratory and nesting birds:

MM BIO-3.1: If feasible, proposed project activities shall be scheduled to avoid the avian nesting season. If such activities are scheduled to take place outside the nesting season, all impacts on nesting birds, including raptors, protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code, would be avoided. The nesting season for most birds in Santa Clara County typically extends from 1 February through 31 August, although in most years a majority of birds have finished nesting by 1 August.

MM BIO-3.2: If proposed project activities will not be initiated until after the start of the nesting season, potential nesting substrate (e.g., bushes, trees, grasses, and other vegetation) that is scheduled to be removed by the proposed project, if any, may be removed prior to the start of the nesting season (e.g., prior to 1 February) to reduce the potential for initiation of nests. If it is not feasible to schedule vegetation removal during the nonbreeding season, or where vegetation cannot be removed (e.g., in areas immediately adjacent to the site), then pre-construction surveys for nesting birds shall be conducted as described below. It is not recommended to remove sensitive and/or regulated wetland vegetation prior to construction, because of the potential water quality impacts such activities could enact.

MM BIO-3.3: If it is not possible to schedule proposed project activities between 1 September and 1 February, then pre-construction surveys for nesting birds shall be conducted by a qualified biologist to ensure that no nests will be disturbed during proposed project implementation. These surveys

shall be conducted no more than 48 hours prior to the initiation of proposed project activities. During this survey, a qualified biologist shall inspect all potential nesting habitats (e.g., trees, shrubs, grasslands, and structures) within 300 feet of impact areas for raptor nests and within 100 feet of impact areas for nests of non-raptors.

MM BIO-3.4: If an active nest (i.e., a nest with eggs or young, or any completed raptor nest attended by adults) is found sufficiently close to work areas to be disturbed by these activities, the biologist, in consultation with CDFW, shall determine the extent of a disturbance-free buffer zone to be established around the nest (typically 300 feet for raptors and 50-100 feet for other species), to ensure that no nests of species protected by the MBTA and California Fish and Game Code will be disturbed during proposed project implementation. Because the majority of the site is already subject to disturbance by vehicles and pedestrians, activities that will be prohibited from occurring within the buffer zone around a nest will be determined on a case-by-case basis. In general, activities prohibited within such a buffer while a nest is active will be limited to new construction-related activities (i.e., activities that were not ongoing when the nest was constructed) involving significantly greater noise, human presence, or vibrations than were present prior to nest initiation.

MM BIO-3.5: If necessary to avoid impacts to active nests (i.e., nests containing eggs or young), nest starts may be removed on a regular basis (e.g., every second or third day), starting in late January or early February, or measures such as exclusion netting or slippery panels may be placed over nesting sites on the existing bridges to prevent active nests from becoming established. Any netting installed for nest deterrence shall be installed appropriately by an experienced deterrence technician, under the supervision of a qualified biologist, and shall be inspected and maintained regularly to avoid the entrapment or entanglement of birds.

These measures would ensure that construction of the project would not result in significant impacts to nesting or migratory birds.

5) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?* **[Less Than Significant Impact]**

Only one willow tree and two eucalyptus trees would be removed by the project. The trees are located in the City of Sunnyvale and are not large enough to be considered protected trees by

the City of Sunnyvale Tree Ordinance. Therefore the proposed project would not conflict with any local tree preservation ordinances.

6) *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]**

The project site is not located within the boundaries of an adopted habitat conservation plan. The Cities of Sunnyvale and Santa Clara are not participating entities in the Santa Clara Valley Habitat Plan, which applies to development within the City of San José and unincorporated Santa Clara County, among other places.

References

H.T. Harvey & Associates. *Natural Environment Study, Old Mountain View – Alviso Road Bridge Over Calabazas Creek (Existing Bridge No. 37C-0254, Federal Aid No: BRLS-5213 (040).* June 2015.

National Marine Fisheries Service. *Endangered Species Act Section 7 Concurrence Letter for the Old Mountain View-Alviso Road Bridge Replacement Project, Federal Aid Project No. BRHLS-5213(040).* January 11, 2016.

4.5 CULTURAL RESOURCES

CULTURAL RESOURCES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5?	☐	☐	☐	☒	10
2) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	☐	☐	☒	☐	10
3) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	☐	☐	☒	☐	10
4) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐	1,10

This section is based in part on a Historic Property Survey Report (HPSR) and Archaeological Survey Report (ASR) prepared for the project by *Holman & Associates, Inc.* in January 2015. These reports are available for review by qualified personnel at the City of Sunnyvale Public Works Department.

Discussion

1) *Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5?* **[No Impact]**

Based on cultural resources studies completed in compliance with Section 106 of the National Historic Preservation Act (i.e. the above-described HPSR and ASR), the existing bridge was constructed in the mid-1960s and is considered "Category 5", meaning it does not meet any of the criteria for National Register or California Register eligibility.

The proposed project would require permanent and temporary easements from several commercial office properties surrounding the project site. All of the buildings on these properties are less than 50 years old, and based on a review by a qualified architectural historian, were found not to be potentially historic resources.

2) *Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?* **[Less than Significant Impact]**

An archaeological records search completed at the Northwest Information Center at Sonoma State University found no records of archaeological sites within the project limits. An archaeological field survey of the site found no indications of buried artifacts, midden, or other subsurface deposits. The current channelized alignment of Calabazas Creek was created between 1876 and 1899. Originally the creek flowed into Campbell Creek well south of the current location. Based on this information, there is a low likelihood of encountering archaeological materials on the project site.

While it is not likely that there are archaeological deposits present on the project site, there is always the possibility that construction and excavation may uncover buried cultural materials or human remains. The project, therefore, includes the following standard construction measures to avoid potential impacts to unknown subsurface archaeological or prehistoric resources.

Standard Measures:

- In the event that construction unearths any archaeological site indicators (as described below), work shall be halted within 200 feet of the discovery until a qualified archaeologist has been retained to inspect it. If the project archaeologist determines that a potentially significant resource will be impacted by additional activities, a plan for evaluative testing shall be submitted to the City of Sunnyvale Public Works Department.

- If testing (normally limited hand excavation) demonstrates that the resource is eligible, a plan for mitigation of impacts shall be submitted to the Sunnyvale Public Works Department for approval before work can recommence inside the zone described as archaeologically-sensitive. Mitigation can include limited data retrieval through additional hand excavation coupled with archaeological monitoring of soils removal from the zone of archaeological sensitivity in order to insure that significant archaeological materials and data are retrieved for analysis. If any indicators found are of Native American origin, the Native American Heritage Commission (NAHC) shall be contacted.

- In the event that human remains are encountered, work shall be stopped within a zone around the discovery determined by the project archaeologist until the Santa Clara County Coroner's Office and the NAHC have been contacted. It is the responsibility of the NAHC to name a Most Likely Descendant, who will be responsible for advising the project sponsor regarding the method of exposure, removal and reburial of any human remains and/or associated grave goods discovered during construction. (Pursuant to

Section 7050.5 of the Health and Safety Code and Section 5097.94 of the Public Resources Code of the State of California).

These measures will be implemented during construction if needed. However, as stated previously, there is a low probability that archaeological resources would be encountered, therefore the proposed project would result in a less than significant impact to archaeological resources.

3) *Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?* **[Less Than Significant Impact]**

The measures included as part of the project and described in response 2) above would ensure that no unknown paleontological resources are destroyed by the proposed project.

4) *Disturb any human remains, including those interred outside of formal cemeteries?* **[Less than Significant]**

Consultation with members of Native American tribes with tribal boundaries in the area was undertaken as part of the Section 106 compliance process. None of the eleven individuals/organizations contacted expressed concerns about the project. Implementation of the avoidance measures described in measures in response 2) above would avoid the potential for the project to cause significant impacts to Native American resources.

References

City of Sunnyvale. *City of Sunnyvale General Plan, Community Vision Chapter.* Consolidated in 2011.

Holman & Associates. *Historic Property Survey Report, BHLS-5213(040)*. March 30, 2015.

Holman & Associates. *ASR Short Form for Local Assistance Projects, BHLS-5213(040)*. March 30, 2015.

4.6 GEOLOGY, SOILS, AND SEISMICITY

GEOLOGY, SOILS, and SEISMICITY					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
a) Rupture of a known earthquake fault, as described 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.)	☐	☐	☐	☒	11,12
b) Strong seismic ground shaking?	☐	☐	☐	☒	11,12
c) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐	12
d) Landslides?	☐	☐	☐	☒	1,12
2) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐	1
3) 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?	☐	☐	☒	☐	1,12
4) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐	1
5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒	1

Discussion

1a) *Rupture of a known earthquake fault, as described 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/Beneficial Impact]**

The project site is not located in an Alquist-Priolo Earthquake Fault Zone, however it is located approximately six miles west of a mapped fault zone for the southeast extension of the Hayward Fault.[1] There is an existing bridge on the site that was constructed in the mid-1960s. The existing bridge, which does not meet current seismic safety design criteria, would be replaced with a new bridge in the same location. The proposed bridge would be constructed using modern engineering techniques and meeting the most recent building codes. Therefore the proposed project would reduce the potential hazards from fault rupture at the project site.

1b) *Strong seismic ground shaking?* **[No Impact/Beneficial Impact]**

As with the existing bridge, the proposed replacement bridge could be subject to ground shaking during a seismic event. The proposed bridge will reduce hazards associated with seismic activity on the project site, as described above. Therefore the proposed project would reduce the potential for ground shaking hazards.

1c) *Seismic-related ground failure, including liquefaction?* **[Less than Significant]**

The project site is located in a liquefaction hazard zone, as identified by the County of Santa Clara.[2] The proposed bridge replacement would be constructed consistent with a design-specific geotechnical report and Caltrans Seismic Design Criteria to ensure that the project is designed to account for any potentially liquefiable soils that might be found on-site. Therefore the project would not expose people or structures to hazards from seismic-related ground failure.

1d) *Landslides?* **[No Impact]**

The project site is located outside of the Santa Clara County Geologic Hazard Zones for landslides. In addition, the project area is relatively level. Therefore, the proposed project would not expose people or structures to landslide hazards.

[1] State of California, The Resources Agency, Department of Conservation. *Special Studies Zones – Milpitas Quadrangle, California, 7.5 Minute Series.* Effective January 1, 1982. Available at: http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm

[2] County of Santa Clara. *Geologic Hazard Zones*. October 26, 2012. Map. Page 11. Available at: https://www.sccgov.org/sites/dpd/PlansOrdinances/GeoHazards/Pages/GeoMaps.aspx

2) *Result in substantial soil erosion or the loss of topsoil?* **[Less than Significant Impact]**

The proposed bridge replacement would require demolition of the existing bridge and grading to prepare the site for the proposed replacement bridge. During implementation of the project, best management practices would be implemented to reduce soil erosion and water quality impacts, as discussed in *Section 4.4, Biological Resources* and *Section 4.9, Hydrology and Water Quality* of this Initial Study. Following construction, no erosion or loss of topsoil would be anticipated. Temporary impacts that would be avoided through implementation of runoff prevention measures would be less than significant.

3) *Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse*? **[Less than Significant Impact]**

Due to the presence of open faces and the proximity of the site to the multiple fault lines, including the southeast extension of the Hayward Fault, the project site could be susceptible to liquefaction, lateral spreading, or other geologic hazards during a seismic event. The proposed bridge replacement would be constructed in accordance with the recommendations of a design-specific geotechnical report and Caltrans Seismic Design Criteria to ensure that the project is designed to account for any potential soil-related hazards that might be found on-site. Therefore, the project would not expose people or structures to hazards from ground failure.

4) *Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property?* **[Less than Significant Impact]**

The proposed bridge replacement would be constructed in accordance with the recommendations of a design-specific geotechnical report and Caltrans Seismic Design Criteria to ensure that the project is designed to account for any potential soil-related hazards that might be found on-site. Therefore the project would not create a substantial risk associated with expansive soils.

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

No septic tanks or wastewater disposal systems are included in the project.

References

State of California, The Resources Agency, Department of Conservation. *Special Studies Zones – Milpitas Quadrangle, California, 7.5 Minute Series.* Effective January 1, 1982. Available at: http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm

County of Santa Clara. *Geologic Hazard Zones*. October 26, 2012. Map. Page 11. Available at: https://www.sccgov.org/sites/dpd/PlansOrdinances/GeoHazards/Pages/GeoMaps.aspx

4.7 GREENHOUSE GAS EMISSIONS

GREENHOUSE GAS EMISSIONS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐	1,2
2) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒	1-3, 18

Discussion

1) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?* **[Less than Significant Impact]**

The proposed project is the replacement of an existing bridge with a new bridge of equal capacity, and would not increase greenhouse gas (GHG) emissions in operation. Equipment used for demolition of the existing bridge and construction of the new bridge would release GHG emissions, as would production of materials required for the construction process including bridge supports, asphalt and coatings, and steel rebar. The proposed project is expected to be constructed in roughly four months or less, therefore GHG emissions would be temporary and would be negligible compared to the scale and volume of global GHG emissions. The project would not result in a significant impact to the global climate.

2) *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?* **[No Impact]**

The proposed project would not increase GHG emissions in operation. The project includes standard measures to reduce air quality impacts (see *Section 4.3, Air Quality*) that minimize idling times and require maintenance of equipment per manufacturer specifications. This is consistent with action items OR-2.1 and OR-2.2 from the City of Sunnyvale's Climate Action Plan.

Measure 5.2 from the City of Santa Clara Climate Action Plan requires construction projects to comply with Bay Area Air Quality Management District Best Management Practices, including

those requiring use of alternatively-fueled vehicles and equipment. This measure requires that 30 percent of construction equipment switch from conventional technologies to hybrid, compressed natural gas, electric, or biodiesel. As detailed in *Section 4.3, Air Quality*, the project would implement standard dust and emission controls during construction. The project bid package would require the contractor to use construction equipment consistent with Measure 5.2 of the Santa Clara Climate Action Plan.

The proposed project would be consistent with the Sunnyvale and Santa Clara Climate Action Plans, therefore it would not conflict with existing plans and policies.

References

City of Santa Clara. *Climate Action Plan*. Adopted December 3, 2013. Available at: http://www.santaclaraca.gov/government/departments/planning-inspection/planning-division/general-plan

City of Sunnyvale. *Climate Action Plan*. Adopted May 20, 2014. Available at: http://www.pmcworld.com/client/sunnyvale/index.html

4.8 HAZARDS AND HAZARDOUS MATERIALS

HAZARDS AND HAZARDOUS MATERIALS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒	1
2) 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?	☐	☒	☐	☐	1,13
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒	1
4) 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?	☐	☐	☐	☒	13
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒	1
6) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒	1

HAZARDS AND HAZARDOUS MATERIALS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
7) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐	1
8) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒	1

This discussion is based in part upon an Initial Site Assessment (ISA) prepared for the project by *Parikh Consultants, Inc.* in January 2015. This report is provided in Appendix B of this Initial Study.

Discussion

1) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?* **[No Impact]**

The proposed bridge replacement would not involve the routine transport, use, or disposal of hazardous materials.

2) *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 with Mitigation]**

Soil Contamination

Based on the ISA, there is a strong potential for the presence of aerially deposited lead in the surface soils surrounding the bridge. This potential is associated with leaded gasoline that was in use from the 1940s through 1990s. In addition, historical use of pesticides and herbicides in the region gives the soils potential to contain residual contamination. The ISA found that these soils could contain elevated levels of arsenic since older herbicides included arsenic compounds. Disturbance of these soils during construction could pose a significant health risk to construction workers.

Impact HAZ-1: Construction of the proposed bridge could result in the accidental release of contaminants in soils surrounding the bridge, including lead, pesticides, herbicides, and arsenic. If present in high enough concentrations, these contaminants could pose significant health risks to construction workers. **(Significant Impact)**

The project would implement the following mitigation measures in order to reduce the potential for health hazards to construction workers:

MM HAZ-1.1: Prior to construction, a soil investigation shall be conducted by a qualified professional to assess the potential presence and extent of agricultural pesticides in the site's shallow soils. Testing shall be completed to provide adequate vertical and lateral characterization, and shall conform to State and local guidelines and regulations. Results of the soil investigation shall be submitted to the Public Works Departments of the Cities of Sunnyvale and Santa Clara. If lead, pesticide, herbicide, and/or arsenic concentrations are below regulatory screening levels for commercial/industrial development and for construction worker health, then no further action would be needed.

MM HAZ-1.2: If contaminant concentrations are identified above commercial/industrial and construction worker screening levels, then a soil management plan (SMP) shall be developed that identifies management practices for characterizing the impacted soil that may be encountered during site development activities. The SMP shall be reviewed and approved by the Cities of Sunnyvale and Santa Clara prior to construction, and included in the construction bid package to ensure implementation by the contractor. The SMP shall include the following elements:

- Procedures for transporting and disposing the waste material generated during removal activities.
- Procedures for stockpiling soil on-site.
- Provisions for collecting additional soil samples in previously inaccessible areas to confirm the extent of soil contamination, following demolition activities.
- Confirmation soil sampling to verify achievement of remediation goals.
- Procedures to ensure that fill and cap materials are verified as clean.

- Truck routes, and/or staging and loading procedures and record keeping requirements.

MM HAZ-1.3: In addition, if contaminant concentrations are identified above commercial/industrial and construction worker screening levels, a health and safety plan (HSP) shall be prepared to provide general health and safety guidance such that construction activities can be conducted in a safe manner. The HSP shall be reviewed and approved by both Cities prior to construction, and included in the construction bid package to ensure implementation by the contractor. The construction contractor shall be responsible for the health and safety of their employees during construction activities, and this HSP shall be kept on-site during all construction activities. The contractors must verify that all on-site personnel are qualified, trained, and prepared to implement the HSP and safely perform the planned site work. Field personnel will be required to indicate in writing that they have read and understand the provisions of the HSP.

A project-specific training program shall also be instituted prior to site work. Attendees at meetings shall be documented by signature. The project-specific training shall include a discussion of the following:

- The health effects (acute and chronic) of the chemical and physical hazards that may be encountered at the project.
- Proper control measures for the chemical and physical hazards that may be encountered.
- The importance of dust control at the site.
- Proper personal hygiene procedures.
- Dust removal on equipment and personnel.
- Emergency procedures.
- Proper management of impacted soil.

Implementation of these measures would avoid the potential for health impacts to construction workers from disturbance of soils potentially contaminated with residual agricultural pesticides.

Asbestos-Containing Materials

The current bridge was built in the 1960s and may contain bearing pads. Based on the age of the bridge, these bearing pads have the potential to contain asbestos. Disturbance of asbestos-containing materials during construction would pose a health risk to construction workers.

Impact HAZ-2: The bridge building pads may contain asbestos which, if disturbed, could pose a health risk to construction workers. **(Significant Impact)**

To avoid the risk of accidentally disturbing asbestos-containing materials, the project would implement the following mitigation:

MM HAZ-2.1: To determine the presence of asbestos-containing materials, a visual inspection/pre-demolition survey and, if needed, sampling, shall be conducted by a State Certified Asbestos Contractor prior to the demolition of the existing bridge.

MM HAZ-2.2: If asbestos is detected, then the following measures shall be implemented:

- All potentially friable asbestos-containing materials shall be removed in accordance with local, state, and federal guidelines prior to building demolition or renovation that may disturb the materials. All demolition activities shall be undertaken in accordance with Cal/OSHA standards contained in Title 8 of the CCR, Section 1529, to protect workers from exposure to asbestos.
- A registered asbestos abatement contractor shall be retained to remove and dispose of asbestos-containing materials identified in the asbestos survey performed for the site in accordance with the standards stated above.
- Materials containing more than one (1) percent asbestos are also subject to Bay Area Air Quality Management District (BAAQMD) regulations. Removal of materials containing more than one (1) percent asbestos shall be completed in accordance with BAAQMD requirements.

Implementation of these measures would reduce the potential for significant health risks to construction workers to a less than significant level.

3) *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]**

There are no schools located within a quarter mile of the project site. Because there are no schools within a quarter mile of the project site, the proposed project would not emit hazardous emissions or handle hazardous materials within the vicinity of a school.

4) *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]**

A review of agency databases and environmental records completed for the ISA found no sites with potential to negatively impact the project. The project site is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

5) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?* **[No Impact]**

The project site is not located within an airport land use plan or within two miles of a public airport.

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

There are no private airports within the vicinity of the project site.

7) *Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?* **[Less Than Significant]**

As detailed further in *Section 4.16, Transportation,* the proposed project would not impair long-term emergency vehicle access, and would provide incremental benefit by replacing the current bridge structure with a wider bridge. Detour routes would be provided during the temporary closure of Old Mountain View-Alviso Road. The project would have less than significant, short-term impacts to emergency vehicle access.

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

The project area is located in a low lying urban area away from hillsides. The proposed project area is not within or adjacent to any wildland areas and would not be exposed to wildland fires.

References

Parikh Consultants, Inc. *Phase I Initial Site Assessment, Old Mountain View-Alviso Road Bridge at Calabazas Creek, Bridge Replacement Project, City of Sunnyvale, Santa Clara County, California*. January 28, 2015.

4.9 HYDROLOGY AND WATER QUALITY

HYDROLOGY AND WATER QUALITY					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐	1-3
2) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒	14
3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site?	☐	☒	☐	☐	1-3
4) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site?	☐	☐	☐	☒	15
5) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐	1-3
6) Otherwise substantially degrade water quality?	☐	☐	☒	☐	1-3
7) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒	1

HYDROLOGY AND WATER QUALITY					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
8) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒	15
9) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒	1,15
10) Be subject to inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒	1

This section is based in part on a Location Hydraulic Study prepared for the project by *Schaaf & Wheeler* in March 2015. This report is included as Appendix C to this Initial Study.

Discussion

1) *Violate any water quality standards or waste discharge requirements?* **[Less than Significant with Mitigation]**

The proposed project is the replacement of an existing bridge over Calabazas Creek with a new three span bridge approximately 125 feet in length and 52 feet in width. Other elements of the project include slightly raising the grade of the roadway and modifying the approaches to conform to the new bridge structure. The new bridge will be supported by two piers and two precast concrete seated abutments supported on driven steel pipe piles.

Work within the creek channel would include demolition and removal of the existing bridge, pile driving for the new bridge supports, and construction of new bridge piers and bents. To accommodate the construction process, the project would require dewatering of Calabazas Creek during construction. All construction work within aquatic habitat would be limited to the dry season (June 15th to October 15th) so as to reduce the impacts from dewatering. This would minimize the volume of creek flows affected by the project.

Nevertheless, water quality within the creek could be impacted by erosion from upland staging areas and from improper dewatering in work areas during construction.

Impact HYD-1: Erosion and runoff during construction could impact the water quality of Calabazas Creek. **(Significant Impact)**

The proposed project would implement the following mitigation measures to protect water quality:

MM HYD-1.1: Implementation of the following measures shall be required of the contractor and incorporated into the construction bid package:

- Construction equipment shall not be operated in the live stream channel;
- Standard erosion control and slope stabilization measures shall be required for work performed in any area where erosion could lead to sedimentation of a waterbody;
- Silt fencing shall be installed between any activities conducted within the banks of the creek, or just above the edge of top-of-bank, to prevent dirt or other materials from entering the channel;
- Debris, soil, silt, sand, bark, slash, sawdust, cement, concrete, washings, petroleum products or other organic or earthen material shall not be allowed to enter into or be placed where it may be washed by rainfall or runoff into Waters of the U.S. and State;
- Machinery shall be refueled at least 60 feet from any aquatic or wetland habitat, and a spill prevention and response plan shall be implemented;
- Water from dewatering of the work areas shall not be pumped or allowed to flow into the creek until the water is clear. The method would be the responsibility of the contractor but would be a standard practice such as using sediment basins outside of the channel or portable settling bins. The method must successfully filter the water until clear; and,
- Post-construction Best Management Practices (BMPs) shall be implemented as necessary to prevent a long term increase in runoff, as well as to prevent hydrological modification of Calabazas Creek as required by the regulatory permits obtained by the project applicant. All post-construction BMPs shall be implemented and functioning prior to completion of the proposed project. The type and design of all BMPs shall conform to Provision C.3 of the Municipal Regional Stormwater Permit (Order No. R2-2009-0074) for the San Francisco Bay Area.

In addition, the project would be required to comply with the National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Activities (No. 2009-0009-DWQ)

administered by the San Francisco Regional Water Quality Control Board. Compliance with this permit would require filing a Notice of Intent (NOI) with the State Water Resources Control Board and preparation of a Stormwater Pollution Prevention Plan (SWPPP), which addresses measures that would be included in the project to control construction stormwater runoff. The mitigation measures detailed above are commonly included in SWPPPs.

The proposed project would comply with all applicable wastewater discharge requirements and would implement the above-described mitigation measures to protect water quality during construction. Seasonal avoidance (i.e. construction during the dry season) would also contribute to minimization of impacts to water quality. The project is required to obtain a Water Quality Certification (Section 401 permit) from the San Francisco Regional Water Quality Control Board prior to construction, which would ensure compliance with the federal and state Clean Water Acts. Therefore, the proposed project would not violate any water quality standards or wastewater discharge requirements.

2) *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?* **[No Impact]**

The project area is located within the Santa Clara Plain Confined area and does not contribute to groundwater recharge.[3] The proposed project is the replacement of an existing bridge and would not affect groundwater recharge or groundwater supplies.

3) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site?* **[Less Than Significant With Mitigation]**

The proposed project would not cause long-term alteration of the course of Calabazas Creek. Construction activities would take place within the riverbed during the dry season and would not increase long-term erosion and siltation. The project includes construction and post-construction measures to minimize erosion, which are detailed in *Section 4.4, Biological Resources* (**MM BIO-2.2** through **-2.8**) and in response 1) above. Implementation of these measures would reduce potentially significant construction erosion impacts to less than significant levels.

[3] Santa Clara Valley Water District. *2012 Groundwater Management Plan.* July 2012. Figure ES-2. Available at: http://www.valleywater.org/services/groundwater.aspx

4) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site?* **[No Impact/Beneficial Impact]**

Based on the Hydraulic Study completed for the project, the proposed bridge replacement would have no impact to water surface elevations in Calabazas Creek or the floodplain around Old Mountain View-Alviso Road. In fact, the Hydraulic Study concluded that the project would result in a slight improvement (decrease) in the base flood profile.

5) *Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?* **[Less Than Significant Impact]**

The proposed project would include an approximately 400 square foot biotreatment swale adjacent to the southerly edge of Old Mountain View – Alviso Road near Reamwood Avenue. The treatment area has been sized to comply with current National Pollutant Discharge Elimination System permit requirements. Such treatment would also be required by agency permit conditions (e.g. Section 401 Water Quality Certification from the Regional Water Quality Control Board). Construction activities would take place within the riverbed during the dry season and would implement measures to minimize polluted runoff. Therefore, the proposed project would not exceed the capacity of stormwater systems or substantially increase polluted runoff.

6) *Otherwise substantially degrade water quality?* **[Less than Significant Impact]**

Compared to the existing bridge and roadway, operation of the proposed bridge would not result in substantial changes to on-site water quality associated with stormwater runoff. Implementation of the stormwater runoff control measures would avoid substantial degradation of water quality.

7) *Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?* **[No Impact]**

Though the project site is within a flood zone, the proposed project is a bridge replacement and would not construct any housing in the floodplain.

8) *Place within a 100-year flood hazard area structures which would impede or redirect flood flows?* **[No Impact/Beneficial Impact]**

As detailed in the project Hydraulic Study, the proposed bridge replacement would slightly reduce the base flood profile in Calabazas Creek. This would provide incremental benefit by reducing the potential hazard posed by floods in the area.

9) *Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?* **[No Impact]**

The proposed project would improve the hydraulic conditions of the creek at this location and reduce the potential for flooding. Therefore the project would not result in any impacts relating to dam or levee failure.

10) *Be subject to inundation by seiche, tsunami, or mudflow?* **[No Impact]**

Calabazas Creek within the project limits is subject to tidal action from the San Francisco Bay, and thus may be affected in the event of a tsunami. This is the case in both the current and the project condition, and the proposed bridge replacement would not increase hazards associated with tsunami. The site is not vulnerable to seiche or mudflow.

References

Santa Clara Valley Water District. *2012 Groundwater Management Plan.* July 2012.

Schaaf & Wheeler. *Location Hydraulic Study, Old Mountain View-Alviso Road Bridge (Replace) at Calabazas Creek. Project No. BHLS-5213(040)*. March 17, 2015.

4.10 LAND USE

LAND USE	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Physically divide an established community?	☐	☐	☐	☒	1
2) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐	1-3
3) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒	16

Discussion

1) *Physically divide an established community?* **[No Impact]**

The proposed project is the replacement of an existing bridge and modification of an existing roadway. Implementation of the project would not physically divide an established community. Old Mountain View-Alviso Road would be closed temporarily during construction, as would the Calabazas Creek trail. Detour routes and signage are included in the project to ensure continued access during the four month construction process. The project would require easements from a number of nearby commercial properties (see Table 1 in *Section 2.0, Project Description*), but will neither affect existing improvements (e.g., parking or structures) or require business relocations.

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

The proposed project would replace the existing Old Mountain View-Alviso Road Bridge with a new bridge constructed in the same location. The project would include erosion control measures and would not impact the hydraulic capacity of the creek. All temporary and

permanent environmental impacts would be mitigated or avoided altogether. The proposed project would not conflict with any environmental plans or policies.

3) *Conflict with any applicable habitat conservation plan or natural community conservation plan?* **[No Impact]**

There are no applicable habitat conservation plans or natural community conservation plans affecting the project site. The site is mapped within the Expanded Study area and Permit Area for Burrowing Owl Conservation in the Santa Clara Valley Habitat Plan, but is not subject to that Habitat Plan.[4] The Cities of Sunnyvale and Santa Clara are not participating entities in the Habitat Plan.

References

County of Santa Clara, City of San José, City of Morgan Hill, City of Gilroy, Santa Clara Valley Water District, and Santa Clara Valley Transportation Authority. *Final Santa Clara Valley Habitat Plan.* August 2012. Available at: http://scv-habitatagency.org/

[4] County of Santa Clara, City of San José, City of Morgan Hill, City of Gilroy, Santa Clara Valley Water District, and Santa Clara Valley Transportation Authority. *Final Santa Clara Valley Habitat Plan.* August 2012. Figure 1-2. Available at: http://scv-habitatagency.org/

4.11 MINERAL RESOURCES

MINERAL RESOURCES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project: 1) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒	1-3
2) 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?	☐	☐	☐	☒	1-3

Discussion

1) *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?* **[No Impact]**

The proposed bridge replacement would be constructed in the same location as the existing bridge and would not impact any known mineral resources.

2) *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]**

The project would not make any mineral resources unavailable.

4.12 NOISE

NOISE					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project result in:					
1) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐	1-3
2) Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐	1-3
3) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒	1-3
4) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐	1-3
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	1-3
6) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	1-3

Discussion

1) *Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?* **[Less Than Significant With Mitigation]**

The proposed project would replace an existing bridge with a new bridge of equal capacity. Once operational, the new bridge and associated traffic would not generate any more noise or vibration than that generated by traffic on the existing bridge. Construction of the project, however, could result in significant temporary noise impacts to surrounding commercial uses.

Noise and vibration from project construction activities would be regulated by the City of Sunnyvale Municipal Code, the City of Santa Clara Municipal Code, and by the most recent Caltrans Standard Specifications. Section 14-8.02 of the 2010 Caltrans Standard Specifications states that noise levels generated during construction shall not exceed 86 dBA maximum noise level (L_{max}) at 50 feet from the job site from 9:00 PM to 6:00 AM, and that all equipment shall be fitted with adequate mufflers according to the manufacturers' specifications.

City of Sunnyvale Municipal Code Section 16.08.030 limits construction to 7:00 AM to 6:00 PM Monday through Friday, and 8:00 AM to 5:00 PM on Saturdays. Construction on Sundays and national holidays is not allowed. The City of Santa Clara Municipal Code Section 9.10.230 states that construction activities are not permitted within 300 feet of residentially-zoned property except within the hours of 7:00 AM and 6:00 PM on weekdays and 9:00 AM and 6:00 PM on Saturdays. There are no residential properties within 300 feet of the project site. Nevertheless, construction noise could impact nearby commercial uses.

Impact NOI-1: Construction of the proposed project could result in significant levels of temporary noise, such that it would disturb nearby commercial office uses. **(Significant Impact)**

In compliance with the Caltrans Standard Specifications and the construction noise regulations of the Cities of Sunnyvale and Santa Clara, the project will include the following measures in order to reduce the noise and vibration impacts from construction:

MM NOI-1.1: Limit construction activities to 7:00 AM to 6:00 PM Monday through Friday, and 8:00 AM to 5:00 PM on Saturdays. Construction shall not be allowed on Sundays or federal holidays.

MM NOI-1.2: Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.

MM NOI-1.3: Prepare a construction schedule identifying the major noise-generating construction activities. The project specifications shall include a procedure for contractors to notify adjacent affected properties prior to the major noise-generating construction activities.

MM NOI-1.4: Designate a "disturbance coordinator" working for the contractor who will be responsible for responding to any complaints about construction noise or vibration. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem.

Implementation of these measures would ensure compliance with applicable noise ordinances and standards, which would reduce potentially significant construction-related noise impacts to a less than significant level.

2) *Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?* **[Less Than Significant Impact]**

Long-Term Increases in Vibration

The project would not result in any new sources of vibration in operation. Further, the volume and types of vehicles using the bridge and Old Mountain View-Alviso Road would not change as a result of the project. Therefore, there would be no long-term vibration impacts.

Short-Term Increases in Vibration

The Cities of Sunnyvale and Santa Clara Municipal Codes do not contain regulations pertaining to construction vibration beyond the time-of-day restrictions detailed above. However, studies have shown that the threshold for perceiving vibration for the average person is in the range of 0.008 to 0.012 in/sec Peak Particle Velocity (PPV). For structural damage, Caltrans uses a vibration limit of 0.5 in/sec PPV for structurally-sound buildings designed to modern engineering standards, 0.3 in/sec PPV for buildings that are found to be structurally-sound but where structural damage is a major concern, and a conservative limit of 0.08 in/sec PPV for ancient buildings or buildings that are documented to be structurally-weakened.

The primary source of vibration during construction would be pile driving for the bridge abutments and bents, which would be constructed using 28 steel pipe piles in total. The time to drive all 28 piles is estimated to be 4 to 12 days. The table below indicates the typical vibration levels that result from impact pile driving.

Table 3 Typical Vibration Levels from a Pile Driver			
Equipment		**PPV at 25 ft. (in/sec)**	**Approximate L_v at 25 ft. (VdB)**
Pile Driver (Impact)	upper range	1.158	112
	typical	0.644	104
The reference velocity is 1 x 10^{-6} in/sec RMS (Root-Mean-Square), which equals 0 VdB, and 1 in/sec PPV equals 120 VdB.			

Source: Federal Transit Administration. *Transit Noise and Vibration Impact Assessment.* May 2006. P. 12-11.

The land use closest to sources of vibration during construction is the commercial/light industrial building approximately 100 feet west of the proposed pile driving location for the west bridge abutment. Commercial and industrial uses are typically not considered vibration sensitive receptors unless there are special circumstances. Maximum and typical vibration levels resulting from pile driving were calculated for this location using the formula recommended by the Federal Transit Administration, below[5]:

$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$

Where: PPV_{equip} is the peak particle velocity of the equipment adjusted for distance
PPV_{ref} is the reference vibration level in in/sec at 25 feet
D is the distance from the equipment to the receiver

Using the reference PPV for impact pile drivers included in the table above, the maximum vibration that would be experienced by tenants would be 0.145 in/sec PPV and the typical vibration levels would be 0.081 in/sec PPV. Since all of the buildings in the project area are modern (post-1970) structures that are not historic, it is unlikely that any are structurally weakened. Therefore, regardless of whether one uses the 0.5 in/sec PPV Caltrans standard or the more conservative 0.3 in/sec PPV Caltrans standard, both the peak and typical vibration levels that would be expected at the closest building would be substantially below both standards and no damage is anticipated. Vibration would be temporarily perceptible, however, and may be an annoyance to tenants of nearby buildings.

At an October 30th, 2014 meeting with representatives from the businesses that occupy the buildings near the bridge site, one tenant stated that its operations might be sensitive to significant vibration. The tenant requested advance notice of pile driving operations and indicated that they would temporarily alter the timing of their vibration-sensitive activities around the pile driving schedule. The City of Sunnyvale has committed to providing this tenant with advance notice of pile driving, which will also be covered as part of MM NOI-1.3. With

[5] Federal Transit Administration. *Transit Noise and Vibration Impact Assessment.* May 2006. P. 12-11.

such noticing, the potential for pile driving to interfere with vibration-sensitive activities will be avoided.

3) *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?* **[No Impact]**

The proposed bridge replacement would not increase the number of vehicles using Old Mountain-Alviso Road and would not move the roadway closer to any existing land uses. Ambient noise levels, therefore, would not increase above the existing condition.

4) *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?* **[Less than Significant With Mitigation]**

Construction of the proposed project would result in a temporary (i.e. up to four months) increase in ambient noise levels in the project vicinity. As detailed in response 1) above, implementation of the mitigation measures included in this chapter would ensure consistency with applicable noise ordinances. Based on these factors as well as the fact that there are no nearby sensitive noise receptors (e.g., residences), any impacts associated with the temporary noise increase resulting from project construction would not be substantial.

5) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?* **[No Impact]**

The project site is not located within an airport land use plan or within two miles of a public airport.

6) *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?* **[No Impact]**

There are no private airports within the vicinity of the project site.

References

City of Sunnyvale. *City of Sunnyvale General Plan, Safety and Noise Chapter.* Consolidated in 2011.

Federal Transit Administration. *Transit Noise and Vibration Impact Assessment.* May 2006.

Santa Clara County Airport Land Use Commission. *Comprehensive Land Use Plan, Santa Clara County, Moffett Federal Airfield*. Adopted November 2, 2012. Available at: https://www.sccgov.org/sites/dpd/Commissions/ALUC/Pages/ALUC.aspx

Santa Clara County Airport Land Use Commission. *Comprehensive Land Use Plan, Santa Clara County, Norman Y. Mineta San José International Airport*. Adopted May 25, 2011. Available at: https://www.sccgov.org/sites/dpd/Commissions/ALUC/Pages/ALUC.aspx

4.13 POPULATION AND HOUSING

POPULATION AND HOUSING					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒	1
2) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	1
3) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	1

Discussion

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

The proposed project would not increase the capacity of the bridge or roadway, therefore it could not induce population growth in the area.

2) *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?* **[No Impact]**

The proposed project would not affect any residential properties and would not result in the displacement of any housing.

3) *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?* **[No Impact]**

The proposed project would require easements from several commercial properties in the vicinity of the site. These would not affect existing improvements (e.g., parking or structures) or require business relocations.

4.14 PUBLIC SERVICES

PUBLIC SERVICES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project: 1) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
Fire Protection?	☐	☐	☐	☒	1
Police Protection?	☐	☐	☐	☒	1
Schools?	☐	☐	☐	☒	1
Parks?	☐	☐	☐	☒	1
Other Public Facilities?	☐	☐	☐	☒	1

Discussion

1) *Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services?* **[No Impact/Beneficial Impact.]**

Implementation of the proposed bridge replacement project would not require additional government facilities or services. By constructing a new bridge that meets current design and seismic safety criteria, the proposed project would reduce the potential for a seismic event to disable the bridge such that it could not be used for the provision of public services. Therefore the project would not result in any environmental impacts associated with new or physically altered government facilities, and would incrementally improve the availability of infrastructure for public services in the Cities of Sunnyvale and Santa Clara.

In the short-term, temporary closure of the bridge could mean a slight increase in emergency vehicle travel times to commercial offices, should they be necessary. Detour routes and

signage would be included in the project, and overall travel times are not expected to increase substantially.

4.15 RECREATION

RECREATION					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) 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?	☐	☐	☒	☐	1
2) 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?	☐	☐	☐	☒	1

Discussion

1) *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]**

The proposed project would replace an existing bridge and would not have any negative, long-term effects on recreational facilities. In order to construct the proposed project, however, the project would require temporary closure of the Calabazas Creek trail.

The Calabazas Creek Trail would be closed between Tasman Drive on the south and SR 237 on the north. Trail users would be detoured along the surrounding surface streets similar to vehicular and bicycle traffic. The detour would include Patrick Henry Drive, Tasman Drive and Reamwood Avenue. Appropriate detour signage would be provided during trail closure. It is anticipated that trail closure would extend for approximately three to four months while the new bridge is being constructed.

Since the project includes detour measures to ensure the continued use of the trail during project construction, no new recreational facilities would be required. Therefore, environmental impacts associated with recreational facilities would be less than significant. The project would not increase use of recreational facilities.

2) *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?* **[No Impact]**

The project is limited to the replacement of an existing bridge and does not include recreational facilities and would not require expansion of existing recreational facilities.

4.16 TRANSPORTATION AND TRAFFIC

TRANSPORTATION/TRAFFIC					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio of roads, or congestion at intersections)?	☐	☐	☐	☒	1-3,17
2) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐	1-3,17
3) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒	1
4) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	☐	☐	☐	☒	1
5) Result in inadequate emergency access?	☐	☐	☒	☐	1
6) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒	1-3

This section is based in part on a Transportation Evaluation memo prepared for the project by *Fehr & Peers* in May 2015. This report is included as Appendix D to this Initial Study.

Discussion

1) *Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant*

components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? **[No Impact]**

The proposed project would replace the existing 32-foot wide bridge with a 52-foot wide bridge, which would include two 12-foot traffic lanes, two 8-foot shoulders/bike lanes, two 5-foot sidewalks and two 1-foot barriers. Though the project would not increase the traffic volume capacity of the roadway, it would improve the safety of the facility by providing shoulders and sidewalks. The addition of these facilities will fill in a gap in the bicycle and pedestrian network along Old Mountain View-Alviso Road. The project would not conflict with any plans, ordinances, or policies measuring the effectiveness of the circulation system.

2) *Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?* **[Less than Significant]**

The proposed project is a bridge replacement that would not increase or decrease the vehicular capacity of Old Mountain View-Alviso Road. The short-term closure of Old Mountain View-Alviso Road will reroute vehicle traffic, resulting in small temporary increases in travel time and distance (see Figure 6 for detour routes). The detour routes have adequate capacity to accommodate the rerouted traffic, however, and therefore any adverse effects of the project during construction would not be significant.

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

The project is a bridge replacement and would not have any effects on air traffic patterns.

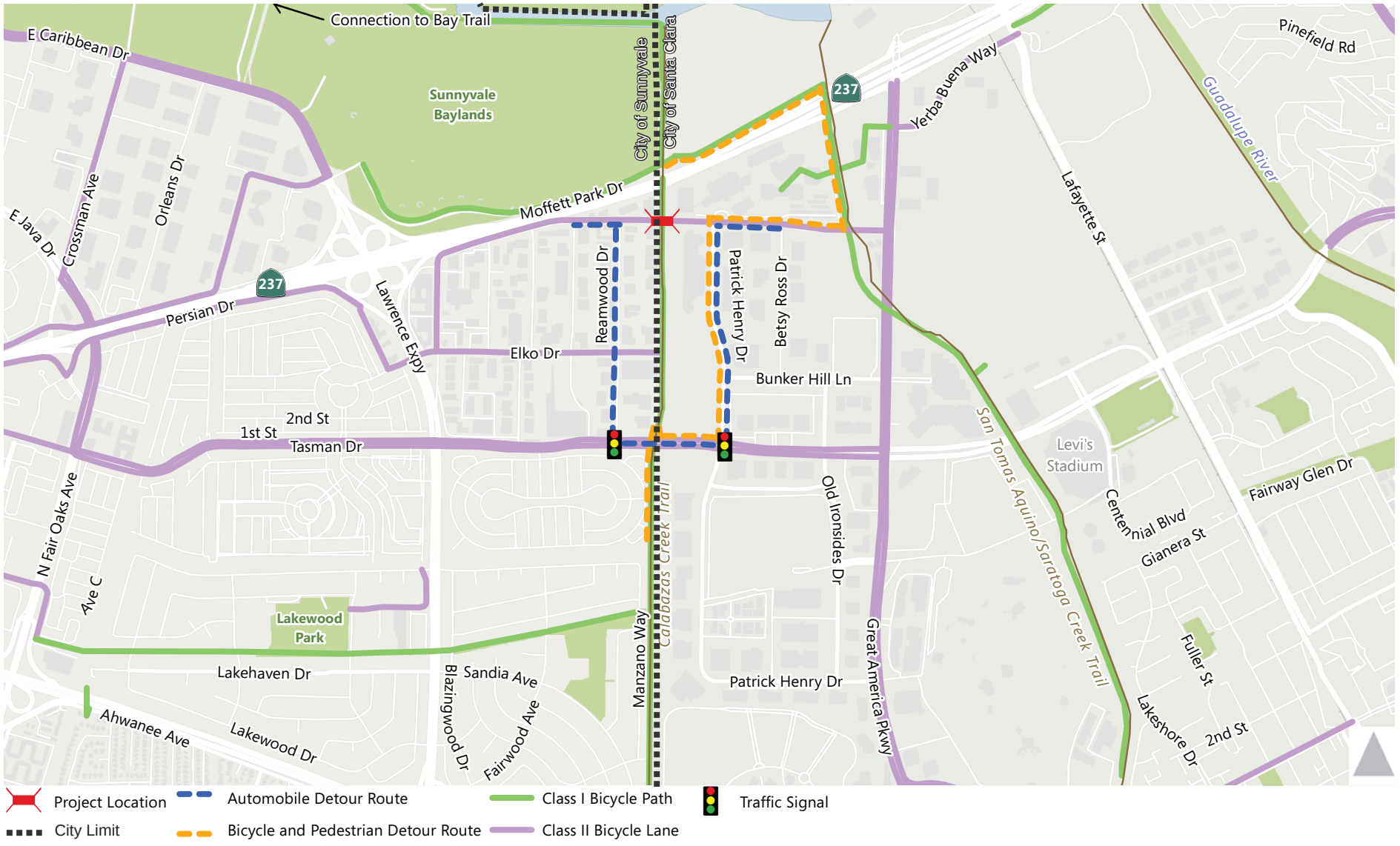
4) *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?*
[No Impact/Beneficial Impact]

Since the new bridge would be wider and would contain standard design features (e.g. shoulders, bicycle lanes, and sidewalks), it would be safer than the existing facility. Modifications to the roadway approaches would ensure continuity with the new design. Therefore, the proposed project would improve the safety of the facility.

5) *Result in inadequate emergency access?* **[Less Than Significant Impact]**

In operation, the new bridge would incrementally benefit emergency access by providing sufficient width to allow cars to pull to the shoulder if necessary (e.g. in an accident). This would allow emergency vehicles to maintain unobstructed access in most circumstances.

In the short-term, temporary closure of the bridge could mean a slight increase in emergency vehicle travel times to commercial offices, should they be necessary. Detour routes and signage would be included in the project, and overall travel times are not expected to increase substantially. In addition, commercial offices generally do not create a high demand for emergency services when compared to other land uses (e.g. hospitals, retirement homes, residences, etc.). The temporary closure of Old Mountain View-Alviso Road would have less than significant, short-term impacts to emergency vehicle access.



Source: Fehr & Peers, Draft Transportation Evaluation. May 14, 2015.

TRAFFIC AND TRAIL DETOUR PLAN

FIGURE 6

6) *Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?* **[No Impact]**

In operation, the proposed project would not affect the Calabazas Creek Trail. The trail would pass under the new bridge along the east side of Calabazas Creek as it does under existing conditions. The addition of sidewalks would improve connectivity across the bridge and possibly encourage more people who work in the surrounding office and industrial buildings to walk instead of drive for short trips (e.g. errands or lunch). Adding sidewalks also enhances connectivity to the trailheads at the bridge that lead down to the Calabazas Creek Trail.

During construction, a detour route would be provided during the temporary closure of the segment of the Calabazas Creek Trail between Tasman Drive and SR 237. This route would redirect bicyclists and pedestrians to the San Tomas Aquino Creek Trail, Patrick Henry Drive, and Tasman Drive and would maintain the connection from the Calabazas Creek Trail to the Bay Trail north of SR 237. The detour may result in a small increase in travel time for users; however, the trail would only be closed for three to four months and the detour route would maintain a continuous route for trail users.

References

City of Sunnyvale. *City of Sunnyvale General Plan, Land Use and Transportation Chapter.* Consolidated in 2011.

Fehr & Peers. *Old Mountain View-Alviso Road Bridge Replacement Project: Draft Transportation Evaluation*. May 14, 2015.

4.17 UTILITIES AND SERVICE SYSTEMS

UTILITIES AND SERVICE SYSTEMS	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒	1-3
2) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐	1-3
3) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐	1-3
4) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒	1-3
5) 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?	☐	☐	☐	☒	1-3
6) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒	1-3
7) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒	1-3

Discussion

1) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?* **[No Impact]**

The proposed project, which is limited to the replacement of an existing bridge, would not generate any wastewater, therefore it could not exceed wastewater treatment requirements.

2) *Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?* **[Less Than Significant Impact]**

The design of the project would incorporate a 10-inch potable water line interconnect across the bridge between the Cities of Sunnyvale and Santa Clara. The bridge superstructure would be designed to accommodate a 14-inch steel casing to contain the water line. The casing would be located within a reinforced gap between the precast concrete voided slabs and would be cast integral with the slabs as part of the concrete overlay pour. Likewise, the project would include a 14-inch steel casing in the bridge superstructure to accommodate a future 10-inch recycled waterline between the two cities. Details would be similar to the casing housing the 10-inch waterline.

Since the proposed water lines would be constructed within the bridge superstructure, construction of them would not result in any more environmental impacts than those resulting from construction of the bridge. As described in this Initial Study, the proposed project would not result in any significant and unavoidable environmental impacts.

3) *Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?* **[Less Than Significant Impact]**

The project includes on-site stormwater treatment measures, which would consist of an approximately 400 square foot biotreatment swale adjacent to the southerly edge of Old Mountain View – Alviso Road near Reamwood Avenue. The treatment area has been sized to comply with current National Pollutant Discharge Elimination System permit requirements. Construction of this swale would not result in any significant environmental impacts, and would incrementally improve the treatment of stormwater in the project area.

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

The proposed bridge would not be a source of water demand.

5) *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]**

The proposed bridge would not generate wastewater, therefore it could not exceed the capacity of any wastewater treatment facilities.

6) *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?* **[No Impact]**

The proposed project is limited to the replacement of an existing bridge and would not generate solid waste. Construction debris would be recycled in conformance with applicable policies and regulations.

7) *Comply with federal, state, and local statutes and regulations related to solid waste?* **[No Impact]**

The project would comply with federal, state, and local statutes and regulations related to solid waste. Specifically, debris from the demolished bridge would be handled and disposed of per current requirements, which include mandates for material recycling to the fullest extent practical.

4.18 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
1) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐	1-17
2) 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)?	☐	☐	☒	☐	1-17
3) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐	1-17

Discussion

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

As described in *Section 2.4, Biological Resources* of this Initial Study, the proposed project has the potential to impact biological resources. Avoidance and mitigation measures have been incorporated as part of the project, which would ensure that the project has no significant impacts to these resources. Impacts to cultural resources are not anticipated.

2) *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?* **[Less than Significant Impact]**

There are no other projects occurring or expected to occur in the area that would have environmental impacts to which the proposed project would contribute. The proposed bridge replacement would improve traffic safety conditions and the seismic safety of the bridge. Impacts to riparian habitat and special-status species would be mitigated to a less than significant level, and the project would not increase air quality, noise, traffic, or greenhouse gas emissions over the long-term. Therefore, the proposed project would not contribute to a cumulatively significant environmental impact.

3) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?* **[Less than Significant with Mitigation]**

As described in *Section 4.8, Hazards and Hazardous Materials*, there is potential for demolition of the existing bridge and construction of the new bridge to pose a significant health risk to construction workers. Mitigation measures, however, have been included to reduce these impacts to less than significant levels.

CHECKLIST INFORMATION SOURCES

1. Professional judgment and expertise of the environmental specialist preparing this assessment, based upon a review of the site and surrounding conditions, as well as a review of the project plans.

2. City of Sunnyvale. *City of Sunnyvale General Plan.* Consolidated in 2011.

3. City of Santa Clara. *2010-2035 General Plan.* November 2010. And, *Integrated Final Environmental Impact Report for the City of Santa Clara Draft 2010-2035 General Plan*. January 2011.

4. California Department of Transportation (Caltrans). *Scenic Highway Program.* Accessed January 17, 2016. Available at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/scenic_hwy.htm

5. California Department of Conservation, Division of Land Resource Protection. Santa Clara County Important Farmland 2012. Map. August 2014.

6. Cities of Sunnyvale and Santa Clara. *Zoning Ordinance.*

7. Bay Area Air Quality Management District (BAAQMD). *Bay Area 2010 Clean Air Plan.* September 15, 2010.

8. BAAQMD. *CEQA Air Quality Guidelines*. May 2011 and 2012.

9. H.T. Harvey & Associates. *Natural Environment Study, Old Mountain View – Alviso Road Bridge Over Calabazas Creek (Existing Bridge No. 37C-0254, Federal Aid No: BRLS-5213 (040).* June 2015.

10. Holman & Associates. *ASR Short Form for Local Assistance Projects, BHLS-5213(040)*. March 30, 2015. And, *Historic Property Survey Report, BHLS-5213(040)*. March 30, 2015.

11. State of California, The Resources Agency, Department of Conservation. *Special Studies Zones – Milpitas Quadrangle, California, 7.5 Minute Series.* Effective January 1, 1982. Available at: http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm

12. County of Santa Clara. *Geologic Hazard Zones*. October 26, 2012. Map. Available at: https://www.sccgov.org/sites/dpd/PlansOrdinances/GeoHazards/Pages/GeoMaps.aspx

13. Parikh Consultants, Inc. *Phase I Initial Site Assessment, Old Mountain View-Alviso Road Bridge at Calabazas Creek, Bridge Replacement Project, City of Sunnyvale, Santa Clara County, California*. January 28, 2015.

14. Santa Clara Valley Water District. *2012 Groundwater Management Plan.* July 2012.

15. Schaaf & Wheeler. *Location Hydraulic Study, Old Mountain View-Alviso Road Bridge (Replace) at Calabazas Creek. Project No. BHLS-5213(040)*. March 17, 2015.

16. County of Santa Clara, City of San José, City of Morgan Hill, City of Gilroy, Santa Clara Valley Water District, and Santa Clara Valley Transportation Authority. *Final Santa Clara Valley Habitat Plan.* August 2012. Available at: http://scv-habitatagency.org/

17. Fehr & Peers. *Old Mountain View-Alviso Road Bridge Replacement Project: Draft Transportation Evaluation*. May 14, 2015.

18. City of Santa Clara. *Climate Action Plan.* Adopted December 3, 2013.

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6.0 APPENDICES

Appendix A Natural Environment Study, *H.T. Harvey & Associates*, June 2015.

Appendix B Initial Site Assessment, *Parikh Consultants, Inc.,* January 2015.

Appendix C Location Hydraulic Study, *Schaaf & Wheeler,* March 2015.

Appendix D Transportation Evaluation, *Fehr & Peers*, May 2015.