

# I-280/Winchester Boulevard Interchange Improvements Project

SANTA CLARA COUNTY, CALIFORNIA

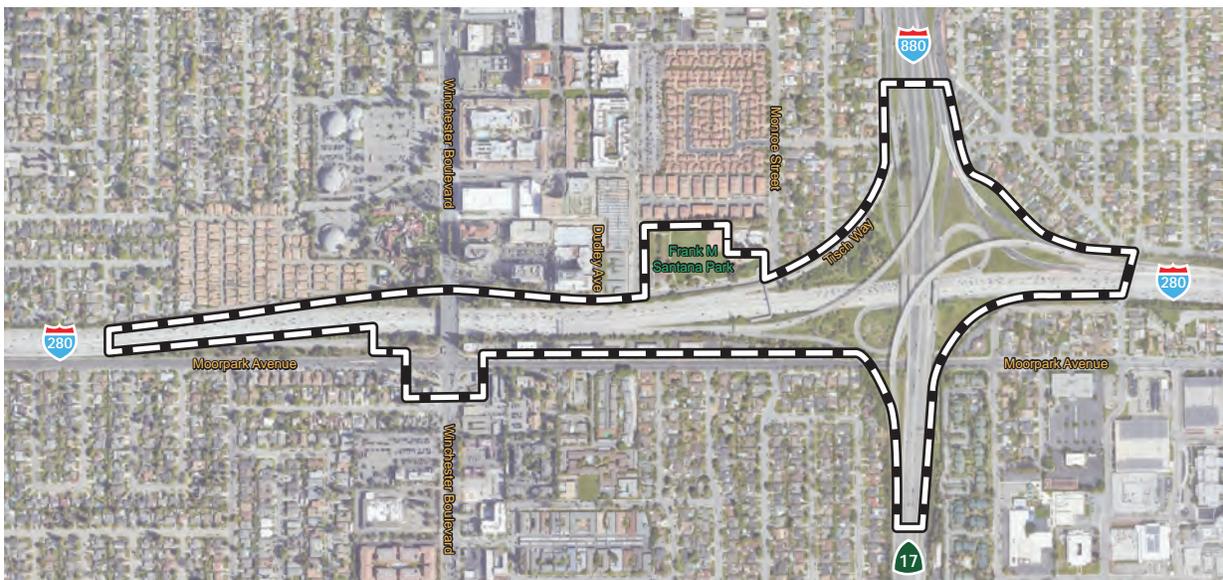
04-SCL-280-PM 4.5/5.3

04-SCL-880-PM 0.0/0.5

04-SCL-17-PM 13.3/13.9

EA 04-1K980

## Draft Environmental Impact Report/Environmental Assessment



Prepared by the  
State of California, Department of Transportation  
and Santa Clara Valley Transportation Authority

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



June 2023

## General Information about This Document

### What's in this document:

The California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration (FHWA), has prepared this Environmental Impact Report/Environmental Assessment (EIR/EA), which examines the potential environmental impacts of the alternatives being considered for the proposed project located in Santa Clara County, California. Caltrans is the lead agency under the National Environmental Policy Act (NEPA). Caltrans is the lead agency under the California Environmental Quality Act (CEQA). The document tells you why the project is being proposed, what alternatives we have considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

### What you should do:

- Please read this document.
- Additional copies of this document and the related technical studies are available for review at Caltrans District 4, 111 Grand Avenue, Oakland, CA 94612 or VTA, 3331 North First Street, San Jose, CA 95134 on weekdays from 8:00 am-5:00 pm. Hardcopies of the report are also available at the Bascom Branch of the San Jose Public Library (1000 S. Bascom Avenue, San Jose, CA 95128). This document may be downloaded at the following website: [www.vta.org/280winchester](http://www.vta.org/280winchester).
- Attend the public meeting and open house: Monday, August 14, 2023 from 6:00 to 7:30 pm at the Cypress Community Center, 403 South Cypress Avenue, San Jose.
- We'd like to hear what you think. If you have any comments about the proposed project, please attend the public meeting and/or send your written comments via postal mail or email to the Department by the deadline.
  - Send comments via postal mail to: Charles Winter, Associate Environmental Planner, Caltrans District 4, 111 Grand Avenue, Mail Stop 8B, Oakland, CA 94612.
  - Send comments via email to: [280-Winchester@vta.org](mailto:280-Winchester@vta.org).
- Be sure to send comments by the deadline: September 8, 2023.

### What happens next:

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

### Alternative Formats:

For individuals with sensory disabilities, this document can be available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternative formats, please write to Caltrans, Attn: Charles Winter, Office of Environmental Planning, 111 Grand Avenue, Oakland, CA 94623-0660; or call (510) 847-3752 (voice); or use the California Relay Service TTY number, (800) 735-2929 or 711.

SCH 2020090118

04-SCL-280-PM 4.5/5.3  
04-SCL-880-PM 0.0/0.5  
04-SCL-17-PM 13.3/13.9  
EA 04-1K980

Construct improvements in the vicinity of the I-280/Winchester Boulevard Interchange in the City of San Jose, Santa Clara County. The project limits are between post mile (PM) 4.50 and 5.30 on I-280, from PM 0.00 to 0.50 on I-880, and from PM 13.30 to 13.90 on State Route 17 (SR-17).

## **DRAFT ENVIRONMENTAL IMPACT REPORT/ ENVIRONMENTAL ASSESSMENT**

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

**THE STATE OF CALIFORNIA  
Department of Transportation  
and  
Responsible Agencies: Santa Clara Valley Transportation Authority and  
City of San Jose**

06/29/2023

Date

*Dina El-Tawansy*

Dina A. El-Tawansy  
District 4 Director  
California Department of Transportation  
NEPA and CEQA Lead Agency

The following persons may be contacted for more information about this document:

California Department of Transportation  
ATTN: Charles Winter  
111 Grand Avenue, MS 8  
Oakland, CA 94612  
(510) 847-3752

Santa Clara Valley Transportation Authority  
ATTN: Lani Lee Ho  
3331 North First Street – B2  
San Jose, CA 95134  
(408) 321-5927

# SUMMARY

---

## NEPA ASSIGNMENT

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

## JOINT NEPA/CEQA DOCUMENT

The proposed project is a joint project by Caltrans and the FHWA, and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and NEPA. Caltrans is the lead agency under NEPA and CEQA. In addition, FHWA's responsibility for environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 United States Code Section 327 (23 USC 327) and the MOU dated May 27, 2022, and executed by FHWA and Caltrans.

Some impacts determined to be significant under CEQA may not lead to a determination of significance under NEPA. Because NEPA is concerned with the significance of the project as a whole, often a “lower level” document is prepared for NEPA. One of the most common joint document types is an Environmental Impact Report/Environmental Assessment (EIR/EA).

After receiving comments from the public and reviewing agencies, a Final EIR/EA will be prepared. Caltrans may prepare additional environmental and/or engineering studies to address comments. The Final EIR/EA will include responses to comments received on the Draft EIR/EA and will identify the preferred alternative. If the decision is made to approve the project, a Notice of Determination will be published for compliance with CEQA, and Caltrans will decide whether to issue a Finding of No Significant Impact

(FONSI) or require an Environmental Impact Statement (EIS) for compliance with NEPA. A Notice of Availability (NOA) of the FONSI will be sent to the affected units of federal, state, and local government, and to the State Clearinghouse in compliance with Executive Order 12372.

## **OVERVIEW OF PROJECT AREA**

The proposed project is located at the existing Interstate 280 (I-280)/Winchester Boulevard interchange and State Route 17 (SR-17)/I-280/I-880 interchange, in San José, Santa Clara County, California. The I-280/Winchester Boulevard interchange is a partial access facility, meaning motorists can exit to Winchester Boulevard from southbound I-280, but not from northbound I-280. Similarly, motorists can access northbound I-280 from Winchester Boulevard, but there is no on-ramp to southbound I-280 at this location. In contrast, the SR-17/I-280/I-880 interchange is a full access facility, meaning that motorists traveling on SR-17, I-280, or I-880 are able to connect to the intersecting freeway in either direction.

## **PURPOSE AND NEED**

### **PURPOSE**

The purpose of the Project is as follows:

- Improve traffic operations on the local roadways in the project area.
- Improve bicycle and pedestrian access and transit connectivity in the project area.
- Improve access from northbound I-280 to the project area.

### **NEED**

The need for the Project is due to several factors that, both individually and cumulatively, have resulted in significant congestion and delay on the freeways and local streets in the project area:

- Substantial local congestion has occurred along the Winchester Boulevard and Stevens Creek corridors. Traffic volumes on Winchester Boulevard and Stevens Creek Boulevard have increased by 15% over the past five years as a result of local growth. Traffic demands at the I-880/Stevens Creek Interchange are expected to grow by another 20% by 2040 and will likely exceed capacity before that time.
- Substantial residential and commercial growth has occurred in the project area along the Winchester Boulevard corridor. Included in this growth are several expansions of Santana Row (large mixed-use development) and Westfield Valley

Fair Mall (large regional shopping center), the planned Urban Villages including the Santana Row/Valley Fair Urban Village, Winchester Boulevard Urban Village and the Stevens Creek Urban Village, additional planned residential and commercial developments in the area, and regional economic growth. Increased travel demand has resulted from this growth and additional travel demand is expected from the planned developments.

- There is insufficient multi-modal access and connectivity within the project area. The Winchester Boulevard corridor within the project area is heavily traveled by pedestrians and bicyclists. The Winchester Boulevard corridor is classified as “high caution” on the Santa Clara Valley Bikeways Map, identifying a need to better accommodate bicyclists. There are several existing local bus routes that serve the project area, including the 23, 25, 59, and 60 lines, and 523 rapid bus line along Stevens Creek Boulevard. Safe and efficient multimodal connectivity is needed to integrate a multimodal transportation system in the project area.
- There is no direct access from northbound I-280 to the project area. Traffic that would otherwise exit northbound I-280 to the project area is forced to use the I-880/Stevens Creek Boulevard interchange.

## **PROPOSED ACTION**

This EIR/EA evaluates the “Build Alternative” and the “No Build Alternative”.

### **BUILD ALTERNATIVE**

The Project would modify the existing I-280/Winchester Boulevard interchange by constructing a new tunnel off-ramp from northbound I-280 to Winchester Boulevard. The Project would also construct a new direct connector ramp from northbound SR-17 to northbound I-280 and would replace the existing Monroe Pedestrian Overcrossing (POC). In addition to these new facilities, the Project would include various other improvements, as listed below under “Other Project Elements.”

A summary of the improvements that would be constructed by the Project is provided below. Details are provided in Section 1.3.1 of this document.

#### **Tunnel Off-Ramp to Winchester Boulevard via Tisch Way**

The new off-ramp from northbound I-280 would connect to Winchester Boulevard via Tisch Way. The new off-ramp would diverge from the current northbound I-280 off-ramp to Stevens Creek Boulevard; run parallel to northbound I-280 separated by a concrete barrier; cross under the I-880 separation structure, which would be widened with tie-back walls; cross under the existing southbound I-280 to northbound I-880 connector ramp structure; tunnel for a total distance of approximately 640 feet under a new northbound SR-17 to northbound I-280 connector ramp, the existing southbound I-880 to northbound

I-280 connector ramp, and Tisch Way; and rise to terminate at the Tisch Way and Hatton Street intersection. The connection from the ramp terminus to Winchester Boulevard would be completed using Tisch Way. Tisch Way would also be realigned to accommodate the northbound I-280 off-ramp. Retaining walls would be constructed between Tisch Way and northbound I-280 to support the realigned portion of the roadway. A new traffic signal would be installed at the intersection of Tisch Way and Hatton Street to replace the existing traffic signal used with the current intersection layout.

### **Flyover Connector Ramp**

The existing northbound SR-17 to northbound I-280 loop ramp conflicts with the proposed new off-ramp from northbound I-280 to Winchester Boulevard. Therefore, the loop ramp would be removed and replaced with a new northbound SR-17 to northbound I-280 direct connector ramp. The connector ramp would diverge from the existing northbound SR-17 to southbound I-280 connector ramp and would “flyover” the I-280/I-880/SR-17 interchange entering northbound I-280 west of the I-280/I-880/SR-17 interchange. The new connector ramp would reach a maximum height of approximately 70 feet above the northbound off-ramp from I-280 to Stevens Creek Boulevard. The connector ramp would widen to two (2) lanes along its length before merging to one lane and entering northbound I-280 as a fourth lane. The flyover connector ramp would be metered with two (2) mixed-flow lanes.

The existing northbound SR-17 to southbound I-280 ramp crossing over Moorpark Avenue would be widened to accommodate the new flyover connector ramp. The existing mainline lane drop on northbound I-280 under I-880/SR-17 would be maintained and northbound I-280 would carry two (2) mixed flow lanes and one (1) high occupancy vehicle (HOV) lane under I-880/SR-17.

### **Monroe Pedestrian Overcrossing**

The existing Monroe POC over I-280 conflicts with the proposed northbound I-280 off-ramp to Winchester Boulevard. It would, therefore, be removed and replaced with a new POC. The north landing for the new POC would be constructed at the corner of Monroe Street and Tisch Way within Frank Santana Park. The new POC would be approximately 16-foot wide and reach a maximum height of approximately 30 feet. The POC would rise to the west for approximately 420 feet. The POC would then turn south for approximately 470 feet, crossing Tisch Way, the proposed northbound I-280 off-ramp, I-280 mainline, and the southbound I-280 to northbound I-880/southbound SR-17 connector ramp. The POC would then turn to the east and descend for approximately 510 feet to conform with the existing Monroe pedestrian path north of Moorpark Avenue.

### **Frank M. Santana Park**

To accommodate the proposed off-ramp from northbound I-280 to Winchester Boulevard and the reconstruction of the Monroe POC, the walking paths and softball field in Frank

M. Santana Park (Santana Park) would be shifted and realigned. Two vacant parcels located on the western-edge of Santana Park, fronting Hatton Street, would be purchased, and the portion not needed for Project-related improvements would be transferred to the City of San José for expansion of Santana Park.

### **Other Project Elements**

- The existing southbound I-880 to northbound I-280 connector ramp would be restriped to accommodate two (2) mixed-flow lanes and realigned to provide a 1,000-foot auxiliary lane before merging onto the northbound I-280 mainline. The connector ramp would be metered with two (2) mixed-flow lanes.
- The existing Winchester Boulevard bridge over I-280 would be widened to provide enhanced bicycle and pedestrian facilities in both directions.
- A portion of the existing soundwalls along the north side of I-280 and east of Winchester Boulevard would be removed and replaced.
- Buffered bike lanes and pedestrian facilities would be added on both northbound and southbound Winchester Boulevard within the project limits.
- A buffered bike lane would be constructed on the southside of Tisch Way from Monroe Street to Winchester Boulevard.
- A combination of multi-use path, buffered bike lane, and designated bike route would be added on the north side of Tisch Way from Monroe Street to Winchester Boulevard.
- Emergency vehicle preemption would be added to traffic signals at the intersections of Tisch Way and Hatton Street and Tisch Way and Winchester Boulevard.
- There is an inactive civil defense siren that is mounted on top of a steel pole at the northwest corner of Tisch Way and Monroe Street (see Figure 2.9-5 in Section 2.9). The siren would be removed and returned to the City for storage.

### **NO BUILD ALTERNATIVE**

The No Build Alternative would consist of not constructing the Project, which would avoid all of the environmental impacts of the Build Alternative, as described in this document. However, the No Build Alternative would not meet any of the purposes or needs of the Project.

### **PROJECT IMPACTS**

Table S-1 provides a brief summary of the environmental impacts of the Build and No Build Alternatives, as well as avoidance, minimization, and/or mitigation measures. The analyses contained in this EIR/EA determined that neither the Build Alternative nor the No Build Alternative will result in any impacts to the following resources:

- Farmlands
- Timberlands
- Community Cohesion
- Coastal Zones
- Wild and Scenic Rivers
- Flooding
- Natural Communities
- Wetlands
- Plant Species
- Threatened and Endangered Species

Therefore, these impact categories were not included in Table S-1. Detailed discussions of the existing setting, impacts, and avoidance, minimization, and/or mitigation measures are provided in Chapter 2 of this EIR/EA.

**Table S-1: Summary of Environmental Impacts and Avoidance, Minimization and/or Mitigation Measures**

Impact Category	No Build Alternative	Build Alternative	Avoidance, Minimization and/or Mitigation Measures
<b>Existing and Future Land Use (Section 2.2)</b>			
Changes to Existing or Future Land Use	No effect	No effect	None required
Business or Residential Relocations	None	None	None required
<b>Consistency with State, Regional, and Local Plans and Programs (Section 2.3)</b>			
Consistency with Relevant Plans & Policies	Inconsistent	Consistent	None required
<b>Parks and Recreational Facilities (Section 2.4)</b>			
Effect on Frank Santana Park	No Effect	Loss of 0.45-acre; impact to softball field, walking path, and trees	MM-PARK-1.1: In compliance with the Park Preservation Act, the Project would fully offset the loss of 0.45 acre of land from Santana Park by purchasing parcels APN 277-38-012 and APN 277-38-014. <sup>1</sup>  MM-PARK-2.1: The segment of the existing walking/jogging path impacted by the Project would be replaced with a new path, directly north of, and parallel to, the existing path.

<sup>1</sup> APN 277-38-012 is 22,981 square feet (0.53 acre) in size. Of this total, and based on the conceptual design, approximately 0.16 acre would be used for the Project and the remainder of 0.37 acre would be dedicated to the City for incorporation into the park. APN 277-38-014 is 11,391 square feet (0.26 acre) in size. The entire parcel would be dedicated to the City for incorporation into the park.

Impact Category	No Build Alternative	Build Alternative	Avoidance, Minimization and/or Mitigation Measures
			<p>MM-PARK-2.2: The Project would reconstruct the existing softball field by shifting and realigning it northward. In the pre-project and post-project condition, the minimum left-field foul line dimensions would be approximately 260 feet. The right-field foul line dimensions would meet or exceed the current field dimensions. Reconstruction of the existing softball field would include the reconstruction of fencing, dugouts, and bleachers.</p> <p>MM-PARK-2.3: The Project would work with the City of San José's Parks, Recreation, &amp; Neighborhood Services (PRNS) Department and an arborist on the replacement of trees within the park to ensure that future tree locations are compatible with the layout of park facilities that may be constructed as part of the Santana Park Master Plan. The minimum number and sizes of replacement trees will be as shown in Table 2.4-1.</p>
<b>Growth (Section 2.5)</b>			
Growth-Inducing Effects	Potential limit to planned growth as congestion worsens	Would facilitate planned growth; would not result in unplanned growth	None required
<b>Environmental Justice (Section 2.6)</b>			
Disproportionate Effects on Minority or Low Income Groups	None	None	None required
<b>Utilities/Emergency Services (Section 2.7)</b>			
Increased Demand for Utilities	None	None	None required
Increased Response Times for Emergency Services	No increase	No increase; potential decrease depending upon the route used	None required
<b>Traffic and Transportation/Pedestrian and Bicycle Facilities Section 2.8)</b>			
Effect on Vehicle Miles Traveled (VMT)	No effect	Slight reduction in VMT compared to No Build	None required
Changes in Traffic Circulation	No change	Traffic shift from I-880/Stevens Creek to I-280/Winchester	None required
Pedestrian and Bicycle Impacts	No impact	Beneficial due to construction of new bike lanes & wider sidewalks	None required

Impact Category	No Build Alternative	Build Alternative	Avoidance, Minimization and/or Mitigation Measures
<b>Visual/Aesthetics (Section 2.9)</b>			
Effect of Elevated New NB-17-to-NB-280 Ramp on the Parkmoor Avenue Neighborhood	No effect	Views to the west of this single family neighborhood would substantially change and the change would remain substantial even after the implementation of MM-VIS-1.1.	MM-VIS-1.1: The existing landscaping that was planted along the westside of Parkmoor Avenue as part of the I-880/Stevens Creek Interchange Project will be enhanced. The enhanced landscaping will consist of one or more rows of rapidly growing (i.e., at least 2 feet per year), tall tree species such as canary island pine or coast redwood that are spaced as closely as possible as recommended by an arborist such that the trees will eventually form a dense visual barrier to the freeway infrastructure from Parkmoor Avenue.
Tree Loss in Santana Park	No effect	24 trees would be removed.	MM-VIS-1.2: Replacement landscaping will be provided for the park. The number of trees to be planted and their location within the park will be determined based on coordination with, and to the satisfaction of, the City's PRNS Department and an arborist. The minimum number and sizes of replacement trees will be as shown in Table 2.4-1.
Aesthetic Impacts of New Structures	No effect	New ramps, overcrossings, soundwalls, retaining walls, and tunnel would reduce the existing visual quality.	MM-VIS-1.3: The Project will incorporate treatments to improve aesthetics and reduce the opportunity for graffiti, which may include aesthetic fence treatments, public art, unique lighting, texture, landscaping, and/or color on project features, including the new Monroe POC, northbound SR-17 to northbound I-280 flyover, Winchester Boulevard bridge, retaining walls of the tunnel off-ramp, and the replacement soundwall constructed for the Project.
Removal of Existing Highway Landscaping	No effect	Existing highway landscaping would be removed at various locations within the project limits.	MM-VIS-1.4: Highway replacement planting will be provided in areas of damaged and/or removed vegetation in accordance with Caltrans policy and guidance where feasible.
Light and Glare Impacts	No impact	Spillover from nighttime lighting during both the construction and operational phases, could result in light and glare impacts to drivers and adjacent land uses.	MM-VIS-1.5: All lighting on new ramps, roads, and structures will be designed to limit light pollution and have minimum impact on the surrounding environment. All light fixtures will have LEDs configured with the minimum necessary number of bulbs, optimal mounting height, mast-arm length, and angle to restrict light to the roadways. Where applicable, shields on the fixtures to prevent light trespass to adjacent properties will be evaluated and

Impact Category	No Build Alternative	Build Alternative	Avoidance, Minimization and/or Mitigation Measures
			<p>incorporated where necessary during the detailed design phase.</p> <p>MM-VIS-1.6: Construction lighting during nighttime work will be limited to the work area by using directional lighting and shielding of light fixtures.</p>
<b>Cultural Resources (Section 2.10)</b>			
Effect on Historic Resources	No effect	No effect	None required
Effect on Archaeological Resources	No effect	No effect	None required
<b>Water Quality and Stormwater Runoff (Section 2.11)</b>			
Long-term Increase in Stormwater Runoff	No increase	Increase of approximately 3.48 acres of impervious surfaces.	<p>MM-WQ-1.1: The Project includes Best Management Practices (BMPs) and will comply with the Caltrans Stormwater Management Plan to reduce the pollutant component of stormwater runoff. The potential permanent BMPs considered for the Project include Biofiltration Strips and Gross Solids Removal Devices (GSRDs).</p> <p>MM-WQ-1.2: The Project will implement permanent design pollution control BMPs to improve stormwater quality by reducing erosion, stabilizing disturbed soil areas, and maximizing vegetated surfaces.</p>
Water Quality Impacts During Construction	No impact	Short-term degradation of water quality may occur from various construction activities.	MM-WQ-1.3 through MM-WQ-1.7 will avoid the potential for short-term water quality degradation to occur. See Section 2.11.4.2 for detailed descriptions of these measures.
<b>Geology/Soils/Seismic/Topography (Section 2.12)</b>			
Impacts Due to Liquefaction	The potential for liquefaction at the project location is low.		The Project would be designed to comply with both the Uniform Building Code and Caltrans' Design Standards. This will avoid the need for adoption of any non-standard avoidance, minimization, and/or mitigation measures.
Impacts Due to Expansive Soils	The potential for impacts from expansive soils at the project location ranges from moderate to high.		
Potential for Surface Rupture during Earthquakes	The project site is not located on an active fault.		
<b>Paleontology (Section 2.13)</b>			
Potential to Impact Paleontological Resources during Construction	No impact	Native sediments at the project site that are more than eight feet deep are given a high sensitivity for containing fossils.	MM-PALEO-1.1: Prior to the start of excavation, a Paleontological Mitigation Plan (PMP) will be prepared by a qualified Principal Paleontologist. The PMP will specify measures to be undertaken to avoid potential impacts on paleontological resources if any are present.

Impact Category	No Build Alternative	Build Alternative	Avoidance, Minimization and/or Mitigation Measures
			MM-PALEO-1.2: If unanticipated discoveries of paleontological resources occur during project construction, all work within 25 feet of the discovery must cease and the find will be protected in place until it can be evaluated by a qualified paleontologist.
<b>Hazardous Waste/Materials (Section 2.14)</b>			
Impacts Due to Exposure to Aerially-Deposited Lead	No impact	Aerially-deposited lead (ADL) may be present in the soils at the project site.	MM-HAZMAT-1.1: A soil investigation will be conducted to determine whether ADL has affected soils that will be excavated as part of the Project. Based on analytical results, the investigation will provide recommendations regarding management and disposal of affected soils in the project area including the reuse potential of ADL-affected soil during project development.
Impacts Due to Exposure to Lead-Based Paints	No impact	Lead-based paint may be present on the structures to be modified or removed by the Project.	MM-HAZMAT-1.2: Testing for the presence of lead-based paint on the existing structures will occur. If this substance is found to be present, applicable regulations pertaining to its removal and disposal will be followed.
Impacts Due to Exposure to Asbestos-Containing Materials	No impact	Materials containing asbestos may be present on the structures to be modified or removed by the Project.	MM-HAZMAT-1.3: Testing for the presence of asbestos-containing materials on the existing structures will occur. If these materials are found to be present, applicable regulations pertaining to their removal and disposal will be followed.
Impacts Associated with Exposure to Contaminated Groundwater	No impact	Groundwater contaminated from former leaking underground fuel storage tanks at the Winchester-Moorpark intersection may be present at the project site.	MM-HAZMAT-1.4: If work in the vicinity of Winchester Blvd. will involve drilling to groundwater and extraction of groundwater, the groundwater will be tested to determine if contamination is present in levels that exceed regulatory thresholds. If elevated levels of contamination are determined to be present and dewatering or extraction is anticipated, the investigation report will provide recommendations regarding proper treatment, if necessary, and disposal or reuse of affected groundwater.
<b>Air Quality (Section 2.15)</b>			
Long-Term Increases in Emissions of Criteria Air Pollutants	Compared to existing conditions, particulate matter emissions will be higher, while carbon monoxide, reactive	Compared to the No Build Alternative, emissions will be slightly lower.	None required

<b>Impact Category</b>	<b>No Build Alternative</b>	<b>Build Alternative</b>	<b>Avoidance, Minimization and/or Mitigation Measures</b>
	organic gases, and nitrogen oxide emissions will be lower.		
Long-Term Increases in Emissions of Toxic Air Contaminants (TAC)	Compared to existing conditions, TAC emissions will be lower.	Compared to the No Build Alternative, emissions will be slightly lower.	None required
Short-Term Increases in Emissions During Construction	No increase	Construction activities and equipment will increase emissions in the short-term.	MM-AIR-1.1 through MM-AIR-1.4 will require the use of Tier 4 construction equipment, limit the idling of diesel-powered equipment, and prohibit the use of diesel-powered generators. MM-AIR-2.1 through MM-AIR-2.14 will limit the generation of dust. See Section 2.15.4 for detailed descriptions of these measures.
<b>Noise (Section 2.16)</b>			
Long-Term Increases in Noise	Compared to existing conditions, the increase in noise levels will range from 0 to +3 dBA.	Compared to existing conditions, the increase in noise levels will range from 0 to +3 dBA.	The portion of the existing soundwall along the south side of Tisch Way that will be removed by the Project will be replaced.
Short-Term Increases in Noise During Construction	No increase	Construction activities and equipment will increase noise in the short-term.	MM-NOI-1.1 through MM-NOI-1.8 will avoid or limit the generation of noise during construction. See Section 2.16.5.2 for detailed descriptions of these measures.
Vibration Impacts during Construction	No impact	Construction activities will generate vibration that could result in cosmetic damage to nearby buildings.	MM-NOI-2.1 through MM-NOI-2.4 will address potential impacts associated with vibration. The measures include the prohibition of impact or vibratory pile driving methods at certain locations, as well as pre- and post-construction surveys of structures. See Section 2.16.5.2 for detailed descriptions of these measures.
<b>Energy (Section 2.17)</b>			
Energy Consumption During the Operational Phase	No impact	Compared to the No Build Alternative, energy consumption will be slightly lower.	None required
Energy Consumption During the Construction Phase	No impact	Construction equipment will be required to be energy-efficient.	None required
<b>Animal Species (Section 2.18)</b>			
Impacts to Roosting Bats	No impact	Modification or removal of structures could	MM-BIO-1.1 through MM-BIO-1.4 will avoid potential impacts to colonies of roosting bats. The measures include pre-construction surveys, as well as

<b>Impact Category</b>	<b>No Build Alternative</b>	<b>Build Alternative</b>	<b>Avoidance, Minimization and/or Mitigation Measures</b>
		impact colonies of roosting bats.	eviction, exclusion, and/or buffer zones, as needed. See Section 2.18.4 for detailed descriptions of these measures.
Impacts to Nesting Birds	No impact	Tree removal during the nesting season could impact nesting birds.	MM-BIO-2.1 through MM-BIO-2.3 will avoid potential impacts to nesting birds. The measures include pre-construction surveys, avoidance of work during the nesting season, and nest deterrence, as needed. See Section 2.18.4 for detailed descriptions of these measures.
Removal of Trees Used by Nesting Birds	None removed	Up to 159 trees to be removed, including 24 in Santana Park.	Except for within Santana Park, replacement trees to be planted at the ratios listed in MM-BIO-3.2. For tree removal impacts within Santana Park, the minimum tree replacement ratios and sizes listed in Table 2.4-1 will be utilized.
<b>Invasive Species (Section 2.19)</b>			
Use of Invasive Species for Landscaping	No effect	No effect. Only non-invasive species will be utilized.	None required
Accidental Introduction or Spread of Invasive Species during Construction	No effect	Construction activities and equipment could inadvertently disperse invasive seeds or plant material.	MM-INV-1.1: Prior to vegetation clearing and grubbing, vehicles (including wheels, undercarriages, and bumpers) and all other equipment, will be washed before and after entering the Project's construction site. Vehicles will be cleaned at legally operating car washes before entering the construction site and at existing construction yards after they have encountered vegetation.
<b>Cumulative Impacts (Section 2.20)</b>			
Cumulative Visual Impact	No impact	The proposed NB SR-17 to NB I-280 flyover ramp, coupled with the recently constructed NB I-280 to NB I-880 flyover ramp, will result in a substantial cumulative visual impact to the Parkmoor Avenue neighborhood.	While the implementation of MM VIS-1.1 would attenuate the cumulative impact by blocking some views of freeway infrastructure from the street over the long-term, it would not reduce this cumulative visual impact to an insubstantial level.

## **COORDINATION WITH OTHER AGENCIES/PERMITS REQUIRED**

Construction of the Build Alternative will require an encroachment permit from the City of San José for all work extending onto local streets within San José. The application for the encroachment permit will be submitted to the City during final design. A National Pollution Discharge Elimination System (NPDES) permit will also be required to address stormwater pollution issues.

# TABLE OF CONTENTS

---

SECTION 1.0 PROPOSED PROJECT.....	1
1.1 INTRODUCTION AND BACKGROUND.....	1
1.2 PURPOSE AND NEED .....	5
1.3 PROJECT DESCRIPTION.....	6
1.4 PERMITS AND APPROVALS NEEDED .....	22
SECTION 2.0 AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES.....	23
2.1 TOPICS CONSIDERED BUT DETERMINED NOT TO BE RELEVANT.....	23
2.2 EXISTING AND FUTURE LAND USE.....	25
2.3 CONSISTENCY WITH STATE, REGIONAL, AND LOCAL PLANS AND PROGRAMS .....	28
2.4 PARKS AND RECREATIONAL FACILITIES.....	31
2.5 GROWTH.....	36
2.6 ENVIRONMENTAL JUSTICE .....	38
2.7 UTILITIES/EMERGENCY SERVICES.....	41
2.8 TRAFFIC AND TRANSPORTATION/PEDESTRIAN AND BICYCLE FACILITIES	44
2.9 VISUAL/AESTHETICS .....	60
2.10 CULTURAL RESOURCES.....	79
2.11 WATER QUALITY AND STORMWATER RUNOFF .....	84
2.12 GEOLOGY/SOILS/SEISMIC/TOPOGRAPHY .....	92
2.13 PALEONTOLOGY .....	95
2.14 HAZARDOUS WASTE/MATERIALS .....	98
2.15 AIR QUALITY .....	103
2.16 NOISE.....	119
2.17 ENERGY.....	141
2.18 ANIMAL SPECIES.....	147
2.19 INVASIVE SPECIES .....	154
2.20 CUMULATIVE IMPACTS .....	156
SECTION 3.0 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) EVALUATION	160
3.1 DETERMINING SIGNIFICANCE UNDER CEQA.....	160
3.2 CEQA ENVIRONMENTAL CHECKLIST .....	161
3.3 CLIMATE CHANGE.....	194
SECTION 4.0 COMMENTS AND COORDINATION.....	213

4.1	INTRODUCTION .....	213
4.2	NOTICE OF PREPARATION AND SCOPING PROCESS .....	213
4.3	CONSULTATION AND COORDINATION WITH AGENCIES AND ORGANIZATIONS .....	214
SECTION 5.0 LIST OF PREPARERS .....		216
SECTION 6.0 DISTRIBUTION LIST .....		218
SECTION 7.0 REFERENCES.....		220

## Figures

Figure 1.1-1:	Regional Location Map.....	2
Figure 1.1-2:	Vicinity Location Map.....	3
Figure 1.1-3:	Aerial Photo of Project Location with Surrounding Land Uses.....	4
Figure 1.3-1:	Conceptual Project Plans .....	8
Figure 2.2-1:	San José General Plan Land Use Designations in the Project Area .....	27
Figure 2.4-1:	Frank Santana Park.....	32
Figure 2.4-2:	Impacts to Frank Santana Park.....	33
Figure 2.8-1:	Existing Roadway Network.....	45
Figure 2.8-2:	Existing Bicycle Facilities.....	47
Figure 2.8-3:	Existing Transit Service .....	49
Figure 2.9-1:	Existing Visual Character of the Project Area.....	62
Figure 2.9-2:	Locations of Key Views .....	65
Figure 2.9-3:	Existing and Simulated Conditions from Key View #1.....	66
Figure 2.9-4:	Existing and Simulated Conditions from Key View #2.....	68
Figure 2.9-5:	Existing and Simulated Conditions from Key View #3.....	69
Figure 2.9-6:	Existing and Simulated Conditions from Key View #4.....	71
Figure 2.9-7:	Existing and Simulated Conditions from Key View #5.....	73
Figure 2.9-8:	Existing and Simulated Conditions from Key View #6.....	75
Figure 2.9-9:	Winchester Bridge – Existing and Future Conditions .....	77
Figure 2.10-1:	Historic Architectural Resource at 3031 Tisch Way .....	81
Figure 2.15-1:	Sensitive Air Quality Receptors in the Project Vicinity .....	109
Figure 2.16-1:	Noise Levels of Common Activities.....	121
Figure 2.16-2:	Noise Receptors and Soundwalls West of Winchester Boulevard.....	123
Figure 2.16-3:	Noise Receptors and Soundwalls Between Winchester Boulevard and I-880/SR-17 .....	124
Figure 2.16-4:	Noise Receptors and Soundwalls East of I-880/SR-17 .....	125

Figure 3.3-1: U.S. 2020 Greenhouse Gas Emissions .....	198
Figure 3.3-2: California 2020 GHG Emissions by Scoping Plan Category .....	199
Figure 3.3-3: Change in California GDP, Population, and GHG Emissions since 2000 ....	199
Figure 3.3-4: Possible Use of Traffic Operation Strategies in Reducing On-road CO <sub>2</sub> Emissions.....	202
Figure 3.3-5: Areas Projected to be Affected by Sea Level Rise .....	212

## Photos

Photo 1: Existing Tunnel to Monroe POC Looking North from Moorpark Avenue .....	10
Photo 2: San José Fire Station #10, 511 South Monroe Street .....	42

## Tables

Table S-1: Summary of Environmental Impacts and Avoidance, Minimization and/or Mitigation Measures .....	vi
Table 1.2-1: Freeway Accident Rates [August 2012 – July 2015] .....	6
Table 1.3-1: Preliminary Right-of-Way Requirements .....	13
Table 1.3-2: Comparison of Alternatives.....	16
Table 1.3-3: Summary of Alternatives and Design Variations Considered But Eliminated From Further Discussion .....	17
Table 1.4-1: Permits and Approvals Needed.....	22
Table 2.2-1: Notable Development in the Project Vicinity .....	26
Table 2.4-1: Tree Replacement Requirements for Santana Park.....	35
Table 2.6-1: Existing Demographics in the Study Area and City of San José.....	39
Table 2.8-1: Level of Service Definitions for Signalized Intersections .....	50
Table 2.8-2: Comparison of Intersection Levels of Service.....	50
Table 2.8-3: Existing Two-Way Traffic Volumes on Local Streets .....	52
Table 2.8-4: Projected 2025 Two-Way Traffic Volumes on Local Streets .....	55
Table 2.8-5: Projected 2040 Two-Way Traffic Volumes on Local Streets .....	56
Table 2.8-6: Effect of Project on Peak Period Congestion on Northbound I-280 .....	57
Table 2-15-1: Air Pollutant Effects and Sources.....	103
Table 2.15-2: State and Federal Attainment Status for San Francisco Bay Area .....	107
Table 2.15-3: Sensitive Receptors Located Within 500 Feet of the Project Footprint.....	108
Table 2.15-4: Criteria Air Pollutant Emissions .....	111
Table 2.15-5: MSAT Emissions.....	113

Table 2.15-6: Construction Emissions .....	114
Table 2.16-1: Noise Abatement Criteria.....	120
Table 2.16-2: Existing and Future Loudest Hour Leq Exterior Noise Levels.....	126
Table 2.16-3: Calculated Interior Noise Levels.....	131
Table 2.16-4: Noise Levels by Construction Phase at 50 Feet and 100 Feet .....	132
Table 2.16-5: Representative Vibration Levels from Construction Equipment.....	134
Table 2.16-6: Distance to Exceedance of Vibration Limit by Structure Type .....	134
Table 2.16-7: Leq[h] Noise Levels with Replacement Soundwall.....	138
Table 2.17-1: Fossil Fuel Use in California for the Transportation Sector (2018) .....	142
Table 2.17-2: Daily Operational VMT in the Study Area .....	143
Table 2.17-3: Operational Daily Fuel Consumption for the Project Area.....	144
Table 2.17-4: Direct Energy Usage for the Construction Phase .....	145
Table 2.19-1: Invasive Plant Species Present in the Biological Study Area.....	155
Table 3.2-1: Comparison of VMT in the Study Area.....	187
Table 3.3-1: Regional and Local GHG Reduction Plans.....	200
Table 3.3-2: Modeled Annual CO <sub>2</sub> e Emissions by Alternative .....	203

## **Appendices**

Appendix A	Section 4(f)
Appendix B	Title VI Policy Statement
Appendix C	Avoidance, Minimization and/or Mitigation Summary
Appendix D	List of Acronyms and Abbreviations
Appendix E	Notice of Preparation
Appendix F	List of Technical Studies
Appendix G	USFWS Species List

# SECTION 1.0 PROPOSED PROJECT

---

## 1.1 INTRODUCTION AND BACKGROUND

The proposed Project is located at the existing Interstate 280 (I-280)/Winchester Boulevard interchange and the adjacent State Route 17 (SR-17)/I-280/I-880 interchange, in San José, Santa Clara County, California.<sup>2</sup> The I-280/Winchester Boulevard interchange is a partial access facility, meaning motorists can exit to Winchester Boulevard from southbound I-280, but not from northbound I-280. Similarly, motorists can access northbound I-280 from Winchester Boulevard, but there is no on-ramp to southbound I-280 at this location.<sup>3</sup> In contrast, the SR-17/I-280/I-880 interchange is a full access facility, meaning that motorists traveling on SR-17, I-280, or I-880 are able to connect to the intersecting freeway in either direction. See Figures 1.1-1 and 1.1-2 for the project location. Figure 1.1-3 depicts the project location on an aerial photograph.

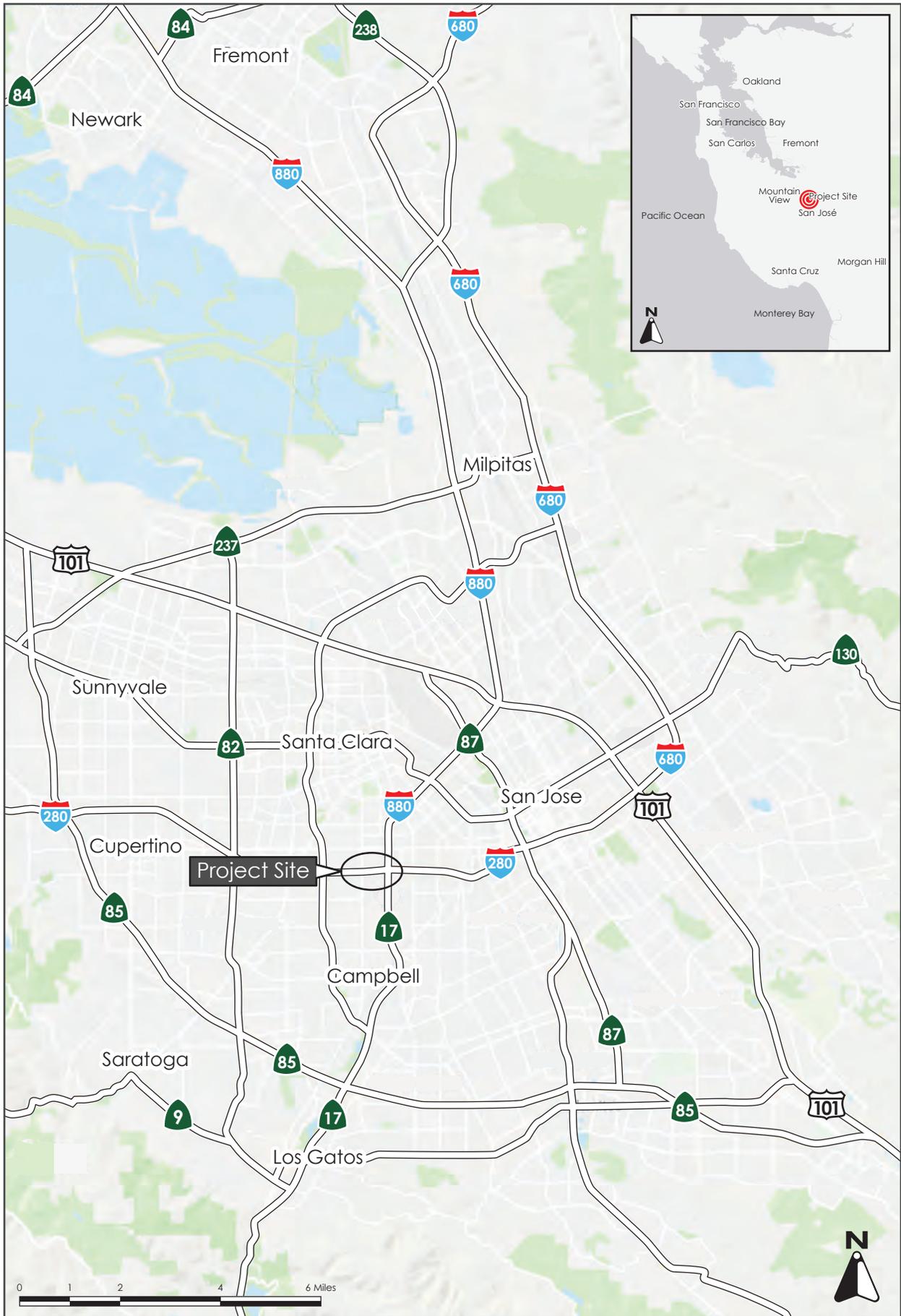
Improvements to the I-280/Winchester Boulevard Interchange were first contemplated and included in the Draft EIR/EA for the Improvements at SR-17/I-280/I-880 Interchange and I-880/Stevens Creek Boulevard Interchange Project in November 2010. The improvements were subsequently eliminated from that project because of concerns over changes in local traffic circulation and property access. However, the underlying need for improvements at the I-280/Winchester Boulevard Interchange remained due to the lack of access to the Winchester Boulevard area from northbound I-280, resulting in out-of-direction travel and congestion along Stevens Creek Boulevard. Therefore, in 2016, the Santa Clara Valley Transportation Authority (VTA) submitted a request to California Department of Transportation (Caltrans), to reinstate project activities for the I-280/Winchester Boulevard Interchange as a standalone project.

Caltrans, in cooperation with the VTA and the City of San José, proposes to modify the I-280/Winchester Boulevard and SR-17/I-280/I-880 interchanges. There are three primary components, which consist of 1) a new off-ramp from northbound I-280 to Winchester Boulevard via Tisch Way, 2) the construction of a direct connector flyover ramp from northbound SR-17 to northbound I-280, and 3) the replacement of the existing Monroe Pedestrian Overcrossing (POC) of I-280. The detailed project description is found in Section 1.3.1.

---

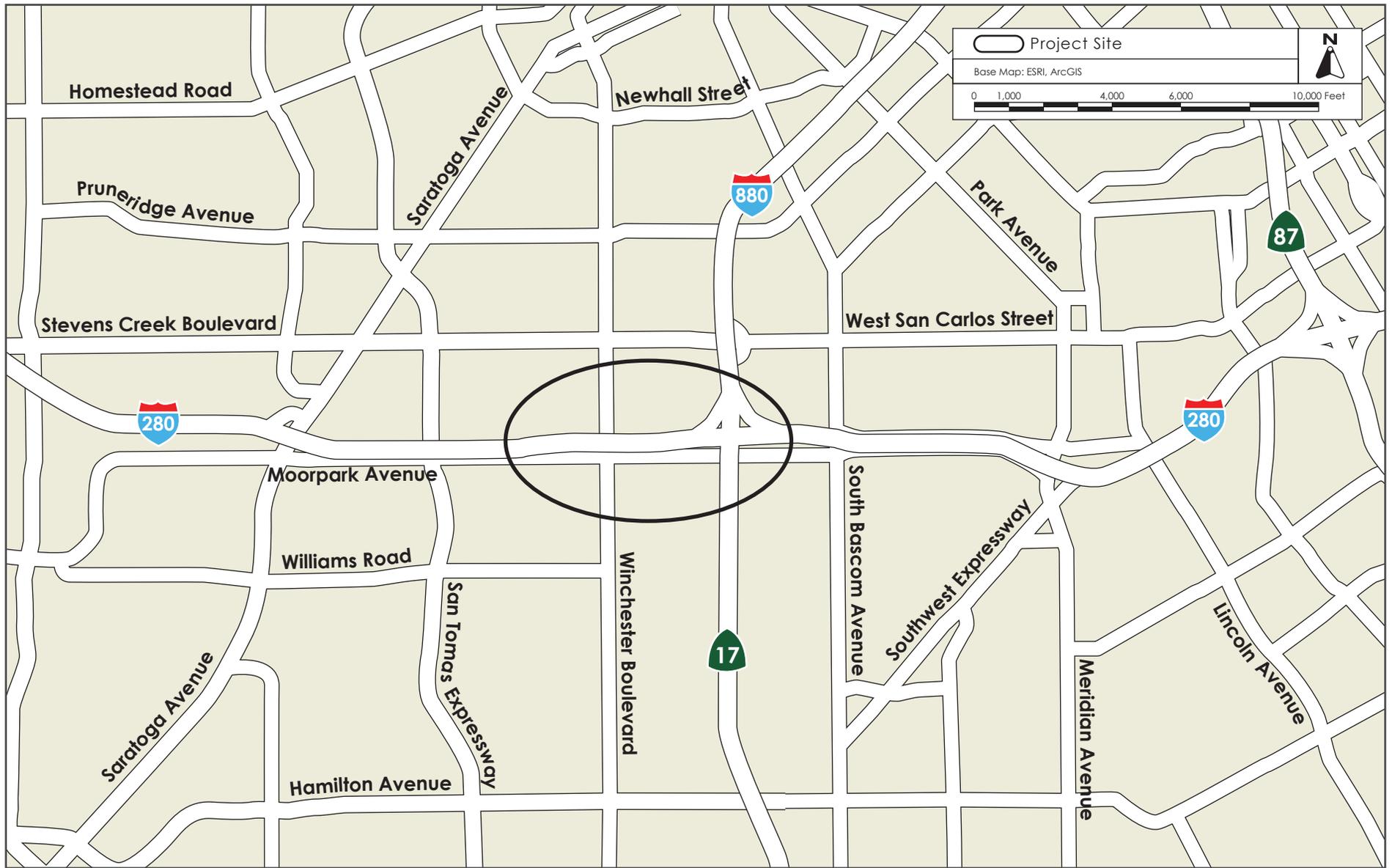
<sup>2</sup> SR-17 and I-880 are the same highway; north of I-280 the freeway is designated as I-880 and south of I-280 the freeway is designated as SR-17.

<sup>3</sup> While SR-17, I-880, and I-280 are each referred to as north-south freeways because their overall alignment runs north-south, I-280 is oriented in an east-west direction at the project location. Nonetheless, when referring to overall direction of travel, this report will utilize the commonly-used phrases of north- and southbound I-280, north- and southbound I-880, and north- and southbound SR-17.



REGIONAL MAP

FIGURE 1.1-1



VICINITY MAP

FIGURE 1.1-2



AERIAL PHOTOGRAPH AND EXISTING SURROUNDING LAND USES

FIGURE 1.1-3

## 1.2 PURPOSE AND NEED

### 1.2.1 Purpose of the Project

The purpose of the Project is as follows:

- Improve traffic operations on the local roadways in the project area.
- Improve bicycle and pedestrian access and transit connectivity in the project area.
- Improve access from northbound I-280 to the project area.

### 1.2.2 Need for the Project

#### 1.2.2.1 *Existing/Projected Congestion and Planned Growth*

Substantial local congestion has occurred along the Winchester Boulevard and Stevens Creek corridors. Traffic volumes on Winchester Boulevard and Stevens Creek Boulevard have increased by 15% over the past five years as a result of local growth. Traffic demands at the I-880/Stevens Creek Interchange are expected to grow by another 20% by 2040 and will likely exceed capacity before that time.<sup>4</sup>

Substantial residential and commercial growth has occurred in the project area along the Winchester Boulevard corridor. Included in this growth are several expansions of Santana Row (large mixed-use development) and Westfield Valley Fair Mall (large regional shopping center), the planned Urban Villages including the Santana Row/Valley Fair Urban Village, Winchester Boulevard Urban Village and the Stevens Creek Urban Village, additional planned residential and commercial developments in the area, and regional economic growth. Increased travel demand has resulted from this growth and additional travel demand is expected from the planned developments.

The City of San José recognizes the importance of the Project to serve existing and planned land uses in the area. To this end, in 2016, the San José City Council adopted the *I-280/Winchester Transportation Development Policy*, which established a traffic impact fee program to partially fund the proposed Project. The fee is paid by new development in the area that will add traffic to the proposed I-280 northbound off-ramp to Winchester Boulevard.

#### 1.2.2.2 *Safety*

Based on data from Caltrans' Traffic Accident Surveillance and Analysis System (TASAS), Table 1.2-1 presents a summary of accidents that occurred on the study

---

<sup>4</sup> It is acknowledged that conditions in 2020 changed dramatically beginning in mid-March due to the shelter-in-place requirements associated with the COVID-19 pandemic. Traffic volumes dropped precipitously, as did passenger levels on all modes of transportation. However, this drop is seen as temporary, and it is expected that transportation demand will return to pre-COVID levels in the future.

segment of I-280 during the 3-year period of August 2012 through July 2015. The data show that both the Fatal + Injury and Total accident rates for the study segment of I-280 are above the average statewide accident rate of the freeways with similar characteristics.

Of the reported collisions, nearly 60 percent occurred in the northbound direction. The three most common accident types recorded on the mainline were rear-end (73.4%), sideswipe (13.7%), and hit-object (9.6%) collisions. Rear-end collisions on the mainline are likely caused by traffic congestion along the mainline. Sideswipe collisions are likely caused by frequent lane changing or weaving maneuvers through this area.

**Table 1.2-1: Freeway Accident Rates [August 2012 – July 2015]**

Location	Number of Accidents	Actual Accident Rate (per million vehicle-miles)			Average Statewide Accident Rate (per million vehicle-miles)		
		Fatal	Fatal + Injury	Total	Fatal	Fatal + Injury	Total
I-280 (PM 4.9-6.0)	342	0.004	0.35	1.37	0.004	0.28	0.92

Source: Traffic Operations Analysis Report, I-280 Winchester Blvd. Interchange, 2021.

### 1.2.2.3 Roadway Deficiencies

There is no direct access from northbound I-280 to the project area. Traffic that would otherwise exit northbound I-280 to the project area is forced to use the I-880/Stevens Creek Boulevard interchange.

### 1.2.2.4 Multimodal Transportation Deficiencies

There is insufficient multi-modal access and connectivity within the project area. The Winchester Boulevard corridor within the project area is heavily traveled by pedestrians and bicyclists. The Winchester Boulevard corridor is classified as “high caution” on the Santa Clara Valley Bikeways Map, identifying a need to better accommodate bicyclists. There are several existing local bus routes that serve the project area, including the 23, 25, 59, and 60 lines, and 523 rapid bus line along Stevens Creek Boulevard. Safe and efficient multimodal connectivity within the project area is needed to integrate a multimodal transportation system in the project area.

## 1.3 PROJECT DESCRIPTION

This section describes the proposed action and the design alternatives that were developed to meet the identified need through accomplishing the defined purpose(s), while avoiding or minimizing environmental impacts. The alternatives are the "Build Alternative" and the "No Build Alternative."

In addition to the Build and No Build Alternatives, this section summarizes 30 design and location alternatives that were evaluated for their potential to meet the Project's purpose and need, but which have been eliminated from further evaluation in this EIR/EA due to one or more of the following reasons: (1) failure to adequately meet the purpose and need, (2) failure to meet minimum roadway design criteria, (3) substantial right-of-way needs that would require significant residential and/or business acquisitions and relocations, (4) substantial environmental impacts, and (5) substantial cost. The evaluation of these 30 alternatives complies with the CEQA requirement that an EIR "describe a range of reasonable alternatives to the project" (CEQA Guidelines §15126.6).<sup>5</sup>

After the public circulation period, all comments will be considered, and Caltrans will select a preferred alternative and make the final determination of the Project's effect on the environment. Under CEQA, Caltrans will certify that the Project complies with CEQA, prepare findings for all significant impacts identified, prepare a Statement of Overriding Considerations for impacts that will not be mitigated below a level of significance, and certify that the findings and Statement of Overriding Considerations have been considered prior to Project approval. Caltrans will then file a Notice of Determination with the State Clearinghouse that will identify whether the Project will have significant impacts, if mitigation measures were included as conditions of Project approval, that findings were made, and that a Statement of Overriding Considerations was adopted. Similarly, if Caltrans, as assigned by FHWA, determines the NEPA action does not significantly impact the environment, Caltrans will issue a Finding of No Significant Impact (FONSI). If it is determined that the Project is likely to have a significant effect on the environment, an Environmental Impact Statement (EIS) will be prepared.

## **ALTERNATIVES**

### **1.3.1 Build Alternative**

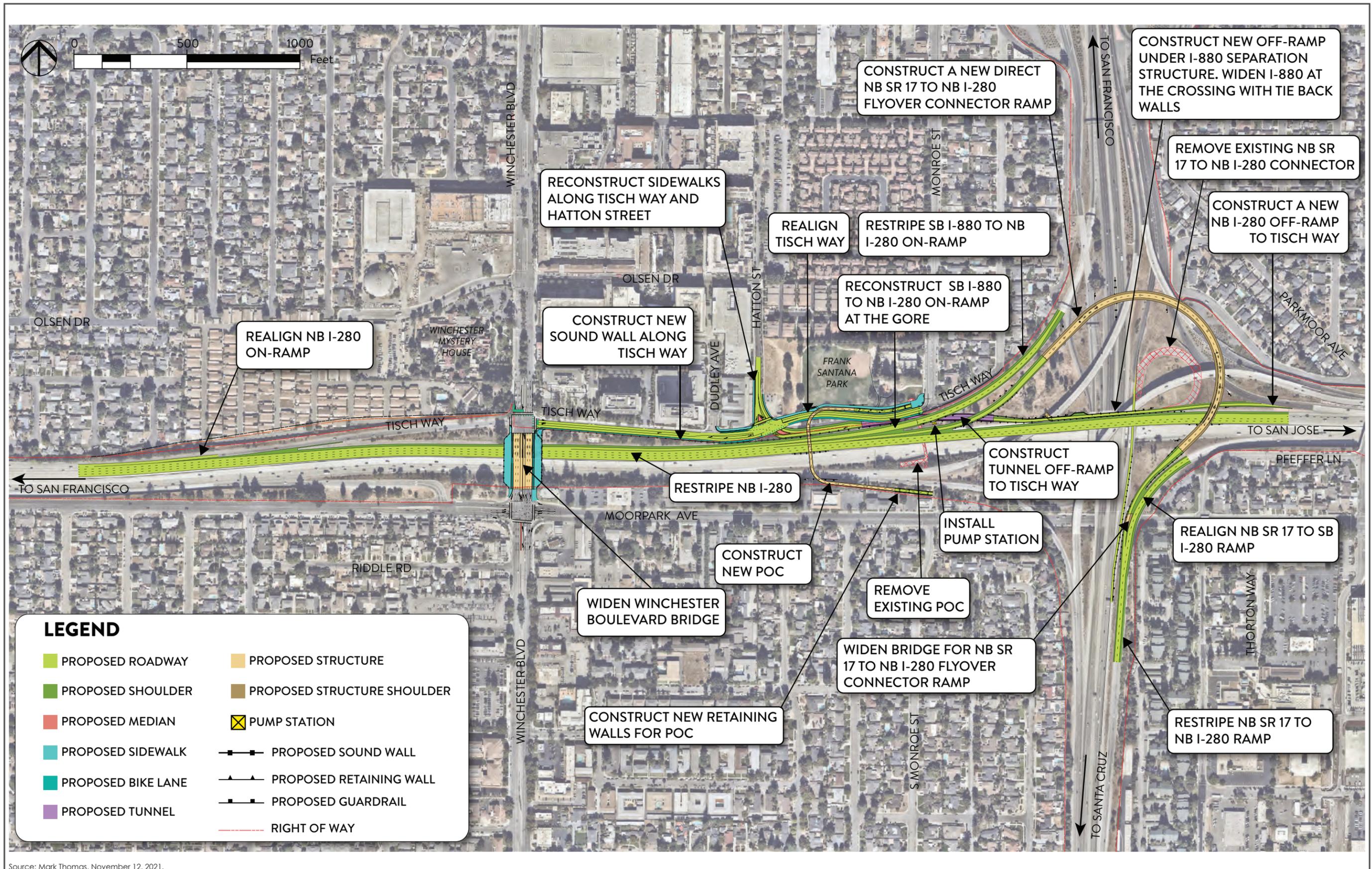
As shown on Figure 1.3-1, the Project would modify the existing I-280/Winchester Boulevard interchange by constructing a new off-ramp from northbound I-280 to the intersection of Tisch Way and Hatton Street and a new direct connector ramp from northbound SR-17 to northbound I-280.

#### **1.3.1.1 *Tunnel Off-ramp to Winchester Boulevard via Tisch Way***

The new off-ramp from northbound I-280 would connect to Winchester Boulevard via Tisch Way. The new off-ramp would diverge from the current northbound I-280 off-ramp to Stevens Creek Boulevard; run parallel to northbound I-280 separated by a concrete barrier; cross under the I-880 separation structure, which would be widened with tie-back walls; cross under the existing southbound I-280 to northbound I-880 connector ramp

---

<sup>5</sup> Under NEPA, an EA need only address one build alternative (FHWA Technical Advisory T6640.8A).



Source: Mark Thomas, November 12, 2021.

CONCEPTUAL SITE PLAN

FIGURE 1.3-1

structure; tunnel for a total distance of approximately 640 feet under a new northbound SR-17 to northbound I-280 connector ramp, the existing southbound I-880 to northbound I-280 connector ramp, and Tisch Way; and rise to terminate at the Tisch Way and Hatton Street intersection. The connection from the ramp terminus to Winchester Boulevard would be completed using Tisch Way. Tisch Way would also be realigned to accommodate the northbound I-280 off-ramp. Retaining walls would be constructed between Tisch Way and northbound I-280 to support the realigned portion of the roadway. A new traffic signal would be installed at the intersection of Tisch Way and Hatton Street to replace the existing traffic signal used with the current intersection layout.

### **1.3.1.2      *Flyover Connector Ramp***

The existing northbound SR-17 to northbound I-280 loop ramp conflicts with the proposed new off-ramp from northbound I-280 to Winchester Boulevard. Therefore, the loop ramp would be removed and replaced with a new northbound SR-17 to northbound I-280 direct connector ramp. The connector ramp would diverge from the existing northbound SR-17 to southbound I-280 connector ramp and would “flyover” the I-280/I-880/SR-17 interchange entering northbound I-280 west of the I-280/I-880/SR-17 interchange. The new connector ramp would reach a maximum height of approximately 70 feet above the northbound off-ramp from I-280 to Stevens Creek Boulevard. The connector ramp would widen to two (2) lanes along its length before merging to one lane and entering northbound I-280 as a fourth lane. The flyover connector ramp would be metered with two (2) mixed-flow lanes.

The existing northbound SR-17 to southbound I-280 ramp crossing over Moorpark Avenue would be widened to accommodate the new flyover connector ramp. The existing mainline lane drop on northbound I-280 under I-880/SR-17 would be maintained and northbound I-280 would carry two (2) mixed flow lanes and one (1) high occupancy vehicle (HOV) lane under I-880/SR-17.

### **1.3.1.3      *Monroe Pedestrian Overcrossing***

The existing Monroe POC over I-280 conflicts with the proposed northbound I-280 off-ramp to Winchester Boulevard. It would, therefore, be removed and replaced with a new POC. The north landing for the new POC would be constructed at the corner of Monroe Street and Tisch Way within Frank Santana Park. The new POC would be approximately 16-foot wide. It would reach a maximum height of approximately 30 feet, which is approximately two feet higher than the existing POC. As shown on Figure 1.3-1, the POC would rise to the west for approximately 420 feet. The POC would then turn south for approximately 470 feet, crossing Tisch Way, the proposed northbound I-280 off-ramp, I-280 mainline, and the southbound I-280 to northbound I-880/southbound SR-17 connector ramp. The POC would then turn to the east and descend for approximately 510 feet to conform with the existing Monroe pedestrian path north of Moorpark Avenue.

When compared to the existing POC, the new structure would provide the following additional benefits for pedestrians and bicyclists:

- In compliance with the requirements of the Americans with Disabilities Act (ADA), the new POC would have a greater width and the slopes of the inclines would be reduced. This design would improve access for all users.
- Under existing conditions, pedestrians access the POC from Moorpark Avenue by walking through a tunnel that goes under the southbound I-280 to northbound I-880 and southbound I-280 to southbound SR-17 connector ramps. The tunnel, which is approximately 100 feet in length, is dark, narrow, and secluded; see Photo 1. The alignment of the new POC would allow for the closure of the tunnel, thereby improving safety for all users.



Photo 1: Existing Tunnel to Monroe POC Looking North from Moorpark Avenue

- Stairs would be provided at the west end of the new POC within Santana Park to shorten access to the POC for pedestrians walking to/from the residential and commercial areas to the west. This accommodation avoids the need for those users to walk to the east end of the park and backtrack, thereby improving access. Please see Figure 2.9-4 in Section 2.9 for an example of the proposed stairway.

#### **1.3.1.4 Frank M. Santana Park**

To accommodate the proposed off-ramp from northbound I-280 to Winchester Boulevard and the reconstruction of the Monroe POC, the walking paths and softball field in Frank

M. Santana Park (Santana Park) would be shifted and realigned. Replacement trees would also be planted in the Park in coordination with the City's Department of Parks, Recreation and Neighborhood Services. As mitigation for impacts to the Park, two vacant parcels located on the western-edge of Santana Park would be purchased:

- Assessor's Parcel Number (APN) 277-38-012, located at the northeast corner of Tisch Way and Hatton Street, would be purchased and the portion not needed for Project-related improvements would be transferred to the City of San José for expansion of Santana Park.
- APN 277-38-014, located along the east side of Hatton Street approximately 225 feet north of Tisch Way, would be purchased and would be transferred to the City of San José for expansion of Santana Park

For a detailed discussion of the Project's impacts to Santana Park, as well as the mitigation that would be implemented by the Project, please see Appendix A, *Section 4(f)*.

### **1.3.1.5 Other Project Features**

- The existing southbound I-880 to northbound I-280 connector ramp would be restriped to accommodate two (2) mixed-flow lanes and realigned to provide a 1,000-foot auxiliary lane before merging onto the northbound I-280 mainline. The connector ramp would be metered with two (2) mixed-flow lanes.
- The existing Winchester Boulevard bridge over I-280 would be widened to provide enhanced bicycle and pedestrian facilities in both directions.
- A portion of the existing soundwalls along the north side of I-280 and east of Winchester Boulevard would be removed and replaced.
- Buffered bike lanes<sup>6</sup> and pedestrian facilities would be added on both northbound and southbound Winchester Boulevard within the project limits.
- A buffered bike lane would be constructed on the southside of Tisch Way from Monroe Street to Winchester Boulevard.
- A combination of multi-use path, buffered bike lane, and designated bike route would be added on the north side of Tisch Way from Monroe Street to Winchester Boulevard.
- Emergency vehicle preemption would be added to traffic signals at the intersections of Tisch Way and Hatton Street and Tisch Way and Winchester Boulevard.
- There is an inactive civil defense siren that is mounted on top of a steel pole at the northwest corner of Tisch Way and Monroe Street (see Figure 2.9-5 in Section 2.9). The siren would be removed and returned to the City for storage.

---

<sup>6</sup> A buffered bike lane is one that is separated from the lanes of traffic by space known as a buffer. The buffer can be delineated by paint on the pavement, raised curb, or by pylons, or a combination of both.

### **1.3.1.6 Standardized Measures**

This project contains a number of standardized project measures which are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are addressed in more detail in the Environmental Consequences sections found in Section 2. Examples include:

- A Transportation Management Plan (TMP) will be prepared for the project.
- Standard provisions dealing with the discovery of unanticipated cultural materials or human remains will be included in the project plans and specifications.
- The construction contractor must comply with Caltrans Standard Specifications in Section 14 that pertain to air pollution control during construction.

### **1.3.1.7 Utility Relocations**

The following utility companies have known facilities within the Project limits: Pacific Gas and Electric (PG&E), San Jose Water Company, American Telephone and Telegraph (AT&T), Comcast, and the City of San José. The Project improvements affect the existing sanitary sewer, water, gas, fiber optic, overhead electric, electric, overhead television, telephone, overhead telecom, and telecom lines. These utilities will require relocation during construction along with overhead utilities requiring temporary relocation during construction.

### **1.3.1.8 Construction Staging Areas**

Staging and laydown areas for equipment and materials would be needed during construction of the Project. Final construction staging areas are to be determined, but potential locations include the vacant Caltrans right-of-way at the northwest corner of the Winchester Boulevard/Moorpark Avenue intersection, the vacant parcels on the east side of Hatton Street that would be purchased by the Project, and areas within the footprint of the SR-17/I-280/I-880 interchange.

### **1.3.1.9 Right-of-Way Requirements**

The majority of the proposed improvements will be constructed within the existing Caltrans and City of San José rights-of-way for the freeways and local streets, respectively. There are a number of locations, however, where the improvements will require additional right-of-way and/or a temporary construction easement (TCE). Based on preliminary design, the locations where additional right-of-way and/or TCEs will be required are listed in Table 1.3-1. This includes partial sliver acquisitions from the current apartment parcels between Dudley Avenue and Hatton Street and commercial parcels on Moorpark Avenue. The acquisitions would not affect any structures or buildings

associated with these properties and would not require relocations of any residences or businesses.

**Table 1.3-1: Preliminary Right-of-Way Requirements**

Assessor's Parcel Number	Property Address	Existing Use	Parcel Size	R/W Needed	TCE Needed
277-38-001	Tisch Way	Santana Park	232,175 ft <sup>2</sup>	19,624 ft <sup>2</sup>	21,664 ft <sup>2</sup>
277-38-012	Tisch Way	Vacant	22,981 ft <sup>2</sup>	22,981 ft <sup>2</sup>	None
277-38-014	Hatton Street	Vacant	11,391 ft <sup>2</sup>	11,391 ft <sup>2</sup>	None
277-38-003	544 Dudley Ave.	Residential	14,450 ft <sup>2</sup>	864 ft <sup>2</sup>	1,012 ft <sup>2</sup>
277-38-004	534 Dudley Ave.	Residential	14,450 ft <sup>2</sup>	343 ft <sup>2</sup>	431 ft <sup>2</sup>
277-38-005	524 Dudley Ave.	Residential	14,450 ft <sup>2</sup>	298 ft <sup>2</sup>	388 ft <sup>2</sup>
279-47-006	3067 Moorpark Ave.	Commercial	20,038 ft <sup>2</sup>	191 ft <sup>2</sup>	221 ft <sup>2</sup>
279-48-003	2845 Moorpark Ave.	Commercial	16,553 ft <sup>2</sup>	None	2,570 ft <sup>2</sup>
279-48-009	2801 Moorpark Ave.	Commercial	12,632 ft <sup>2</sup>	None	3,457 ft <sup>2</sup>
279-48-010	2875 Moorpark Ave.	Commercial	40,511 ft <sup>2</sup>	None	2,973 ft <sup>2</sup>
R/W = right-of-way                      TCE = temporary construction easement					
Information in this table is preliminary and is subject to revision during final design.					

**1.3.1.10 Project Cost**

The Project is included in the Federal Statewide Transportation Improvement Program (ID No. SCL-150014) and the Regional Transportation Plan/Sustainable Communities Strategy (Project No. 21-T06-017 in *Plan Bay Area 2050*), which is updated by the Metropolitan Transportation Commission. The Project is also identified in VTA's 2016 Measure B Program and the City of San José's Capital Improvement Program as Allocation A406G.

The total capital construction cost of the project is estimated to be \$153.5 million, of which the right-of-way costs are estimated to be approximately \$6.8 million.

**1.3.1.11 Project Schedule**

Construction of the Project would take approximately three years, and is anticipated to begin in 2025. A combination of day and night work is anticipated. Construction would occur in phases and would require the temporary closure of traffic lanes. A Transportation Management Plan would be implemented to minimize traffic delays and maintain safety and access during construction (refer to Chapter 2, Section 2.8). Construction activities would include grubbing/land cleaning, grading/excavation, drainage/utilities, and paving.

### **1.3.2 Transportation System Management (TSM) and Transportation Demand Management (TDM) Alternatives**

Transportation systems management (TSM) strategies increase the efficiency of existing facilities by accommodating a greater number of vehicle trips on a facility without increasing the number of through lanes. Transportation demand management (TDM) focuses on regional means of reducing the number of vehicle trips and vehicle miles traveled (VMT), as well as increasing vehicle occupancy.

The project need could not be adequately satisfied by reasonable TSM and TDM strategies. The project area is currently serviced by express bus service (Route 103), rapid bus service (523), and local bus routes (SCVMC Shuttle, 23,25,59, & 60). Project improvements are expected to reduce congestion along Winchester Boulevard and Stevens Creek Boulevard, leading to marginally improved transit system reliability and efficiency in the immediate project area. However, despite the improvements, due to the spread-out configuration of the County's transit system, major improvements and expansions beyond the scope and purpose of this Project, would need to be made to the system in order to lure motorists out of their vehicles in sufficient numbers so as to eliminate the need for the Project. For example, a preliminary study conducted by VTA for a future Bus Rapid Transit (BRT) line on the Stevens Creek Boulevard corridor estimated only 5,000 added daily trips in ridership in year 2030 with BRT implementation. This projected increase in transit ridership with BRT in the Stevens Creek Boulevard corridor would not translate into sufficiently fewer cars to adequately reduce congestion. Likewise, neither ramp metering nor the provision of auxiliary or HOV lanes would provide sufficient congestion relief, in part, because the project need is related to improved access from I-280 to the project area and improved circulation within the project area.

In addition to facilitation of improved transit service, the Project would improve bicycle and pedestrian access and circulation within the project limits. Improvements would be made to on-street and off-street pedestrian and bicycle facilities in order to attract additional bicycle and pedestrian trips and reduce auto trips.

Although TSM and TDM measures alone could not satisfy the purpose and need for the Project, the following TSM and TDM measures have been incorporated into the Build Alternative for this Project:

- To increase the efficiency of the freeway system during peak travel periods, ramp metering would be installed on the direct connector ramp from southbound I-880 to northbound I-280, as well as on the direct connector ramp from northbound SR-17 to northbound I-280.
- The widening of the Winchester Boulevard bridge over I-280 would facilitate improved bicycle and pedestrian access across I-280, reducing local auto trips.
- The reconstruction of the Monroe POC would create a safer and more attractive crossing of I-280 for pedestrians and bicyclists, connecting the primary north-south bicycle corridor in the project area. These improvements would improve bicycle

and pedestrian access across I-280, encourage additional non-motorized trips, and reduce auto trips overall.

- Improvements to Tisch Way within the project limits would facilitate bicycle travel by constructing Class I and Class IV bikeways.

### **1.3.3 No Build Alternative**

The No Build Alternative would consist of not constructing the Project, which would avoid all of the environmental impacts of the Project, as described in this document. However, the No Build Alternative would not meet any of the purposes of the Project, which are listed in Section 1.2.1. Under the No Build Alternative, projected increases in traffic would cause congestion to worsen and the existing problems that are described in Section 1.2.2 would be exacerbated. For a discussion of future traffic conditions in the project area under the No Build Alternative, please see Section 2.8, *Traffic and Transportation*.

### **1.3.4 Comparison of Alternatives**

This section highlights the differences between the Build Alternative and the No Build Alternative. Key differences are also shown in Table 1.3-2.

The Build Alternative would not require the acquisition or relocation of any businesses or residences.

When compared to existing conditions, changes in noise levels under the No Build Alternative would vary by location and would range from zero to an increase of 3 dBA. When compared to existing conditions, changes in noise levels under the Build Alternative would vary by location and would range from zero to +3 dBA. None of these changes are substantial.

For noise abatement purposes, a replacement soundwall is proposed to be constructed along Tisch Way under the Build Alternative. No new or replacement soundwalls are proposed under the No Build Alternative.

Neither the Build Alternative, nor the No Build Alternative, would result in impacts with regard to cultural resources, geology, or long-term air quality. Impacts to biological and water resources under the Build Alternative would not be substantial, with no impacts to these resources occurring under the No Build Alternative.

The Build Alternative would impact 0.45 acres of Frank Santana Park. Portions of the park's existing softball field and walking/jogging path would be impacted. Tree loss would also occur. All impacts would be fully mitigated. No impacts to Santana Park would occur under the No Build Alternative.

**Table 1.3-2: Comparison of Alternatives**

<b>Category</b>	<b>Build Alternative</b>	<b>No Build Alternative</b>
Summary of Vehicular Improvements	Construct NB off-ramp from I-280 to Winchester Blvd; construct NB SR-17-to-NB I-280 direct connector	No improvements
Key Bicycle and Pedestrian Improvements	Widened Winchester bridge over I-280; buffered bike lanes on Winchester & Tisch; new Monroe POC	No improvements
Ability to Meet Purpose and Need	Meets the purpose and need.	Does not meet the purpose and need.
Cost	\$ 153.5 million	\$ 0
Changes in Traffic Circulation Pattern	Direct access to Winchester from NB I-280 will reduce traffic at I-880/Stevens Creek	No changes
Effect on Congestion and Delay	Reduction in congestion, delay, VMT, and peak-period travel times	Congestion will worsen over time as planned growth continues
Impacts to Santana Park	Loss of acreage, encroachment onto softball field and walking path; all impacts to be mitigated	None
Business Relocations	None	None
Residential Relocations	None	None
Change in Noise Levels Compared to Existing Conditions	0 to +3 dBA	0 to +3 dBA
Changes in Noise Levels Compared to No Build conditions	-1 to +2 dBA	----
Visual Impacts in Neighborhood East of I-880, North of I-280	Substantial changes due to new NB SR-17-to-NB 280 connector	None
Impacts to Sensitive Habitats	None	None
Impacts to Threatened & Endangered Species	None	None
Duration of Construction	Approximately three years	n/a
Construction Impacts	Noise, vibration, and dust may be substantial but will be avoided/minimized.	None

The Build Alternative would result in substantial changes to the visual environment for residents living in homes located on Parkmoor Avenue and Pioneer Avenue, which is part of the neighborhood located in the northeast quadrant of the SR-17/I-280/I-880 interchange. Tree replacement is proposed to mitigate for these changes but the impact cannot be reduced to a less-than-substantial level.

Congestion will substantially worsen under the No Build Alternative as planned growth in the area continues. However, when compared to the No Build Alternative, the Build Alternative would result in improvements in traffic operations in the project area, particularly during weekday and weekend peak travel periods.

The Build Alternative would meet the purposes and needs of the project, but the purposes and needs would not be met under the No Build Alternative.

### 1.3.5 Alternatives Considered but Eliminated from Further Discussion

During the development of the proposed Project, numerous alternatives and design variations were considered and studied. Potential improvements included new interchanges, as well as major improvements to existing interchanges. Local street improvement alternatives including improved facilities for pedestrians and bicyclists were also evaluated. Each was evaluated for its potential to meet the purpose and need of the project, its engineering feasibility in terms of its ability to meet Caltrans' minimum design criteria, its cost, and its environmental impacts.

The evaluation process included multiple meetings from 2016 to 2019 with Caltrans, VTA, City of San José, property owners, developers, neighborhood associations, and the general public.

Table 1.3-3 summarizes each of these alternatives and design variations, as well as the reasons they were eliminated from further discussion and evaluation in this EIR/EA. This summary is based on a detailed analysis contained in the *I-280/Winchester Boulevard Interchange Improvements Final Project Variations Screening Memo* (October 2019), which is incorporated into this EIR/EA by reference and which is available for review at the locations listed inside the front cover of this document.

**Table 1.3-3: Summary of Alternatives and Design Variations Considered But Eliminated From Further Discussion**

Name	Description	Reason(s) for Rejection
<b>Interchange Location Alternatives</b>		
I-280/San Tomas Expwy Interchange	Construct new interchange on I-280 at San Tomas Expressway	Acquisition of ≥30 residences; local traffic circulation impacts; would only draw 10% of traffic away from 880/Stevens Creek.
I-880/Forest Avenue Full Interchange	Construct new full interchange on I-880 at Forest Avenue	Acquisition of ≥15 residences; impacts to parking lots & structures at Valley Fair; impacts to O'Connor Hospital parking structure and O'Connor medical building; weaving conflicts with adjacent ramps at Bascom Avenue & Stevens Creek Boulevard.
I-880/Forest Avenue Half Interchange	Construct new half interchange on I-880 at Forest Avenue	Acquisition of ≥15 residences; impacts to O'Connor Hospital parking structure; nonstandard spacing with adjacent interchange at Bascom Avenue.
SR-17/Williams Road Interchange	Construct new interchange on SR-17 at Williams Road	Acquisition of ≥70 residences; inadequate weaving lengths with adjacent I-280 and Hamilton Avenue ramps.
I-280/Bascom Avenue Off-Ramp	Construct new off-ramp from NB I-280 to Bascom Avenue	Requires closure of Leland Avenue on-ramp, creating adverse traffic impacts; requires widening of Bascom Avenue & San Carlos Street with significant right-of-way acquisition from adjacent businesses; would not reduce bottleneck at Stevens Creek/Monroe intersection.

<b>Name</b>	<b>Description</b>	<b>Reason(s) for Rejection</b>
I-880/Hedding Street Interchange	Construct new interchange on I-880 at Hedding Street	Acquisition of ≥40 residences; impacts O'Connor Hospital parking structure; creates non-standard spacing with adjacent interchanges at Bascom Avenue and Stevens Creek Boulevard.
I-280/Saratoga Avenue Interchange	Construct improvements to increase capacity at the I- 280/Saratoga Avenue interchange	Would require widening of Saratoga Avenue & Stevens Creek Boulevard, which would entail significant right-of-way impacts; would not draw much traffic away from 880/Stevens Creek.
SR-17/Hamilton Avenue Interchange	Construct improvements to increase capacity at the SR-17/Hamilton Avenue interchange	Would require widening of Hamilton Avenue, which would entail significant right-of-way impacts; would require reconstruction of LRT station and tracks; would not reduce bottleneck at Stevens Creek/Monroe intersection.
I-880/Bascom Avenue Interchange	Construct improvements to increase capacity at the I-880/Bascom Avenue interchange	Acquisition of 37 residences; requires upgrades to Newhall Street with substantial reduction in on-street parking.
<b>Northbound SR-17 to Northbound I-280 Connector Variations<sup>7</sup></b>		
F1: Tunnel Connector	Realign the NB SR-17 to NB I-280 loop connector, tunneling westerly under I-880 before coming up to grade, merging with the SB I-880 to NB I-280 connector, then merging onto NB I-280.	The geometry is less than desirable due to tightening the radius of the existing freeway to freeway connector and reversing curves. There are constructability concerns due to the curvature of the tunnel.
F2: Horseshoe Connector	Replace the NB SR-17 to NB I-280 loop ramp with a connector ramp that continues north following a long horseshoe alignment veering west before merging with NB I-280.	Due to the length of the connector ramp, a two-lane ramp would be required to comply with Caltrans design standards. Providing a two-lane connector introduces challenges with the falsework clearances over the connector ramp and I-880.
<b>Northbound I-280 to Winchester Boulevard Off-Ramp Variations</b>		
5-legged intersection at Winchester	Construct off-ramp from NB I-280 to Winchester; Tisch Way would be 1-way WB west of Dudley Avenue to accommodate off-ramp.	Evaluated in 2010 Draft EIR/EA; subsequently withdrawn because of substantial opposition from the public and adjacent property owners due to concerns over changes in local traffic circulation and property access.
Hook Ramp to Tisch Way	Construct off-ramp from NB I-280 to Winchester; hook ramp design would terminate on Tisch, east of Winchester.	Evaluated in 2010 Draft EIR/EA; subsequently withdrawn because Caltrans concluded that the required exceptions to the standard design criteria could not be approved at this location.
R1: Tunnel to Tisch Way	Construct a tunnel branching off from the NB I-280 to Stevens Creek off-ramp; tunnel passes underneath the I-880/SR-17 to NB I-280 connectors and ends along Tisch west of Dudley Avenue where it rises to grade near the intersection of Winchester/Tisch.	Unlike the R3 (Tunnel to Hatton Variation), this variation does not provide direct access to Santana Row via Hatton Street.
R3: Hook-Ramp to Hatton Street	Construct an off-ramp branching off from the NB I-280 to Stevens Creek off-ramp; ramp passes over the I-880/SR-17 to NB I-280 freeway	Does not provide a through movement across I-280 for local traffic to off-load Winchester Boulevard. The improvements in this design

<sup>7</sup> In order to provide an off-ramp from northbound I-280 to Winchester Boulevard, the northbound SR-17 to northbound I-280 freeway-to-freeway loop connector needs to be realigned to allow space for construction of a new off-ramp under the I-880 separation structure.

Name	Description	Reason(s) for Rejection
and Moorpark Avenue	connectors on an aerial structure; ramp then splits to provide two local connections: one north of I-280 at Hatton Street and one south of I-280 at Moorpark Avenue.	preclude pairing with an overcrossing variation.
R4: Loop Off-Ramp to Winchester	Construct an off-ramp branching off from the NB I-280 to Stevens Creek off-ramp; ramp passes over the I-880/SR-17 to NB I-280 freeway connectors on an aerial structure; ramp would then continue to the west parallel to Tisch Way; then span over I-280 and rise in elevation to span over Winchester; then lower in elevation in a loop off-ramp configuration to connect to a new intersection at Winchester.	Requires major right-of-way acquisition. Impacts the adjacent historic property (Winchester Mystery House). Needs to be paired with a local overcrossing and/or pedestrian overcrossing, all of which would be incompatible improvements. Provides very little benefit in comparison to the challenges and cost of the improvement.
R5: Tight Diamond with Tisch Closure	Construct an off-ramp branching off from the NB I-280 to Stevens Creek off-ramp; ramp passes over or under the I-880/SR-17 to NB I-280 freeway connectors; convert Tisch Way to a cul de sac just east of Winchester; connect the new off-ramp to the existing Winchester/Tisch intersection.	This variation would require closure of Tisch Way, which would have an adverse impact on the local circulation and emergency responses from San José Fire Station #10.
R6: Slip Ramp to Moorpark Avenue	Construct an off-ramp branching off from the NB I-280 to SB SR-17 connector; ramp would span over I-280 and other connector ramps; ramp would descend in elevation to merge into the westbound direction of Moorpark Avenue.	This variation has adverse impacts for bikes and pedestrians. It also requires significant right-of-way acquisitions.
R7 Off-Ramp to Moorpark Avenue T-Intersection	Construct an off-ramp branching off from the NB I-280 to SB SR-17 connector; ramp would span over I-280 and other connector ramps; ramp would descend in elevation to T-intersection at Moorpark Avenue.	Requires FHWA approval for new exit. Requires construction of a new underpass structure at the SB I-280 to SB SR-17 connector, which would entail a temporary shoofly bridge during construction.
<b>Local Street Improvement Variations</b>		
L1-a: Monroe-Hatton Street Overcrossing	Construct an overcrossing connecting Hatton St. north of I-280 to Monroe St. south of I-280; overcrossing will span over Tisch, I-280, and the I-280/I-880/SR-17 connector ramps; then turn eastward parallel to Moorpark and I-280; then turn southward ending at the existing Moorpark at Monroe signaled intersection.	Requires full right-of-way acquisition at four commercial properties located on north side of Moorpark Avenue. Requires acquisition of City-owned land on east side of Hatton Street that is part of Santana Park.
L1-a: Monroe-Baywood Street Overcrossing	Construct an overcrossing connecting Baywood St. north of I-280 to Monroe St. south of I-280; overcrossing will span over Tisch, I-280, and the I-280/I-880/SR-17 connector ramps; then turn eastward parallel to Moorpark and I-280; then	Requires full right-of-way acquisition at four commercial properties located on north side of Moorpark Avenue. Requires acquisition of City-owned land on east side of Hatton Street that is part of Santana Park.

Name	Description	Reason(s) for Rejection
	turn southward ending at the existing Moorpark at Monroe signalized intersection.	
L2: Clover Avenue-Hatton Street Overcrossing	Construct an overcrossing connecting Hatton Street north of I-280 to Clover Avenue south of I-280; overcrossing will span over Tisch, I-280, and the I-280/I-880/SR-17 connector ramps; then turn eastward parallel to Moorpark and I-280; then turn southward ending at the existing Moorpark at Clover signalized intersection.	Requires full right-of-way acquisition at four commercial properties located on north side of Moorpark Avenue. Requires acquisition of City-owned land on east side of Hatton Street that is part of Santana Park.
L3: Monroe Street Overcrossing	Construct an overcrossing connecting Monrow Street north and south of I-280; overcrossing will span over Tisch, I-280, the I-280/I-880/SR-17 connector ramps and Monroe; the Moorpark/Monroe intersection will be eliminated.	Requires significant right-of-way acquisitions and relocations from neighborhoods along Monroe Street north and south of I-280. Access to San José Fire Station #10 would be eliminated.
<b>Interchange Design Variations</b>		
I1-a: Partial Interchange at Monroe-Hatton	Construct a partial interchange approximately 1,000 feet east of the existing Winchester Boulevard interchange. Includes an off-ramp branching off from the NB I-280 to Stevens Creek off-ramp; ramp passes over the I-880/SR-17 to NB I-280 freeway connectors on an aerial structure. The ramp would terminate at a T-intersection along a new overcrossing that connects Hatton Street north of I-280 and Monroe Street south of I-280.	This variation results in concerns for the isolated offramp, circulation and property impacts to Santana Row, and visual impacts of the elevated off-ramp and overcrossing adjacent to Santana Park.
I1-b: Partial Interchange at Monroe-Baywood	Construct a partial interchange approximately 1,200 feet east of the existing Winchester Boulevard interchange. Includes an off-ramp branching off from the NB I-280 to Stevens Creek off-ramp; ramp passes over the I-880/SR-17 to NB I-280 freeway connectors on an aerial structure. The ramp would terminate at a t-intersection along a new overcrossing that connects Baywood Avenue north of I-280 and Monroe Street south of I-280.	This variation results in concerns for the isolated offramp, circulation and property impacts to Santana Row, and visual impacts of the elevated off-ramp and overcrossing adjacent to Santana Park.
I2: Partial Interchange at Clover-Hatton	Construct a partial interchange approximately 1,000 feet east of the existing Winchester Boulevard interchange. Includes an off-ramp branching off from the NB I-280 to Stevens Creek off-ramp; ramp passes over the I-880/SR-17 to NB I-280 freeway connectors on an aerial structure. The ramp would terminate at a t-intersection along a	This variation results in concerns for the isolated offramp, circulation and property impacts to Santana Row, and visual impacts of the elevated off-ramp and overcrossing adjacent to Santana Park.

Name	Description	Reason(s) for Rejection
	new overcrossing that connects Hatton Street north of I-280 and Clover Street south of I-280.	
I3: Modified Single-Point Urban Interchange with Grade Separation at Moorpark Avenue	Convert the I-280/Winchester interchange to a Single Point Urban Interchange. Includes replacing the existing bridge over I-280 and depressing Moorpark at Winchester, requiring substantial right-of-way. Tisch Way would be converted to right-in/right-out access only.	High cost. Requires significant right-of-way acquisition and changes to local traffic circulation. Design is not bicycle and pedestrian friendly so this improvement would need to be paired with a local overcrossing or a pedestrian overcrossing, which would add to the already extensive cost for the improvement,
I4: Partial Interchange at Olsen Drive	Extend Olsen Drive from the Winchester/Olsen intersection, cross I-280 1,200 feet west of Winchester, and connect to a new intersection with Moorpark 650 feet west of the Winchester. The existing I-280/Winchester interchange would be replaced with a new partial interchange with the new Olsen Drive extension.	Requires significant right-of-way acquisition from the Winchester Ranch property, which is being redeveloped. Impacts parking at Winchester Mystery House, a historic resource and landmark.
I5: Winchester "Horseshoe" Interchange	Construct a new NB I-280 "horseshoe" off-ramp to Winchester with realignment of the existing Winchester NB on-ramp and SB Moorpark off-ramp. The NB off-ramp would diverge from I-280 just to the west of the Winchester Overcrossing, climb adjacent to I-280 and then cross over I-280 and the SB Moorpark off-ramp before crossing over I-280 again, and would connect to Winchester directly south of the existing Winchester at Tisch intersection.	Requires right-of-way acquisitions, including from the Winchester Ranch property, which is being redeveloped. Results in local circulation challenges on Winchester Boulevard due to close intersection spacing between Moorpark and the Tisch/Ramp intersection.
<b>Bicycle and Pedestrian Improvement Variations</b>		
B1: One-Way Cycletrack on Winchester Boulevard	Construct Class IV bike lanes in both directions along Winchester Boulevard between Stevens Creek Boulevard and Moorpark Avenue.	Requires right-of-way acquisitions. Less benefit to cyclists and pedestrians than the proposed Project.
NB = northbound      SB = southbound      WB = westbound      EB = eastbound		
Source: I-280 Winchester Boulevard Improvements Project, Final Project Variations Screening Memo, October 2019.		

Following this screening process, two alternatives were identified for further study. Alternative A included the F2 Flyover Connector, R2 Tunnel to Hatton, B3 Monroe Pedestrian Overcrossing, and B2 Winchester Enhanced Widened Bridge components. Alternative B included the I5 Winchester "Horseshoe" Interchange and B3 Monroe Pedestrian Overcrossing components. Please refer to the table above for a description of these components.

Preliminary engineering studies were conducted for these alternatives. These studies included analysis of traffic operations and property impacts. During the environmental planning phase, the PDT agreed to eliminate Alternative B from further consideration due to right-of-way impacts. Alternative A became the Build Alternative for the Project.

## 1.4 PERMITS AND APPROVALS NEEDED

Construction of the proposed project will require permits/approvals from the governmental agencies listed in Table 1.4-1.

**Table 1.4-1: Permits and Approvals Needed**

Agency	Permit/Approval	Status
City of San José	Encroachment permit for work extending onto local streets within San José	Application to be submitted during final design.
State Water Resources Control Board	NPDES permit to address stormwater pollution issues	Permit issued by SWRCB to Caltrans (Order No. 99-06-DWQ).

In addition to the above-listed permits and approvals, a *Notice of Proposed Construction or Alteration* (Form 7460-1) would be filed with the Federal Aviation Administration (FAA), as required by Part 77 of the Federal Aviation Regulations. This is a standard requirement by which the FAA is notified of structures exceeding specified heights. For the Project, the maximum height of the new flyover ramp from northbound SR-17 to northbound I-280 would be approximately 70 feet above the existing level, which equates to approximately 220 above mean sea level. A structure of this height requires notification to the FAA.<sup>8</sup>

<sup>8</sup> Source: City of San José Airport Department, Notice Requirement Criteria for Filing FAA Form 7460-1

## SECTION 2.0      **AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES**

---

### 2.1           **TOPICS CONSIDERED BUT DETERMINED NOT TO BE RELEVANT**

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

- **Farmlands:** There are no farmlands located within or adjacent to the proposed improvements.
- **Timberlands:** There are no timberlands located in the project vicinity.
- **Community Cohesion:** The Project will construct improvements to existing freeway interchanges and local streets. The improvements will not divide any community or neighborhood.
- **Relocations and Real Property Acquisition:** The Project would not result in the relocation of any residences or businesses.
- **Coastal Zones:** The project site is not in or near areas covered by the Coastal Zone Management Act.
- **Wild & Scenic Rivers:** There are no waterways designated as Wild & Scenic Rivers in the project area. The closest rivers with this designation are over 100 miles from the project area.
- **Flooding:** According to floodplain maps prepared by the Federal Emergency Management Agency (FEMA), the project impact area is not within or adjacent to any 100-year floodplain. There are no waterways within or adjacent to the project limits.
- **Natural Communities:** Based on the Natural Environment Study (NES)<sup>9</sup> prepared for this Project (HT Harvey & Associates, 2021), there are no sensitive habitats

---

<sup>9</sup> The NES is incorporated into this EIR/EA by reference. A copy of the NES is available for review at the locations listed inside the front cover of this document.

located within, or in proximity to, the area to be disturbed by the Project. The Project is not located in or near a wildlife corridor. There are no waterways located within or adjacent to the project limits.

- **Wetlands:** Based on the NES prepared for this Project (HT Harvey & Associates, 2021), there are no wetlands within or adjacent to the project area.
- **Plant Species:** Based on the NES prepared for this Project (HT Harvey & Associates, 2021), there are no special-status plant species within or adjacent to the project area.<sup>10</sup>
- **Threatened & Endangered Species:** Based on the NES prepared for this Project (HT Harvey & Associates, 2021), there is no suitable habitat for any threatened or endangered species within or adjacent to the project area. This Project is located outside of National Oceanic Atmospheric Administration (NOAA) Fisheries Service jurisdiction; therefore, a NOAA species list is not required and no effects to NOAA species are anticipated.

---

<sup>10</sup> “Special-status plant species include California Department of Fish and Wildlife species of special concern, United States Fish and Wildlife Service candidate species, and California Native Plant Society rare and endangered plants.

# HUMAN ENVIRONMENT

## 2.2 EXISTING AND FUTURE LAND USE

The information in this section is based primarily on a technical Community Impact Assessment (November 2021) that was prepared for the Project. This study is incorporated into this EIR/EA by reference. A copy of this study is available for review at the locations listed inside the front cover of this document.

### 2.2.1 Affected Environment

The Project is located within an urban area of the City of San José. As shown on Figure 1.1-3, the existing land uses within the project limits are primarily residential and commercial. Single-family residences are located along local streets including segments of Moorpark Avenue, Parkmoor Avenue, Monroe Street, Tisch Way, and Genevieve Lane. The Winchester Ranch Mobilehome Park is located on the west side of Winchester Boulevard, north of I-280. Commercial uses are located along portions of Winchester Boulevard and Moorpark Avenue.

Although not within the project limits, there are several notable land uses within the immediate area. The Westfield Valley Fair Shopping Mall is a large regional shopping destination that is bounded by I-880 on the east, Stevens Creek Boulevard on the south, Winchester Boulevard on the west, and Forest Avenue on the north. Santana Row is a large residential/commercial mixed-use development located in the southeast quadrant of the Stevens Creek Boulevard/Winchester Boulevard intersection. The Winchester Mystery House is located on the west side of Winchester Boulevard, north of I-280 and is designated as a San José City Landmark, a California State Landmark, and is listed on the *National Register of Historic Places*. The existing I-280/Winchester Boulevard interchange, as well as the nearby I-280/I-880/SR-17 and I-880/Stevens Creek Boulevard interchanges, are major transportation facilities that provide access to these destinations.

As described in Section 1.2, *Purpose and Need*, substantial residential and commercial growth has occurred, and is continuing to occur, in the project area. Major development includes the projects listed in Table 2.2-1.

### 2.2.2 Environmental Consequences

The Project would not result in a substantial change to community character because construction would primarily occur within the footprints of the existing I-280/Winchester Boulevard and I-280/I-880/SR-17 interchanges. However, as shown in Table 1.3-1, some right-of-way acquisition would be necessary to accommodate the Project. Note that the additional right-of-way would not require the acquisition or relocation of any residences

**Table 2.2-1: Notable Development in the Project Vicinity**

<b>Name</b>	<b>Land Uses</b>	<b>Status</b>
Santana Row Expansion	970,000 square feet of office space and 29,000 square feet of retail space	Approved; under construction
Valley Fair Mall Expansion	685,000 square feet of net new commercial space	Constructed
Winchester Ranch	688 new residential units	Under construction
Winchester Agrihood	361 new residential units	Approved; under construction
Santana Row/Valley Fair Urban Village	2,550,000 square feet of net new commercial space and 2,635 new residential units	Plan approved
Winchester Blvd Urban Village	600,000 square feet of net new commercial space and 1,776 new residential units	Plan approved
Stevens Creek Blvd Urban Village	1,350,000 square feet of net new commercial space and 3,860 new units	Plan approved
Source: City of San José, 2021.		

or businesses. Further, in no case would these acquisitions affect any buildings or the viability of the land use itself.

Land use in San José is guided by the *Envision San José 2040 General Plan*. The Project is limited to improvements to existing freeway interchanges and ancillary facilities (e.g., the Monroe Street POC) and would not change land use patterns or density anticipated in the City of José’s General Plan. The Project, which is intended to reduce traffic congestion and vehicle delay, would not change or negatively affect the land uses for the project area that are identified in the General Plan, as shown in Figure 2.2-1. Rather, the improvements that are part of the Project would improve the transportation network that serve those land uses.

See Appendix A for a discussion of the impacts associated with proposed right-of-way acquisition for the Project within Santana Park.

Indirect land use impacts (e.g., noise) are discussed under their own headings in this document.

**2.2.3 Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures are required.



- |  |                                   |  |                                   |  |                           |  |                              |
|--|-----------------------------------|--|-----------------------------------|--|---------------------------|--|------------------------------|
|  | Mixed Use Commercial              |  | Open Hillside                     |  | Regional Commercial       |  | Transit Residential          |
|  | Main Street Commercial            |  | Open Space, Parklands and Habitat |  | Residential Neighborhood  |  | Transportation and Utilities |
|  | Mixed Use Neighborhood            |  | Private Recreation and Open Space |  | Rural Residential         |  | Urban Residential            |
|  | Neighborhood/Community Commercial |  | Public/Quasi-Public               |  | Transit Employment Center |  | Urban Village                |
|  |                                   |  |                                   |  |                           |  | Urban Village Commercial     |

Source: Envision San Jose 2040 General Plan.

SAN JOSE GENERAL PLAN LAND USE DESIGNATIONS IN THE PROJECT AREA

FIGURE 2.2-1

## **2.3 CONSISTENCY WITH STATE, REGIONAL, AND LOCAL PLANS AND PROGRAMS**

### **2.3.1 Regional Transportation Plans**

The Project is listed in, and therefore consistent with, the Metropolitan Transportation Commission's (MTC's) *Plan Bay Area 2050*, which is the regional transportation plan (RTP).<sup>11</sup> The Project is also included in the adopted 2021 Transportation Improvement Program (TIP) for the San Francisco Bay Area.<sup>12</sup>

The No Project Alternative would not be consistent with the RTP and TIP.

### **2.3.2 VTA 2016 Measure B Program**

In 2016, Santa Clara County voters approved Measure B, which increased the local sales tax to fund specified transportation projects. The Project is listed as one of the projects to be funded using Measure B monies, and is therefore consistent with the Measure B program.

The No Project Alternative would not be consistent with the Measure B program.

### **2.3.3 Envision San José 2040 General Plan**

The Envision San José 2040 General Plan contains a number of policies that are relevant to the proposed Project:

Policy EC-1.5: Encourage the State Department of Transportation and County transportation agencies to provide visually pleasing sound attenuation devices on all new and existing freeways and expressways.

Policy CD-3.10: Increase neighborhood connectivity in new development by providing access across natural barriers (e.g., rivers) and man-made barriers (e.g., freeways).

Policy CD-10.4: Work with other agencies or with properties within the City's jurisdiction to promote memorable landscape treatments at freeway interchanges (including 280/87, 680/101, 101/87, 101/85 and 280/17) to frame views of San José and the City's surrounding hillsides.

---

<sup>11</sup> RTP Project ID# 17-07-0025

<sup>12</sup> TIP Project ID# SCL-150014

Policy LU-1.2: Encourage Walking. Create safe, attractive, and accessible pedestrian connections between developments and to adjacent public streets to minimize vehicular miles traveled.

Policy TR-1.1: Accommodate and encourage use of non-automobile transportation modes to achieve San José's mobility goals and reduce vehicle trip generation and vehicle miles traveled (VMT).

Policy TR-1.5: Design, construct, operate, and maintain public streets to enable safe, comfortable, and attractive access and travel for motorists and for pedestrians, bicyclists, and transit users of all ages, abilities, and preferences.

Policy TR-2.1: Coordinate the planning and implementation of citywide bicycle and pedestrian facilities and supporting infrastructure. Give priority to bicycle and pedestrian safety and access improvements at street crossings (including proposed grade-separated crossings of freeways and other high vehicle volume roadways) and near areas with higher pedestrian concentrations (school, transit, shopping, hospital, and mixed-use areas).

Policy TR-2.3: Construct crosswalks and sidewalks that are universally accessible and designed for use by people of all abilities.

Policy TR-2.5: Integrate the financing, design and construction of pedestrian and bicycle facilities with street projects. Build pedestrian and bicycle improvements at the same time as improvements for vehicular circulation.

Policy TR-2.6: Require that all new traffic signal installations, existing traffic signal modifications, and projects included in San José's Capital Improvement Plan include installation of bicycle detection devices where appropriate and feasible.

Policy TR-2.7: Give priority to pedestrian improvement projects that: improve pedestrian safety; improve pedestrian access to and within the Urban Villages and other growth areas; and that improve access to parks, schools, and transit facilities.

Policy TR-2.21: Identify locations where traffic signal phases can be modified or added or where alternative intersection control can be utilized to enhance efficiency and safety for pedestrian service.

Based on the following, the Project is consistent with these policies:

- It would widen the existing Winchester Boulevard bridge over I-280 to provide enhanced bicycle and pedestrian facilities in both directions.
- It would add buffered bike lanes and pedestrian facilities on northbound and southbound Winchester Boulevard within the project limits.

- It would construct an eastbound dedicated bike lane on Tisch Way from Monroe Street to Winchester Boulevard.
- It would reconstruct the existing non-ADA compliant Monroe POC to be ADA compliant. The new Monroe POC would also improve safety for pedestrians and bicyclists; see Section 1.3.1.3 for details.
- It would install bicycle detection devices at the modified signalized intersection at Winchester Boulevard/Tisch Way and at the new signalized intersection at Tisch Way/Hatton Street.
- The Project is located in between the Santana Row/Valley Fair, Winchester Boulevard, and the Stevens Creek Urban Villages. The proposed bike and pedestrian improvements would improve access to and within these Urban Villages, including parks, schools, and transit facilities within these Urban Villages.
- Existing and future traffic signals within the project limits would be timed to safely accommodate pedestrians.
- The Project includes landscaping and replacement tree planting.

#### **2.3.4 I-280/Winchester Transportation Development Policy**

The City of San José recognizes the importance of the Project to serve existing and planned land uses in the area. To this end, in 2016, the San José City Council adopted the *I-280/Winchester Transportation Development Policy (Resolution 77932)*, which established a traffic impact fee program to partially fund the proposed Project. The fee is paid by new development in the area that will add traffic to the proposed I-280 northbound off-ramp to Winchester Boulevard.

The Project is consistent with this policy as, by definition, its construction is the ultimate objective of the policy.

The No Project Alternative would not be consistent with the policy since the specified transportation improvements would not be constructed.

#### **2.3.5 Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures are required.

## **2.4 PARKS AND RECREATIONAL FACILITIES**

### **2.4.1 Regulatory Setting**

The Park Preservation Act (California Public Resources Code [PRC] Sections 5400-5409) prohibits local and state agencies from acquiring any property which is in use as a public park at the time of acquisition unless the acquiring agency pays sufficient compensation or land, or both, to enable the operator of the park to replace the park land and any park facilities on that land.

### **2.4.2 Affected Environment**

There is one park and recreation facility located in the project area at the intersection of Tisch Way and Monroe Street (see Figure 1.1-3). Frank M. Santana Park (Santana Park) is owned and maintained by the City of San José. As shown in Figure 2.4-1, this approximately 5.6-acre park includes a softball field, a children's play area, a walking/jogging path, restrooms, and several picnic tables.

Based on data provided by San José's Parks, Recreation and Neighborhood Services (PRNS) Department, organizations reserved the park's softball field on 244 occasions in 2019, primarily for softball, baseball, soccer, and cricket.<sup>13</sup> In addition, the park's walking/jogging path, children's play area, and picnic facilities are utilized on a daily basis by community members. For additional details on Santana Park and its usage, please see Appendix A, *Section 4(f)*.<sup>14</sup>

### **2.4.3 Environmental Consequences**

The footprint of the proposed off-ramp from northbound I-280 to Winchester Boulevard, including modifications to Tisch Way and the reconstruction of the Monroe POC, would require approximately 0.45 acre of right-of-way from the southerly portion of Santana Park (see Figure 2.4-2). This area is currently occupied by the southerly segment of the park's walking/jogging path and the southerly portion of the outfield of the softball field, both of which would be directly impacted.

Approximately 24 trees with diameters ranging from 4 to 40 inches would also be removed. Access to the park would be maintained and parking would be provided on Tisch Way.

---

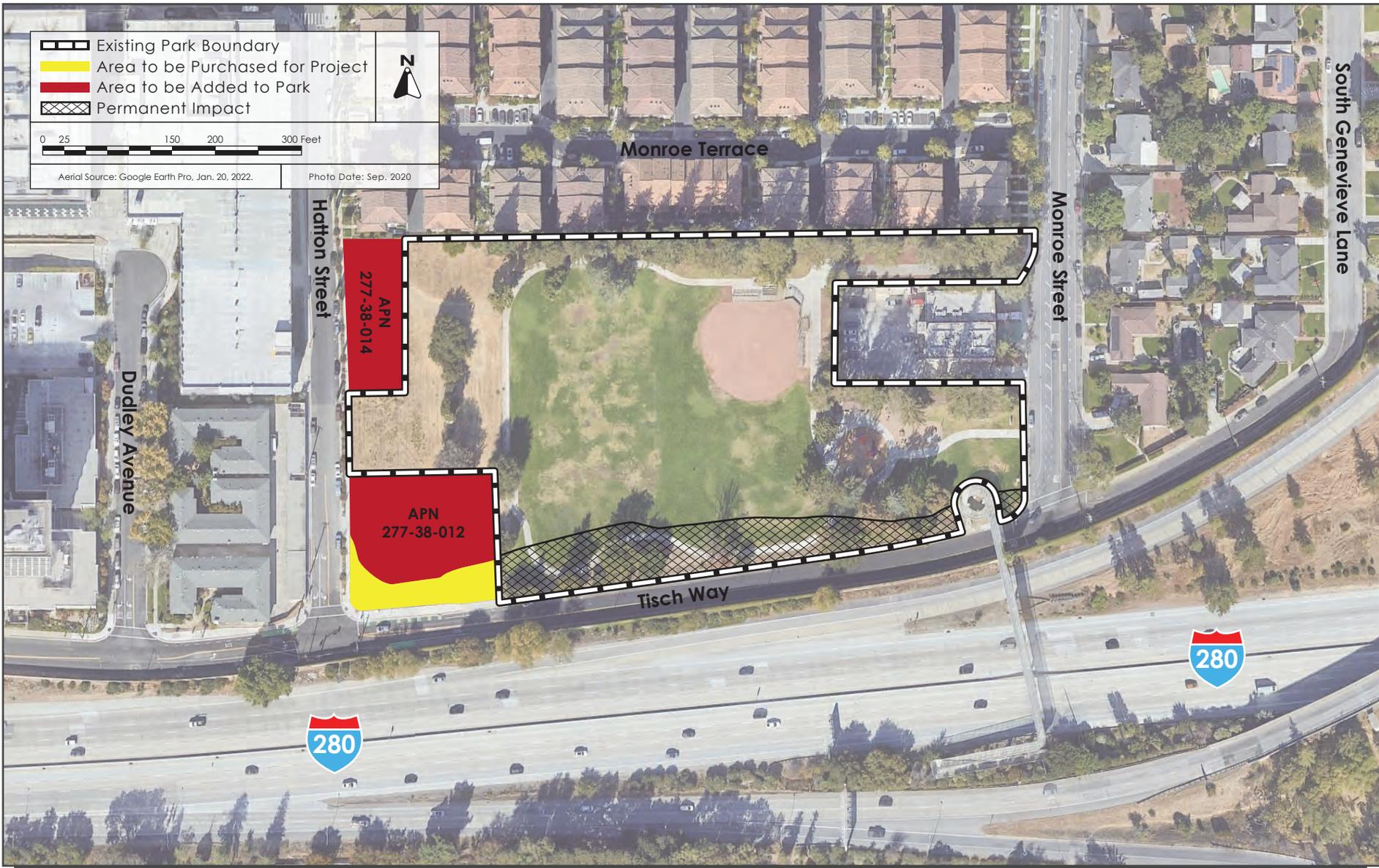
<sup>13</sup> Due to the COVID-19 pandemic, post-2019 data are not representative of typical park usage.

<sup>14</sup> "Section 4(f)" refers to Section 4(f) of the Department of Transportation Act of 1966, which requires transportation projects to avoid and minimize the use of publicly-owned parks. Please see Appendix A for a discussion of the impacts of the project on Santana Park in the context of the requirements of Section 4(f).



FRANK SANTANA PARK

FIGURE 2.4-1



IMPACTS TO FRANK SANTANA PARK

FIGURE 2.4-2

The loss of a portion of the outfield of the softball field would result in a substandard facility. The encroachment onto the walking/jogging path would remove a substantial part of the path and would eliminate the ability of its users to circle the park. The removal of the trees would result in visual and aesthetic impacts for park users as discussed in Section 2.9, *Visual/Aesthetics*.

Although the Project would move traffic closer to facilities in Santana Park, noise levels would not increase. Please see Section 2.16, *Noise*, for details.

#### **2.4.4 Avoidance, Minimization, and/or Mitigation Measures**

**MM-PARK-1.1:** In compliance with the Park Preservation Act, the Project would fully offset the loss of 0.45 acre of land from Santana Park by purchasing the following two parcels:

- An adjacent vacant parcel on the northeast corner of Tisch Way and Hatton Street. The subject parcel, Assessor's Parcel Number (APN) 277-38-012, is 22,981 square feet (0.53 acre) in size.<sup>15</sup> Of this total, and based on the conceptual design, approximately 0.16 acre would be used for the Project and the remainder of 0.37 acre would be dedicated to the City for incorporation into the park.
- An adjacent vacant parcel on the east side of Hatton Street approximately 225 feet north of Tisch Way. The subject parcel, APN 277-38-014, is 11,391 square feet (0.26 acre) in size.<sup>16</sup> The entire parcel would be dedicated to the City for incorporation into the park.

Thus, consistent with the requirements of the Park Preservation Act, there would be no net loss of Santana Park acreage as a result of the Project. Instead, there would be a net gain of 0.18 acre.

The locations of APN 277-38-012 and APN 277-38-014 are shown on Figure 2.4-2. In addition to the purchase of these two parcels, the Project would mitigate for its impacts on Santana Park facilities by undertaking the following:

**MM-PARK-2.1:** The segment of the existing walking/jogging path impacted by the Project would be replaced with a new path, directly north of, and parallel to, the existing path.

**MM-PARK-2.2:** The Project would reconstruct the existing softball field by shifting and realigning it northward. In the pre-project and post-project condition, the

---

<sup>15</sup> The parcel is owned by Federal Realty Investment Trust, the owner of the nearby Santana Row development. The parcel, which is vacant, is used for temporary construction and equipment staging.

<sup>16</sup> The parcel is owned by Swenson Builders. The parcel is vacant.

minimum left-field foul line dimensions would be approximately 260 feet. The right-field foul line dimensions would meet or exceed the current field dimensions. Reconstruction of the existing softball field would include the reconstruction of fencing, dugouts, and bleachers. The conceptual design for this measure is depicted on Figure A-3 in Appendix A.

**MM-PARK-2.3:** The Project would work with the City’s PRNS Department and an arborist on the replacement of trees within the park to ensure that future tree locations are compatible with the layout of park facilities that may be constructed as part of the Santana Park Master Plan. The minimum number and sizes of replacement trees will be as shown in Table 2.4-1.

**Table 2.4-1: Tree Replacement Requirements for Santana Park**

Diameter of Tree to Be Removed	Type of Tree to be Removed		
	Native	Non-Native	Orchard
18 inches or greater	5:1	4:1	3:1
12-18 inches	3:1	2:1	none
Less than 12 inches	1:1	1:1	none

x:x = replacement to tree loss ratio.

**Note:** Ratios shown are minimums. Replacement trees will vary and include a mixture of sizes ranging from 15-gallon to 48-inch boxes at the following approximate percentages: 48-inch box at 10%; 36-inch box at 10%; 24-inch box at 40%, and 15-gallon at up to 40%, depending on the tree species and location of replanting, as determined during final design. If there is insufficient area within Santana Park to accommodate the required replacement trees, the project shall pay Off-Site Tree Replacement Fee(s) to the City, prior to the completion of the project, in accordance with the City Council approved Fee Resolution in effect at the time of payment. The City will use the off-site tree replacement fee(s) to plant trees at alternative sites.

For a detailed discussion on the above-described measures that would be undertaken by the Project, please see Appendix A, *Section 4(f)*.

## **2.5 GROWTH**

### **2.5.1 Regulatory Setting**

The Council on Environmental Quality (CEQ) regulations, which established the steps necessary to comply with NEPA, require evaluation of the potential environmental effects of all proposed federal activities and programs. This provision includes a requirement to examine indirect effects, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. The CEQ regulations (40 CFR 1508.8) refer to these consequences as indirect impacts. Indirect impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

CEQA also requires the analysis of a project's potential to induce growth. The CEQA Guidelines (Section 15126.2[d]) require that environmental documents "...discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment..."

### **2.5.2 Environmental Consequences**

The information in this section is based primarily on a technical Community Impact Assessment (November 2021) that was prepared for the Project. This study is incorporated into this EIR/EA by reference. A copy of this study is available for review at the locations listed inside the front cover of this document.

#### **Build Alternative**

The Project is limited to improvements to an existing interchange and would not change land use patterns or density. The Project is located within, and is intended to serve, an urbanized and mostly-developed area of San José. The Project would not open additional areas to development.

The Project is intended to reduce traffic congestion and vehicle delay, which are the result of growth that has already occurred or is expected to occur in the area in accordance with the land uses identified in the City's adopted General Plan.

One result of reducing congestion can be to increase accessibility, which can in turn affect the timing and location of growth elsewhere. However, due to the urban location of this interchange, the Project is not expected to drive growth in unplanned areas or areas where growth is not currently foreseeable.

The Project is not expected to drive growth in unplanned areas or areas where growth is not currently foreseeable. Therefore, the Project would not result in a population increase.

The Project is not expected to drive growth in unplanned areas or areas where growth is not currently foreseeable as its purpose is limited to serving the local urbanized area. To the extent that a reduction in congestion makes the area more attractive for development, the Project could facilitate residential and commercial growth in the area, as identified in the *Envision San José 2040* General Plan.

The Project is limited to improvements to an existing interchange and is intended to improve traffic operations in the project area. As stated previously, the Project would not induce unplanned growth but would facilitate the planned growth of the area as identified in the General Plan. The General Plan contains policies that ensure that the future capacity of services (e.g., schools, utilities, police and fire protection, libraries, parks, etc.) will be adequate to serve that planned growth.

There are no related (i.e., freeway improvement) projects in the area. The closest project of a similar type is the I-280/Wolfe Road Interchange Improvements Project in the City of Cupertino, which is located approximately 3.6 miles to the west. At that distance, none of the effects of either project would combine to result in cumulative growth effects.

### **No-Build Alternative**

The No-Build Alternative would potentially limit planned growth as congestion worsens at Winchester Boulevard and Stevens Creek corridors.

#### **2.5.3 Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, and/or mitigation measures are necessary because the Project would not induce growth beyond what is expected to occur in the area.

## **2.6 ENVIRONMENTAL JUSTICE**

The information in this section is based primarily on a technical Community Impact Assessment (November 2021) that was prepared for the Project. This study is incorporated into this EIR/EA by reference. A copy of this study is available for review at the locations listed inside the front cover of this document.

### **2.6.1 Regulatory Setting**

All projects involving a federal action (funding, permit, or land) must comply with Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, signed by President William J. Clinton on February 11, 1994. This EO directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the Department of Health and Human Services poverty guidelines. For 2020, this was \$26,200 for a family of four.

All considerations under Title VI of the Civil Rights Act of 1964, and related statutes, have also been included in this project. Caltrans' commitment to upholding the mandates of Title VI is demonstrated by its Title VI Policy Statement, signed by the Director, which can be found in Appendix B of this document.

The CEQ defines minority as a person who is:

- Black (having origins in any of the black racial groups of Africa);
- Hispanic (of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race);
- Asian American (having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); or
- American Indian and Alaskan Native (having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition).

### **2.6.2 Affected Environment**

The study area for the purposes of this analysis is comprised of five census tracts adjacent to the I-280/Winchester Boulevard interchange. Figure 2.6-1 depicts the study area and shows the location of the census tracts in relation to the proposed Project. The demographic characteristics of the population within the study area were also compared to that for the City of San José as a whole. The purpose of this research was to determine if minority and/or low-income populations are present in sufficient numbers such that the

Project could potentially result in a disproportionately high and adverse effect on these populations. This analysis would show the comparative effects on these populations in relation to either non-minority or higher income populations, as appropriate.

As shown in Table 2.6-1, 52% of the population within the study area are minorities, which compares to 72% for the City of San José as a whole. Persons of low-income represent 8% of the population in the study area, which compares to 13% for the City of San José as a whole. The data in Table 2.6-1 also show that the percentage of each minority population within the study area is lower than, or similar to, that found throughout the City of San José as a whole.

**Table 2.6-1: Existing Demographics in the Study Area and City of San José**

	<b>Study Area <sup>a</sup></b>	<b>City of San José</b>
Total Population	28,667	1,033,670
Minority Populations (% of total)		
Black	5%	3%
Asian American	20%	36%
Native American	< 1%	< 1%
Hispanic	27%	32%
Total Minorities	52%	72%
% of Population below Poverty Guidelines	8%	13%
<sup>a</sup> The study area is comprised of the following census tracts the encompass the project limits: Census Tracts 5020.01, 5021.01, 5063.01, 5063.02, and 5064.01.  <u>Source:</u> Year 2010 U.S. Census, as supplemented by Census Bureau 2020 American Community Survey (ACS) data and Federal Financial Institutions Examination Council data.		

Field surveys of the study area determined that, with few exceptions, the neighborhoods contain homes that are well-maintained and in good condition. Similarly, most of the businesses in the study area are well-maintained. The study area is generally considered to be a thriving and desirable location.

### **2.6.3 Environmental Consequences**

The long-term impacts of the Project would primarily consist of increased noise and visual effects. The short-term impacts of the Project would primarily take the form of increased noise, emission of air pollutants, as well as traffic delays associated with temporary lane closures during construction. Based on the above, slightly more than half (52%) of the population that would be affected by these impacts would be minorities. This is congruent

with the fact that 72% of San José's population are minorities. However, the effects of the Project on low-income populations would not be disproportionately high since they comprise only 8% of the population in the study area.

Based on the data in Table 2.6-1, an environmental justice minority population is present because 52% of the population in the project area are minorities. This conclusion notwithstanding, it is important to note that the study area does not have characteristics that are typically associated with minority and low-income communities. According to the US Census, the estimated 2020 median household income in the study area is approximately \$121,000. Further, the 2020 median home value in zip code 95128, which comprises the study area, is approximately \$1.2 million. These numbers are significantly higher than for the City of San José as a whole.

The Project would construct improvements to the existing I-280/Winchester Boulevard interchange. No businesses or residences would be acquired and the Project would not divide an established neighborhood or community. Short-term impacts would be limited to increased noise and emission of air pollutants, as well as traffic delays associated with temporary lane closures during construction. Long-term impacts would include changes to aesthetics and increases in noise.

The project area includes freeways and major arterials that carry substantial volumes of traffic, which produce emissions that affect the surrounding land uses. Traffic-related emissions of air pollutants occur under existing conditions and will continue irrespective of whether the Project is implemented. However, because the Project would improve traffic operations and reduce vehicle miles traveled (VMT), emissions would be lower when compared to the No Build Alternative.

These short- and long-term impacts would affect all populations, both minority and non-minority. Similarly, the long-term transportation and air quality benefits of the Project would be shared by all populations.

Based on the above discussion and analysis, the Project will not cause disproportionately high and adverse effects on any minority or low-income populations in accordance with the provisions of EO 12898. No further environmental justice analysis is required.

#### **2.6.4 Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures are required.

## **2.7 UTILITIES/EMERGENCY SERVICES**

### **2.7.1 Regulatory Setting**

There are no federal or state regulations or plans applicable to utilities or emergency services.

### **2.7.2 Affected Environment**

Various utility lines (e.g., gas, electric, water, communications, sanitary sewer, stormwater, etc.) are located along and within the local streets in the vicinity of the Project. These utility lines also cross or parallel SR-17, I-280, and I-880 in the project area. Water service is provided by the San Jose Water Company. Natural gas and electric power are supplied by PG&E. Telephone and data transmission (cable and internet) service is provided by AT&T and Comcast. The sanitary sewer system in the project area is maintained by the City of San José and transports waste water from residences and businesses to the City's San José-Santa Clara Regional Wastewater Facility. It is then treated physically and biologically before being reused as reclaimed water or discharged into the Bay watershed.

San José Fire Station #10 is located in the project area at 511 South Monroe Street, near the intersection of Monroe Street/Tisch Way (see Figure 2.4-1 and Photo 2). The station houses an engine company and a battalion chief. Station 10's service area encompasses locations on both the north and south sides of I-280. Depending on the location of the emergency, either westbound Tisch Way or northbound Monroe Street is used as the emergency response route from Station 10.

### **2.7.3 Environmental Consequences**

#### **2.7.3.1 *Increased Demand for Utilities and Services***

The Project is limited to improvements to an existing interchange and is intended to improve traffic operations in the project area. As stated previously in Section 2.5, *Growth*, the Project would not induce unplanned growth but would facilitate the planned growth of the area as identified in the General Plan. The General Plan contains policies that ensure that the future capacity of services (e.g., schools, utilities, police and fire protection, libraries, parks, etc.) will be adequate to serve that planned growth.

#### **2.7.3.2 *Impacts on Emergency Vehicle Response Times***

The Project would not sever or adversely impact the existing emergency response routes along Tisch Way and Monroe Street from nearby San José Fire Station #10. Response times would be improved because the Project would install emergency vehicle preemption to traffic signals at the intersections of Tisch Way and Hatton Street and Tisch



Photo 2: San José Fire Station #10, 511 South Monroe Street

Way and Winchester Boulevard. During the construction phase of the Project, any temporary lane or road closures would be coordinated in advance with the fire department, as well as with other emergency responders (e.g., police, ambulance, etc.).

Upon completion of the Project, the improvements from I-280 to Winchester Boulevard and other streets would result in improved access to the surrounding community for emergency vehicles and other public service providers from outside the project area.

**2.7.3.3      *Impacts on Public Utilities***

The Project would affect the existing sanitary sewer, water, gas, fiber optic, overhead electric, electric, overhead television, telephone, overhead telecom, and telecom lines. These utilities would require relocation during construction along with overhead utilities requiring temporary relocation during construction. Utility relocations would not result in the disruption of utility services in the project area because existing lines would not be disconnected prior to the relocated utility lines being in place. As such, there would be no construction impacts related to public utilities.

**2.7.4      Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures are required.

## **2.8 TRAFFIC AND TRANSPORTATION/PEDESTRIAN AND BICYCLE FACILITIES**

### **2.8.1 Regulatory Setting**

Caltrans, as assigned by FHWA, directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of Federal-aid highway projects (see 23 CFR 652). It further directs that the special needs of the elderly and the disabled must be considered in all Federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

In July 1999, the U.S. Department of Transportation (USDOT) issued an Accessibility Policy Statement pledging a fully accessible multimodal transportation system. Accessibility in federally assisted programs is governed by the USDOT regulations (49 CFR 27) implementing Section 504 of the Rehabilitation Act (29 United States Code [USC] 794). The FHWA has enacted regulations for the implementation of the 1990 Americans with Disabilities Act (ADA), including a commitment to build transportation facilities that provide equal access for all persons. These regulations require application of the ADA requirements to Federal-aid projects, including Transportation Enhancement Activities.

### **2.8.2 Affected Environment**

The information in this section is based primarily on a technical Traffic Operations Analysis Report (2021), which is incorporated into this EIR/EA by reference. This report is available for review at the locations listed inside the front cover of this document.

#### **2.8.2.1 *Existing Roadway Network***

The existing roadway network in the project area is shown on Figure 2.8-1 and the key facilities are as follows:

*I-280* is a north-south freeway that extends from U.S. 101 in San José on the south to I-80 in San Francisco on the north. Within the project limits, I-280 is three mixed-flow lanes and one high occupancy vehicle (HOV) lane in each direction. A partial access interchange is located at Winchester Boulevard and a full-access interchange is located at I-880/SR-17.

*I-880* is a north-south freeway that extends from I-280 in San José on the south to I-80 in Oakland on the north. Within the project limits, I-880 is three lanes in each direction and interchanges are located at Stevens Creek Boulevard and I-280. South of I-280, the freeway becomes SR-17.



Source: DKS, October 22, 2021.

EXISTING ROADWAY NETWORK AND STUDY INTERSECTIONS FIGURE 2.8-1

*SR-17* is a north-south freeway that extends from SR-1 in Santa Cruz on the south to I-280 in San José on the north. Within the project limits, SR-17 is three lanes in each direction. North of I-280, the freeway becomes I-880.

*Winchester Boulevard* is a major north-south arterial that begins in the south in the Town of Los Gatos and extends northerly through the Cities of Campbell, San José, and Santa Clara. Within the project limits, there is a partial interchange on Winchester Boulevard with I-280.

*Stevens Creek Boulevard* is a major east-west arterial that begins in the west in the City of Cupertino and extends easterly through the Cities of Santa Clara and San José. In the project vicinity, there is an interchange on Stevens Creek Boulevard with I-880, with ramp connections to southbound SR-17 and southbound I-280. East of Bascom Avenue, Stevens Creek Boulevard becomes San Carlos Street.

*Moorpark Avenue* is an east-west minor arterial that runs south of and parallel to I-280 in the City of San José. It extends from Lawrence Expressway on the west to Meridian Avenue on the east. In the project area, there is an off-ramp from southbound I-280 that terminates on Moorpark Avenue just west of Winchester Boulevard.

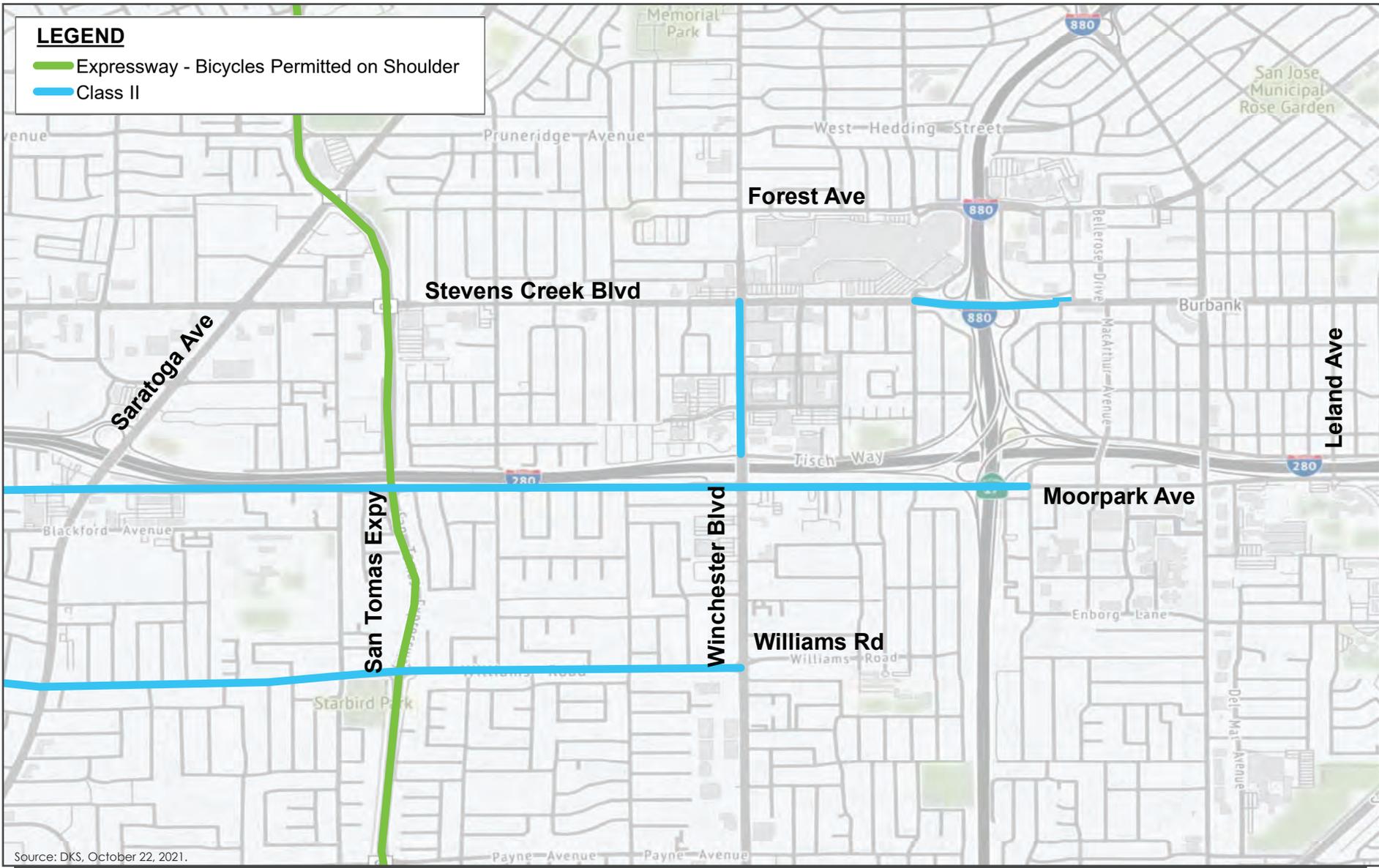
### **2.8.2.2 Existing Bicycle and Pedestrian Facilities**

Bicycle facilities within the study area currently include Class II bicycle lanes in both directions on Williams Road west of Winchester Boulevard, on Stevens Creek Boulevard between Monroe Street and Di Salvo Avenue/Wainwright Avenue, on Moorpark Avenue west of Thornton Way, and on Winchester Boulevard between Tisch Way and Stevens Creek Boulevard. Bicycles are also permitted on the shoulders of San Tomas Expressway. According to the San José *Better Bike Plan 2025*, the City of San José plans to implement more Class II and Class III bike lanes within the study area.<sup>17</sup> The existing bicycle facilities are shown on Figure 2.8-2.

Within the study area, there is an 8-foot-wide sidewalk on both sides of Winchester Boulevard. For Stevens Creek Boulevard, typically, there is an 8-foot-wide sidewalk on each side; between the southbound I-880 ramps and the northbound I-880 ramps, the sidewalk width varies between 8 and 12 feet. For Moorpark Avenue, there is an 8-foot-wide sidewalk along the south side of the arterial. Along the north side, there is an 8-foot-wide sidewalk east of Winchester Boulevard (east of the southbound I-280 off-ramp to Moorpark Avenue/Winchester Boulevard), as well as a short segment extending from east of Saratoga Avenue for about 700 feet. Along I-280, there are pedestrian overcrossings near Cypress Avenue and Monroe Street.

---

<sup>17</sup> Class II facilities are painted lanes on roadways that designate exclusive use by bicyclists. Class III facilities are designated bike routes that are marked by signs but there are no lanes marked for exclusive use by bicyclists. A Class III route is preferable to alternatives that are less conducive to use by bicyclists.



Source: DKS, October 22, 2021.

EXISTING BICYCLE FACILITIES

FIGURE 2.8-2

### **2.8.2.3 Existing Public Transit Service**

Bus service in the project area and throughout Santa Clara County is provided by the VTA. Within the project limits, Express Route 103 utilizes I-280. Rapid Bus Route 523 and Bus Route 23 utilize Stevens Creek Boulevard. Bus Route 25 utilizes Winchester Boulevard and Moorpark Avenue, while Bus Route 60 utilizes Winchester Boulevard. Bus Route SCVMC Shuttle utilizes I-280, Moorpark Avenue, and Bascom Avenue. Bus Route 59 utilizes Stevens Creek Boulevard, Winchester Boulevard, and Forest Avenue. VTA's Valley Fair Transit Center, which is located on the north side of Valley Fair on Forest Avenue, was previously served by Bus Routes 59 and 60, but is no longer in use. The existing public transit facilities are shown on Figure 2.8-3.

### **2.8.2.4 Existing Bicycle and Pedestrian Volumes**

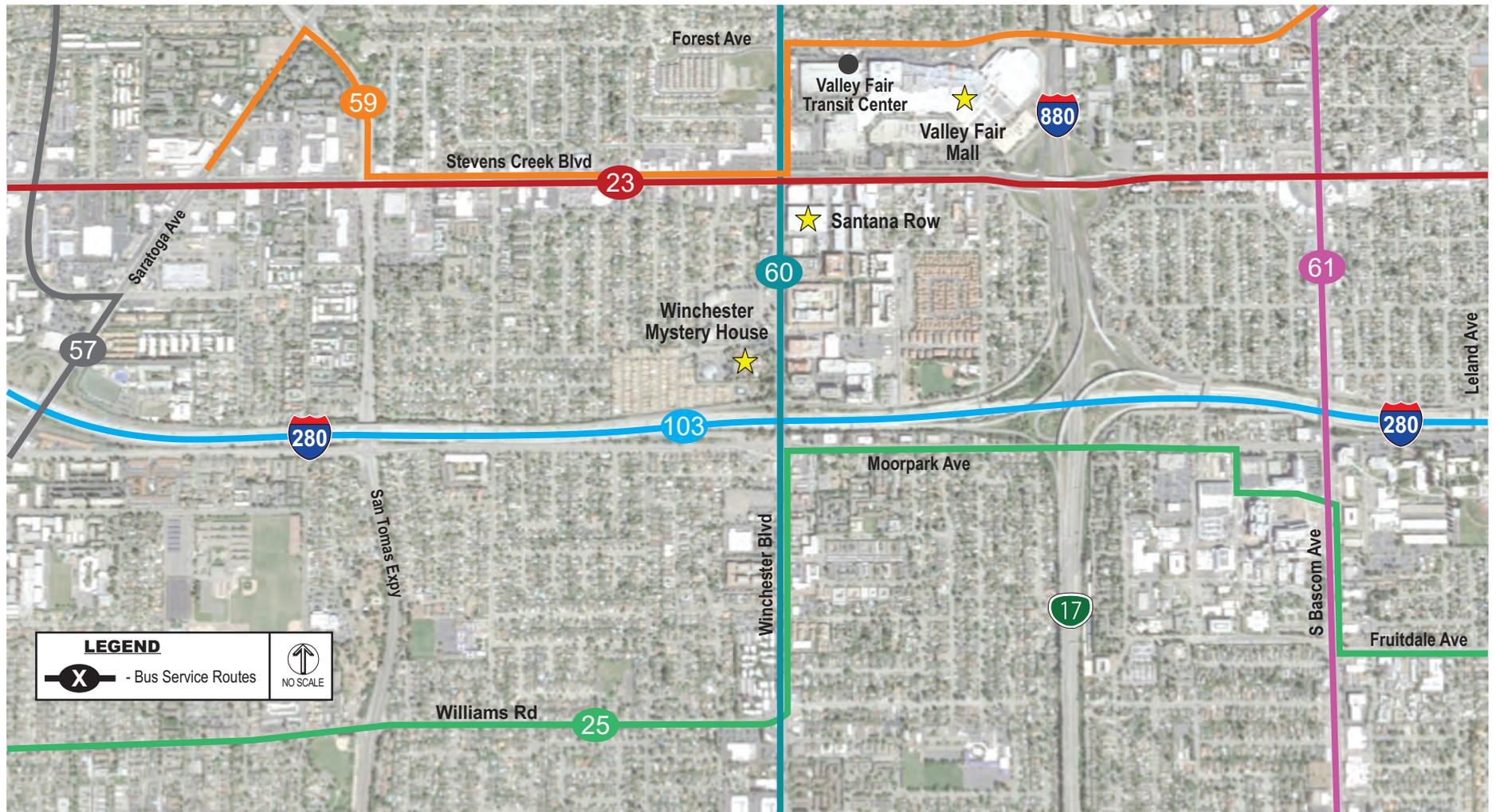
Existing bicycle movements in the study area are light at most intersections. The highest average rate observed was six bicyclists per hour during the weekday PM peak period at the intersection of Winchester Boulevard and Magliocco Drive, which is adjacent to apartment homes.

Pedestrian crossings are highest at Santana Row and Stevens Creek Boulevard, where pedestrians go between the Westfield Valley Fair and Santana Row shopping malls. Weekday PM and Saturday peak periods were observed to have an average of 282 pedestrians per hour and an average of 490 pedestrians per hour, respectively. Other intersections with notable pedestrian activity include Winchester Boulevard/Olsen Drive and Winchester Boulevard/Olin Drive, which are adjacent to the overflow parking lot for Santana Row.

### **2.8.2.5 Existing Operating Conditions at Key Intersections in the Study Area**

Based on their proximity to the proposed improvements, 20 signalized intersections in the project area were selected as study intersections. The intersections are shown on Figure 2.8-1. Operating conditions at the intersections were measured using the "level of service" (LOS) concept, whereby traffic demand is evaluated in the context of capacity. The methodology computes a level of service taking into account factors such as the demand for each traffic movement (i.e., left turns, straight, right turns), the number of lanes, and (where applicable) signal timing. Based on these factors, the methodology computes the average delay per vehicle at the intersection to which a corresponding LOS is assigned. As summarized in Table 2.8-1, level of service can range from "LOS A", representing free-flow conditions, to "LOS F", representing jammed/over-saturated conditions.

The intersection LOS results for the existing weekday AM, weekday PM, and Saturday peak hours are presented in Table 2.8-2. All intersections are performing at LOS E or better, with the exception of San Tomas Expressway/Stevens Creek Boulevard, which operates at LOS F during the weekday PM peak hour. Other intersections showing high levels of delay (LOS E) include San Tomas Expressway at Moorpark Avenue and Winchester Boulevard at Moorpark Avenue during the weekday PM peak.



Source: DKS, 2022.

EXISTING PUBLIC TRANSIT SERVICE

FIGURE 2.8-3

**Table 2.8-1: Level of Service Definitions for Signalized Intersections**

Level of Service	Description of Operations	Average Control Delay <sup>a</sup> (seconds/vehicle)
A	Insignificant Delays: No approach phase is fully utilized and no vehicle waits longer than one red indication.	≤ 10
B	Minimal Delays: An occasional approach phase is fully utilized. Drivers begin to feel restricted.	> 10 to 20
C	Acceptable Delays: Major approach phase may become fully utilized. Most drivers feel somewhat restricted.	> 20 to 35
D	Tolerable Delays: Drivers may wait through no more than one red indication. Queues may develop but dissipate rapidly, without excessive delays.	> 35 to 55
E	Significant Delays: Volumes approaching capacity. Vehicles may wait through several signal cycles and long vehicle queues from upstream.	> 55 to 80
F	Excessive Delays: Represents conditions at capacity, with extremely long delays. Queues may block upstream intersections.	> 80

<sup>a</sup> Average Control Delay includes the time for initial deceleration delay, queue move-up time, stopped delay, and final acceleration.

**Table 2.8-2: Comparison of Intersection Levels of Service**

Intersection	Peak Period	Existing		YEAR 2025				YEAR 2040			
				No Build Alternative		Build Alternative		No Build Alternative		Build Alternative	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Stevens Creek Blvd @ San Tomas Expwy	AM	79.9	E	134.5	F	127.4	F	182.2	F	187.0	F
	PM	143.4	F	219.6	F	217.5	F	277.9	F	273.8	F
	Sat	46.7	D	65.4	E	65.0	E	89.9	F	88.5	F
Stevens Creek Blvd @ Cypress Ave	AM	11.7	B	12.2	B	12.7	B	15.7	B	16.0	B
	PM	15.4	B	18.7	B	19.5	B	24.2	C	25.0	C
	Sat	15.8	B	18.2	B	18.1	B	22.5	C	22.6	C
Stevens Creek Blvd @ Winchester Bl	AM	34.7	C	35.8	D	35.3	D	43.3	D	38.7	D
	PM	46.7	D	53.4	D	49.4	D	51.4	D	48.8	D
	Sat	49.9	D	68.2	E	66.4	E	70.9	E	68.2	E
Stevens Creek Blvd @ Santana Row	AM	11.2	B	12.9	B	11.4	B	13.9	B	14.7	B
	PM	28.6	C	29.4	C	29.2	C	30.2	C	30.3	C
	Sat	29.5	C	30.3	C	30.0	C	29.9	C	29.5	C
Stevens Creek Blvd @ Mall Entrance	AM	5.2	A	6.0	A	5.4	A	6.9	A	5.7	A
	PM	14.2	B	14.3	B	14.3	B	13.5	B	13.4	B
	Sat	13.0	B	13.1	B	12.5	B	14.1	B	11.9	B
Stevens Creek Blvd @ Monroe St	AM	22.4	C	27.0	C	18.5	B	42.5	D	24.6	C
	PM	35.8	D	38.6	D	32.6	C	40.9	D	34.3	C
	Sat	358	D	41.1	D	33.7	C	52.6	D	41.3	D
Stevens Creek Blvd @ SB I-880 Ramps	AM	22.6	C	25.7	C	21.6	C	31.8	C	23.7	C
	PM	21.1	C	23.1	C	19.2	B	24.9	C	20.7	C
	Sat	22.0	C	19.1	B	15.5	B	19.6	B	16.4	B

Intersection	Peak Period	Existing		YEAR 2025				YEAR 2040			
				No Build Alternative		Build Alternative		No Build Alternative		Build Alternative	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Stevens Creek Blvd @ NB I-880 Ramps	AM	39.7	D	43.1	D	36.9	D	38.1	D	38.0	D
	PM	28.6	C	30.5	C	24.3	C	31.6	C	24.3	C
	Sat	36.6	D	<b>85.7</b>	<b>F</b>	<b>68.7</b>	<b>E</b>	<b>99.7</b>	<b>F</b>	<b>80.9</b>	<b>F</b>
Moorpark Ave @ San Tomas Expwy	AM	<b>62.5</b>	<b>E</b>	<b>88.7</b>	<b>F</b>	<b>84.3</b>	<b>F</b>	<b>99.3</b>	<b>F</b>	<b>106.8</b>	<b>F</b>
	PM	<b>66.5</b>	<b>E</b>	<b>133.6</b>	<b>F</b>	<b>134.8</b>	<b>F</b>	<b>180.2</b>	<b>F</b>	<b>181.1</b>	<b>F</b>
	Sat	29.2	C	36.2	D	36.3	D	36.9	D	36.8	D
Moorpark Ave @ Cypress Ave	AM	6.5	A	6.7	A	6.6	A	7.0	A	7.2	A
	PM	3.2	A	3.2	A	3.2	A	3.3	A	3.3	A
	Sat	2.7	A	2.8	A	2.8	A	2.9	A	2.9	A
Moorpark Ave @ SB I-280 Off-Ramp	AM	14.4	B	15.7	B	13.5	B	15.9	B	15.3	B
	PM	14.1	B	14.6	B	15.4	B	15.5	B	11.3	B
	Sat	9.1	A	14.3	B	13.3	B	13.6	B	13.3	B
Moorpark Ave @ Winchester Bl	AM	49.1	D	<b>79.5</b>	<b>E</b>	<b>68.0</b>	<b>E</b>	<b>83.2</b>	<b>F</b>	<b>57.9</b>	<b>E</b>
	PM	<b>63.4</b>	<b>E</b>	<b>119.9</b>	<b>F</b>	<b>67.1</b>	<b>E</b>	<b>152.5</b>	<b>F</b>	<b>81.2</b>	<b>F</b>
	Sat	49.4	D	<b>57.2</b>	<b>E</b>	49.5	D	54.9	D	51.4	D
Moorpark Ave @ Monroe St	AM	8.9	A	11.7	B	11.1	B	10.9	B	10.5	B
	PM	9.4	A	21.3	C	12.9	B	29.5	C	33.0	C
	Sat	3.3	A	4.5	A	6.5	A	4.9	A	6.8	A
Winchester Blvd @ Williams Rd	AM	35.1	D	31.9	C	29.9	C	30.3	C	29.0	C
	PM	30.9	C	28.7	C	27.5	C	27.4	C	29.3	C
	Sat	17.8	B	22.8	C	21.8	C	22.8	C	21.4	C
Winchester Blvd @ Magliocco Dr	AM	12.6	B	11.0	B	12.3	B	11.0	B	11.9	B
	PM	13.9	B	12.5	B	14.1	B	12.2	B	13.6	B
	Sat	11.1	B	10.9	B	11.5	B	10.7	B	11.3	B
Winchester Blvd @ Tisch Way	AM	21.8	C	35.0	D	24.0	C	21.8	C	24.9	C
	PM	40.9	D	<b>91.4</b>	<b>F</b>	49.2	D	<b>83.8</b>	<b>F</b>	38.8	D
	Sat	22.8	C	29.6	C	37.3	D	30.0	C	42.8	D
Winchester Blvd @ Olsen Dr	AM	6.3	A	13.0	B	14.9	B	13.9	B	16.5	B
	PM	18.2	B	28.7	C	37.3	D	34.4	C	48.9	D
	Sat	18.7	B	19.5	B	20.2	C	21.0	C	19.5	B
Winchester Blvd @ Olin Ave	AM	16.2	B	32.5	C	28.7	C	35.1	D	31.9	C
	PM	23.4	C	37.5	D	36.0	D	37.1	D	35.3	D
	Sat	24.8	C	36.7	D	32.6	C	36.9	D	33.4	C
Winchester Blvd @ Dorcich St	AM	7.9	A	8.9	A	8.6	A	12.9	B	12.8	B
	PM	19.4	B	21.0	C	20.0	C	30.1	C	30.0	C
	Sat	23.4	C	26.0	C	25.8	C	31.9	C	31.8	C
Winchester Blvd @ Forest Ave	AM	22.4	C	17.2	B	17.2	B	17.3	B	17.0	B
	PM	23.3	C	20.8	C	24.4	C	26.7	C	26.5	C
	Sat	31.1	C	28.4	C	28.4	C	26.6	C	26.6	C
NB I-280 Off-Ramp @ Hatton St	AM	Intersection does not exist		Intersection does not exist		12.9	B	Intersection does not exist		13.3	B
	PM	Intersection does not exist		Intersection does not exist		13.8	B	Intersection does not exist		13.4	B
	Sat	Intersection does not exist		Intersection does not exist		14.1	B	Intersection does not exist		16.6	B

Intersection locations are shown on Figure 2.8-1.

Delay is measured in seconds.

Bold text denotes LOS E or worse. Shaded cells denote LOS F.

Source: Traffic Operations Analysis Report for I-280/Winchester Boulevard Interchange Improvements Project, 2021.

### 2.8.2.6 Existing Operating Conditions on Roadways in the Project Area

The following discussion summarizes observed operating conditions on roadways in the project area. The observations represent existing conditions on a typical weekday AM peak period, weekday PM peak period, and Saturday midday peak period, with traffic volumes presented in Table 2.8-3. Conditions due to atypical circumstances (i.e., stalls and accidents, major storms, holidays, etc.) are not described.

**Table 2.8-3: Existing Two-Way Traffic Volumes on Local Streets**

Roadway Segment	Weekday AM Peak Trips	Weekday PM Peak Trips	Saturday Midday Peak Trips
<b><u>Winchester Boulevard</u></b>			
- North of Stevens Creek Boulevard	1,600	2,250	2,200
- South of Stevens Creek Boulevard	1,850	2,750	2,750
- South of Olin Avenue	1,850	2,250	2,250
- South of Olsen Drive	1,950	2,350	2,300
- South of Tisch Way	2,700	2,800	2,400
- South of Moorpark Avenue	2,150	2,500	1,850
<b><u>Stevens Creek Boulevard</u></b>			
- West of Winchester Boulevard	2,000	2,650	3,000
- East of Winchester Boulevard	2,350	2,800	3,100
- East of Santana Row	2,700	3,000	3,150
- East of Monroe Street	4,050	4,450	4,700
- East of Northbound I-880 Ramps	1,900	2,200	1,550
<b><u>Moorpark Avenue</u></b>			
- West of Southbound I-280 Off-Ramp	1,350	1,650	1,200
- West of Winchester Boulevard	2,050	2,300	1,950
- East of Winchester Boulevard	2,250	2,650	1,750
<b><u>Tisch Way</u></b>			
- East of Winchester Boulevard	700	650	400
<b><u>Monroe Street</u></b>			
- North of Stevens Creek Boulevard	400	700	1,300
- South of Stevens Creek Boulevard	700	650	500
Note: Volumes are rounded to the nearest 50.			
Source: Traffic Operations Analysis Report for I-280/Winchester Boulevard Interchange Improvements Project, 2021.			

#### Weekday AM Peak Period

Northbound I-280 typically becomes congested on weekdays just after 6:30 AM due to a bottleneck between the on-ramp from southbound I-880 and the Winchester on-ramp. Shortly after 7:00 AM, the queue from downstream bottlenecks associated with several high-volume off-ramps (at Lawrence Expressway, Wolfe Road, and De Anza Boulevard interchanges) plus the SR 85-Foothill Expressway ramp weave segment spills back into

the study area resulting in congestion throughout the study segment. This congestion on northbound I-280 persists until after 9:30 AM. During the AM peak period, significant queuing also occurs on the unmetered ramps from both southbound I-880 and northbound SR 17, with queue spillback to the respective freeway mainlines. As a result, southbound I-880 is heavily congested from the exit to northbound I-280 to Forest Avenue, while the right lanes on northbound SR 17 are also heavily congested approaching the exit to northbound I-280.

Congestion during the weekday AM peak period also occurs farther north on northbound I-880 due to a bottleneck around the US 101 junction, with the queue extending into the study area from 7:30 AM until 10:00 AM. Associated with this, congestion slowly builds up on the southbound I-280 connector to northbound I-880, but does not spill back onto southbound I-280. By 10:00 AM, traffic flows along each direction of each freeway mostly returns to free-flow conditions.

In the middle of the AM peak period, northbound San Tomas Expressway is slightly congested. There is also significant delay on westbound Stevens Creek Boulevard between Cypress Avenue and San Tomas Expressway. Traffic is free flowing along Winchester Boulevard, Moorpark Avenue, and the Santana Row/Westfield Valley Fair shopping mall areas.

### **Weekday PM Peak Period**

No significant congestion typically occurs within the study segment of northbound I-280 during the PM peak period. In the southbound direction, the queue from downstream bottlenecks at the SR 17/I-280, SR 87/I-280 and US 101/I-280 interchanges spill back into the study area by 3:00 PM. By approximately 3:45 PM, the queue from these downstream bottlenecks typically merge together and extend through the study segment. Congestion in the study area does not begin to dissipate until after 6:30 PM.

The mainline congestion along southbound I-280 results in significant queuing on the unmetered ramp from southbound I-880/Stevens Creek, extending at times to just beyond the merge point for traffic coming from southbound I-880 and from Stevens Creek Boulevard. Queues associated with the meter on the on-ramp from Saratoga Avenue fluctuate with the arrival of traffic platoons from the upstream intersections, but these queues do not extend back to the intersection. Queuing also occurs on the off-ramps to Saratoga Avenue and Winchester Boulevard.

On I-880, congestion occurs in both directions north of Stevens Creek Boulevard between 5:00 and 6:00 PM. Similar conditions occur on southbound SR 17 south of I-280. By the end of the peak period, the freeways within the study area are no longer congested, except for southbound I-280 west of San Tomas Expressway.

## **Saturday Midday Peak Period**

Free-flow conditions on the freeways are typical for the Saturday midday period. Queues, however, occur at several off-ramps at various times throughout the Saturday midday period. Affected off-ramps include the northbound I-280 off-ramp to Saratoga Avenue, southbound I-280 off-ramps to Saratoga Avenue and Winchester Boulevard, and the southbound I-880 off-ramp to Stevens Creek Boulevard.

Forest Avenue and Stevens Creek Boulevard are typically congested near the Valley Fair and Santana Row malls and remain so for the entire Saturday peak period. Winchester Boulevard is also congested within the entire study area, but typically clears near the end of the peak period. Heavy congestion occurs along eastbound Stevens Creek east of I-880. Clearing the intersection at the I-880 northbound ramps and Stevens Creek Boulevard frequently requires two or more signal cycles and vehicles often block the intersection. Moorpark Avenue is generally free flowing throughout the Saturday midday peak period.

### **2.8.2.7 Future “No Build” Traffic Conditions**

Forecasts for the opening (2025) and design horizon (2040) years were developed using the VTA’s countywide travel demand model. Demographic and employment variables that are used in the trip generation and other components of the VTA model are derived from the Association of Bay Area Government’s (ABAG’s) Projections-2013 demographic and employment forecasts. Future year transportation networks incorporate projects included in the Plan Bay Area, as adopted by the Metropolitan Transportation Commission (MTC) and ABAG in 2013. The VTA model meets the MTC’s criteria for regional consistency.

The benefit of the travel demand model is that it provides projections of future traffic volumes, taking into account traffic from future development planned for in the approved general plans of the cities in Santa Clara County. The model also accounts for planned growth in the region, as well as planned improvements to the transportation network.

When compared to existing conditions, mainline volumes on I-280 northbound are forecasted to increase by about 27 percent over existing conditions by 2040 during the AM peak period. On I-880, the southbound direction will experience a 13 percent increase over existing volumes. For the PM peak period, the largest increases in freeway mainline volumes will be seen on northbound I-280, at 26 percent by 2040 over existing volumes. The north and southbound I-880 mainline volumes will increase by 10 and 4 percent during the PM period by 2040, respectively. The largest increases in mainline volumes will be seen for the Saturday peak period, with north and southbound I-280 mainline volumes increasing by 42 and 25 percent over existing conditions by 2040, respectively. North and southbound I-880 mainline volumes will increase by 10 and 12 percent, respectively, for the Saturday peak period by 2040. For all time periods, changes in ramp volumes will vary widely.

When compared to existing conditions, traffic volumes on local roadways will generally be higher in 2025 and 2040. This is due to the planned growth in the greater project area. Projected traffic volumes for 2025 and 2040 are presented in Tables 2.8-4 and 2.8-5, respectively.

The intersection LOS results for the 2025 and 2040 weekday AM, weekday PM, and Saturday peak hours under the No Build Alternative are presented in Table 2.8-2. The following intersections are projected to operate under congested (i.e., LOS F) conditions in one or more of the peak periods: Stevens Creek Boulevard at San Tomas Expressway, Stevens Creek Boulevard at Southbound I-880 Ramps, Moorpark Avenue at San Tomas Expressway, Moorpark Avenue at Winchester Boulevard, and Winchester Boulevard at Tisch Way. In addition, the intersection of Stevens Creek Boulevard at Winchester Boulevard is projected to operate at high levels of delay (i.e., LOS E) during the Saturday midday peak.

**Table 2.8-4: Projected 2025 Two-Way Traffic Volumes on Local Streets**

Roadway Segment	Weekday AM Peak Trips		Weekday PM Peak Trips		Saturday Midday Peak Trips	
	No Build Alt.	Build Alt.	No Build Alt.	Build Alt.	No Build Alt.	Build Alt.
<b>Winchester Boulevard</b>						
- North of Stevens Creek Boulevard	1,850	1,300	2,550	2,550	2,450	2,450
- South of Stevens Creek Boulevard	2,200	2,000	3,150	2,900	3,350	3,100
- South of Olin Avenue	1,700	1,650	2,050	1,950	2,250	2,150
- South of Olsen Drive	2,250	2,300	2,850	2,800	2,350	2,350
- South of Tisch Way	2,950	2,950	3,100	3,350	2,800	2,900
- South of Moorpark Avenue	2,100	2,750	2,500	2,600	2,050	2,150
<b>Stevens Creek Boulevard</b>						
- West of Winchester Boulevard	1,900	1,850	2,600	2,550	2,700	2,700
- East of Winchester Boulevard	2,850	2,550	3,300	3,000	3,450	3,200
- East of Santana Row	3,200	2,700	3,500	3,200	3,500	3,250
- East of Monroe Street	4,550	3,900	4,850	4,400	5,000	4,600
- East of Northbound I-880 Ramps	1,650	1,600	2,100	2,100	1,300	1,300
<b>Moorpark Avenue</b>						
- West of Southbound I-280 Off-Ramp	1,550	1,600	2,200	2,300	1,350	1,350
- West of Winchester Boulevard	2,500	2,550	2,800	2,900	2,300	2,300
- East of Winchester Boulevard	2,850	2,700	3,500	3,450	2,300	2,250
<b>Tisch Way</b>						
- East of Winchester Boulevard	350	700	150	700	400	800
<b>Monroe Street</b>						
- North of Stevens Creek Boulevard	400	400	700	700	1,350	1,350
- South of Stevens Creek Boulevard	700	450	650	450	500	300
Note: Volumes are rounded to the nearest 50.						
Source: Traffic Operations Analysis Report for I-280/Winchester Boulevard Interchange Improvements Project, 2021.						

**Table 2.8-5: Projected 2040 Two-Way Traffic Volumes on Local Streets**

Roadway Segment	Weekday AM Peak Trips		Weekday PM Peak Trips		Saturday Midday Peak Trips	
	No Build Alt.	Build Alt.	No Build Alt.	Build Alt.	No Build Alt.	Build Alt.
<b>Winchester Boulevard</b>						
- North of Stevens Creek Boulevard	2,150	2,150	2,800	2,800	2,650	2,700
- South of Stevens Creek Boulevard	2,450	2,200	3,450	3,150	3,600	3,350
- South of Olin Avenue	1,900	1,700	2,250	2,100	2,350	2,250
- South of Olsen Drive	2,500	2,550	3,250	3,250	2,450	2,500
- South of Tisch Way	3,150	3,250	3,500	3,750	3,000	3,150
- South of Moorpark Avenue	2,200	2,300	2,700	2,850	2,200	2,350
<b>Stevens Creek Boulevard</b>						
- West of Winchester Boulevard	2,450	1,350	2,900	2,850	3,050	3,050
- East of Winchester Boulevard	3,450	3,200	3,600	3,200	3,900	3,650
- East of Santana Row	3,850	3,550	3,650	3,250	3,900	3,650
- East of Monroe Street	5,500	4,950	5,400	4,750	5,950	5,400
- East of Northbound I-880 Ramps	2,050	1,850	2,550	2,450	1,400	1,400
<b>Moorpark Avenue</b>						
- West of Southbound I-280 Off-Ramp	1,700	1,750	2,550	2,650	1,400	1,400
- West of Winchester Boulevard	2,700	2,750	3,050	3,200	2,500	2,450
- East of Winchester Boulevard	3,050	2,950	4,050	4,000	2,400	2,150
<b>Tisch Way</b>						
- East of Winchester Boulevard	350	750	150	800	550	1,000
<b>Monroe Street</b>						
- North of Stevens Creek Boulevard	600	650	900	900	1,600	1,600
- South of Stevens Creek Boulevard	800	550	700	500	600	400

Note: Volumes are rounded to the nearest 50.

Source: Traffic Operations Analysis Report for I-280/Winchester Boulevard Interchange Improvements Project, 2021.

### 2.8.3 Environmental Consequences

#### 2.8.3.1 *Impacts on Freeway Operations*

With the Project in place, changes in mainline freeway volumes would be fairly minimal when compared to overall mainline volumes. Northbound I-280 volumes would increase slightly, while northbound SR 17/I-880, southbound I-880, and southbound I-280 would show nearly no change. The primary change on northbound I-280 due to the Project would occur between the off-ramp to Stevens Creek Boulevard and the Winchester on-ramp with the addition of the new off-ramp, as well as modification of the northbound SR-17 to northbound I-280 ramp. In general, volumes along northbound I-280 would decrease in this area under the Build Alternative due to these changes.

As shown in Table 2.8-6, when compared to the No Build Alternative, the Project would generally result in a reduction in total hours of vehicle delay during peak travel times on northbound I-280. The exception is in 2025 during the AM peak-period where hours of

vehicle delay would increase due to a slight increase in demand and the additional connector ramp metering.

**Table 2.8-6: Effect of Project on Peak Period Congestion on Northbound I-280**

Peak	Year 2025		Year 2040	
	No Build Alternative	Build Alternative	No Build Alternative	Build Alternative
Weekday AM	23,542	17,045	25,644	23,224
Weekday PM	279	467	1,356	1,134
Saturday MIDDAY	244	237	1,781	1,565

Note: Data in this table are expressed as total vehicle hours of delay.

Source: Traffic Operations Analysis Report for I-280/Winchester Boulevard Interchange Improvements Project, 2021.

Under the Build Alternative, the more direct access to Winchester Boulevard and Santana Row via the new I-280 northbound off-ramp would result in decreased volumes on the off-ramp from I-280 northbound to Stevens Creek Boulevard and, in turn, westbound on Stevens Creek Boulevard west of I-880. The new Winchester off-ramp would also result in decreased volume on the Saratoga Avenue off-ramps from northbound I-280. The addition of new ramps between SR 17/ I-880 and Saratoga Avenue to the west would provide additional access to both Winchester Boulevard and San Thomas Expressway to both the north and south.

Other changes in ramp volumes due to the Project would be less pronounced, with the exception of the connector from northbound I-280 to southbound SR 17. Volumes on that connector would decrease under the Build Alternative due to the added access to areas south and west of the I-280/I-880/SR 17 junction as provided by the new Winchester off-ramp. Whereas under the No Build alternative, people would travel south on SR 17 to Hamilton Avenue to access this area, the proposed off-ramp from northbound I-280 to Winchester Boulevard would provide additional access.

### **2.8.3.2 Impacts on Local Travel Patterns**

Major changes in traffic volumes on arterial roadways due to the Project would be limited to Stevens Creek Boulevard between Winchester Boulevard and I-880, on Winchester Boulevard between Stevens Creek Boulevard and Moorpark Avenue, and on Tisch Way and Moorpark Avenue adjacent to I-280. Volumes on Stevens Creek Boulevard and Winchester Boulevard would decrease under the Build Alternative, as primary access to Winchester Boulevard and the Santana Row area would shift to the new off-ramp. Traffic volumes on Monroe Street south of Stevens Creek Boulevard would also be reduced. Tables 2.8-4 and 2.8-5 depict this shift in traffic that would result from the Project.

The improved access that would result from the Project would, when compared to the No Build Alternative, result in an overall decrease in vehicle-miles-traveled (VMT). Please see Section 3.2.17 of this EIR/EA for a discussion of VMT.

### **2.8.3.3      *Impacts on Peak Period Operations at the Study Intersections***

The change in local circulation patterns resulting from the Project would also affect the LOS during peak traffic periods at a number of the study intersections, as shown in Table 2.8-3. Key highlights of the changes are as follows:

- For all of the peak periods in both 2025 and 2040, there would be little change in intersection operations under the Build Alternative. However, the shift in demand away from Stevens Creek Boulevard would result in lower average delay at intersections along Stevens Creek.
- In the weekday AM peak in 2025, along Winchester Boulevard, the physical improvements at the Tisch Way and Moorpark Avenue intersections would result in substantial reductions in average delay at these locations. However, only the Stevens Creek Boulevard at Monroe Street and Winchester Boulevard at Williams Road intersections would experience an improvement in LOS grade under the Build Alternative.
- In the weekday PM peak in 2025, the intersections on Stevens Creek Boulevard with Monroe Street and the southbound I-880 ramps would experience improved LOS. The Project would also improve the LOS at the Winchester Boulevard/Tisch Way intersection from LOS E to LOS D and improve the LOS at the Winchester Boulevard/Moorpark Avenue intersection from LOS F to LOS E.
- In the Saturday midday peak in 2025, the most notable Project-related improvement would occur at the Stevens Creek Boulevard/northbound I-880 ramps intersection Boulevard where the LOS would improve from LOS F to LOS E. In addition, the physical improvements at the Winchester Boulevard/Moorpark Avenue intersection would result in the LOS improving from LOS E to LOS D. However, despite improvements at the Winchester Boulevard/Tisch Way intersection, operations at that intersection would degrade from LOS C to D as a result of the increased traffic on Tisch Way.
- In the weekday AM peak in 2040, the LOS at the Stevens Creek Boulevard/Monroe Street intersection would improve from LOS D to LOS C. In addition, the LOS at the Winchester Boulevard/Moorpark Avenue intersection would improve from LOS F to LOS E.
- In the weekday PM peak in 2040, the LOS at the Stevens Creek Boulevard/Monroe Street intersection would improve from LOS D to LOS C. At the Winchester Boulevard/Moorpark Avenue intersection, average delay would decrease from 152.5 seconds to 81.2 seconds. The LOS at the Winchester Boulevard/Tisch Way intersection would improve from LOS F to LOS D.
- In the Saturday midday peak in 2040, the LOS at the Winchester Boulevard/Olin Avenue intersection would improve from LOS D to LOS C. However, despite improvements at the Winchester Boulevard/Tisch Way intersection, operations at

that intersection would degrade from LOS C to D as a result of the increased traffic on Tisch Way.

#### **2.8.3.4 Impacts to Bicycle and Pedestrian Facilities**

New bicycle and pedestrian facilities would be constructed as part of the Project, all of which would facilitate safe travel by those modes in the area. The new facilities would include the following:

- The existing Monroe POC over I-280 would be replaced with a new ADA-compliant structure. User safety would also be improved as passage through a dark and narrow tunnel would no longer be required. See Section 1.3.1.3 for details.
- The existing Winchester Boulevard bridge over I-280 would be widened to provide enhanced bicycle and pedestrian facilities in both directions.
- Buffered bike lanes and pedestrian facilities would be added on both northbound and southbound Winchester Boulevard within the project limits.
- A buffered bike lane would be constructed on the southside of Tisch Way from Monroe Street to Winchester Boulevard.
- A combination of multi-use path, buffered bike lane, and designated bike route would be added on the north side of Tisch Way from Monroe Street to Winchester Boulevard.

Figure 1.3-1 shows these new facilities and Figure 2.9-9 shows the existing and future conditions of the Winchester Boulevard bridge.

#### **2.8.3.5 Short-Term Transportation Impacts During Construction**

Construction of the Project would include temporary lane closures, narrowing of lanes on local roadways, and loss of parking. Narrowed lanes on the freeways through the construction zone will also be likely.

Prior to construction, a Transportation Management Plan (TMP) will be prepared. The TMP will address all traffic-related aspects of construction including, but not limited to, the following: traffic handling in each stage of construction, pedestrian safety/access, and bicycle safety/access. A component of the TMP will involve public dissemination of construction-related information through notices to the neighborhoods, press releases, and the use of changeable message signs. The TMP will also include advance coordination with the San José Fire Department, as well as with other emergency responders (e.g., police, ambulance, etc.), especially with regard to any temporary lane closures or detours.

#### **2.8.4 Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures are required.

## **2.9 VISUAL/AESTHETICS**

### **2.9.1 Regulatory Setting**

NEPA, as amended, establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and aesthetically (emphasis added) and culturally pleasing surroundings (42 USC 4331[b][2]). To further emphasize this point, FHWA, in its implementation of NEPA (23 USC 109[h]), directs that final decisions on projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

CEQA establishes that it is the policy of the state to take all action necessary to provide the people of the state “with...enjoyment of aesthetic, natural, scenic and historic environmental qualities” (CA Public Resources Code [PRC] Section 21001[b]).

California Streets and Highways Code Section 92.3 directs Caltrans to use drought resistant landscaping and recycled water when feasible, and incorporate native wildflowers and native and climate-appropriate vegetation into the planting design when appropriate.

### **2.9.2 Affected Environment**

The information in this section is based primarily on a technical Visual Impact Assessment (June 2022), which is incorporated into this EIR/EA by reference. This report is available for review at the locations listed inside the front cover of this document. Visual impacts are determined by assessing changes to the existing visual resources and predicting viewer response to those changes. Resource change is assessed by evaluating the visual character and visual quality of the visual resources that comprise the project corridor before and after construction of the Project. Please refer to this report for a detailed description of this methodology.

#### **2.9.2.1 *Existing Visual Character***

The project corridor is characterized by heavily trafficked, multi-lane freeways, and surrounding urban and suburban development. Visual character of the freeways are wide, flat surfaces with overcrossings at the I-280/I-880/SR-17 interchange, Monroe Street, and Winchester Boulevard that block the continuity of views toward the Santa Cruz Mountains to the west. The interchange is currently a three-level stack with linear and curved aerial ramps. Shoulder width is discontinuous and the density of tree planting varies along the project corridor. Some stretches of I-280 contain wider berms with denser plantings of trees; other areas are sparsely planted or bare. Soundwalls flank much of I-280 northbound along the project corridor, covered in vines in some places and bare in others.

Vegetation along the project corridor provides color, texture, and organic forms that contrast with and soften freeway hardscape and a gray color palette.

Project surroundings have an urban/suburban character (see Figure 2.9-1). The area north of I-280 and west of I-880 is the most urban and densely built. Winchester Boulevard and Tisch Way are lined with commercial and residential buildings of up to six stories.

Many lower-scale developments and parking lots in this area are being redeveloped as taller structures. An exception to the density in this area is Santana Park. Buildings are somewhat diverse with historic structures, such as the Winchester Mystery House and Century 21 Theater, adjacent to much newer buildings. Many newer buildings are smooth, light-colored high-rises. Santana Row stands out by the incorporation of more color and architectural details than surrounding structures.

Elsewhere in the project vicinity, development is more suburban in character and feels somewhat more open. Buildings are smaller, farther apart, and often have large parking lots. Larger streets contain neighborhood-oriented businesses and small apartment buildings. Smaller streets contain single-family tract housing with repetitive architectural patterns.

Numerous street plantings soften the built environment, provide visual complexity, and form tall visual screens that block medium- to long-distance views throughout the area.

The portion of I-280 within the project corridor west of the I-280/I-880/SR-17 interchange is an Eligible State Scenic Highway. However, none of the project corridor is within or visible from an Officially Designated State Scenic Highway.

### **2.9.2.2 Existing Visual Quality**

Visual quality along I-280 is moderate to moderately low. Views are typical of similar stretches of freeway throughout the region and are not memorable. Vivid elements such as the Santa Cruz Mountains to the west are vivid elements of the setting, though are too distant to be considered highly vivid. Views toward these mountains are intermittently blocked by the Winchester Boulevard overcrossing, Monroe POC, and interchange direct connector ramps. Vegetation, where present along the freeway shoulder, provides an additional scenic amenity and visual screening between the freeway and adjacent areas. Sections of wall covered in vines or with tree or shrub plantings have a higher degree of vividness than sections of bare wall. Intactness is moderate to moderately low. Unity of the freeway corridor is moderate to moderately low because of the disparate development patterns.

Surface streets in the project vicinity exhibit moderate to moderately high visual quality. Winchester Boulevard is highly memorable because of the historic Winchester Mystery House and Century 21 Theater. These structures are set back from the street but are visible from certain vantage points and their distinctive period architecture creates a



*View toward north from pedestrian walkway on existing Winchester Boulevard I-280 overcrossing.*



*View of Santana Row mixed-use development from Winchester Boulevard just north of project corridor.*



*View of Winchester Mystery House just north of project corridor.*



*View of development on Winchester Boulevard just south of project corridor.*



*View of houses on Monroe Street east of Frank M. Santana Park.*



*View of houses on Parkmoor Avenue just east of project corridor.*

sense of place. The Santana Row complex also has relatively distinctive architecture. Other parts of the project vicinity have moderate visual quality typical of more suburban areas. Street trees contribute the majority of the vividness. Orderly streetscapes create moderate levels of intactness and unity that are somewhat diminished by billboards and utility poles.

Visual quality of the existing setting is moderate overall.

### **2.9.3 Environmental Consequences**

#### **2.9.3.1 *Overview of Visual Impacts***

The Project would mostly be compatible with the existing visual character and visual quality of the project area. The Project would expand existing transportation infrastructure. It would increase the scale of the existing I-280/I-880/SR-17 interchange with a 4th level connector ramp, widen the Winchester Boulevard overcrossing, move and expand the Monroe Street POC, and create a tunnel off-ramp from northbound I-280. Santana Park would lose approximately 0.5-acres from its southern end. From most vantage points in the project vicinity, infrastructural changes would be noticeable but would be incremental changes consistent with the existing large freeway interchange and relatively dense urban visual character and quality. This includes a few areas from which Project features would be visible from residences such as along Genevieve Lane. Overall, resource change would be moderate.

The exception would be visual change created by the new flyover connector ramp as seen from residences along Parkmoor Avenue. This tall structure would be out of character with the adjacent residential neighborhood from which it would be visible and visual quality would be diminished. Resource change from this area would be high. This effect is discussed in greater detail, below, in Section 2.9.3.2, *Impacts from Key Views*.

To accommodate the Project, a maximum of 159 mature trees would be removed from the freeway shoulders and from Santana Park. As will be discussed in Section 2.9.4, tree removal would be mitigated. Primary areas of tree removal include:

- Southern part of Santana Park to accommodate the new tunnel off-ramp and POC
- I-280 northbound shoulder between Monroe Street and Dudley Avenue
- Northwest quadrant of I-280/I-880/SR-17 interchange to accommodate new ramp
- Around Winchester Boulevard bridge to accommodate widening
- Section of ramp from I-280 southbound to SR-17/I-880 to accommodate new POC

Mature tree removal would cause resource change across the project corridor. In the long run, this change would be particularly pronounced in areas where there would not be room for new landscaping such as along the shoulder of northbound I-280 adjacent to

Tisch Way. Tree removal would also create resource change in Santana Park where trees are the primary visual amenity and new landscaping would take time to mature.

### **2.9.3.2 Visual Impacts from Key Views**

Because it is not feasible to analyze all the views in which the proposed Project would be seen, it is necessary to select a number of key views that would most clearly demonstrate the change in the project area's visual resources. Key views also represent the viewer groups that have the highest potential to be affected by the Project considering exposure and sensitivity. The following section describes and illustrates visual impacts by comparing existing conditions to the proposed Project (Build Alternative) at six key views plus the view at the Winchester Boulevard bridge over I-280. The locations of the six key views are shown on Figure 2.9-2.

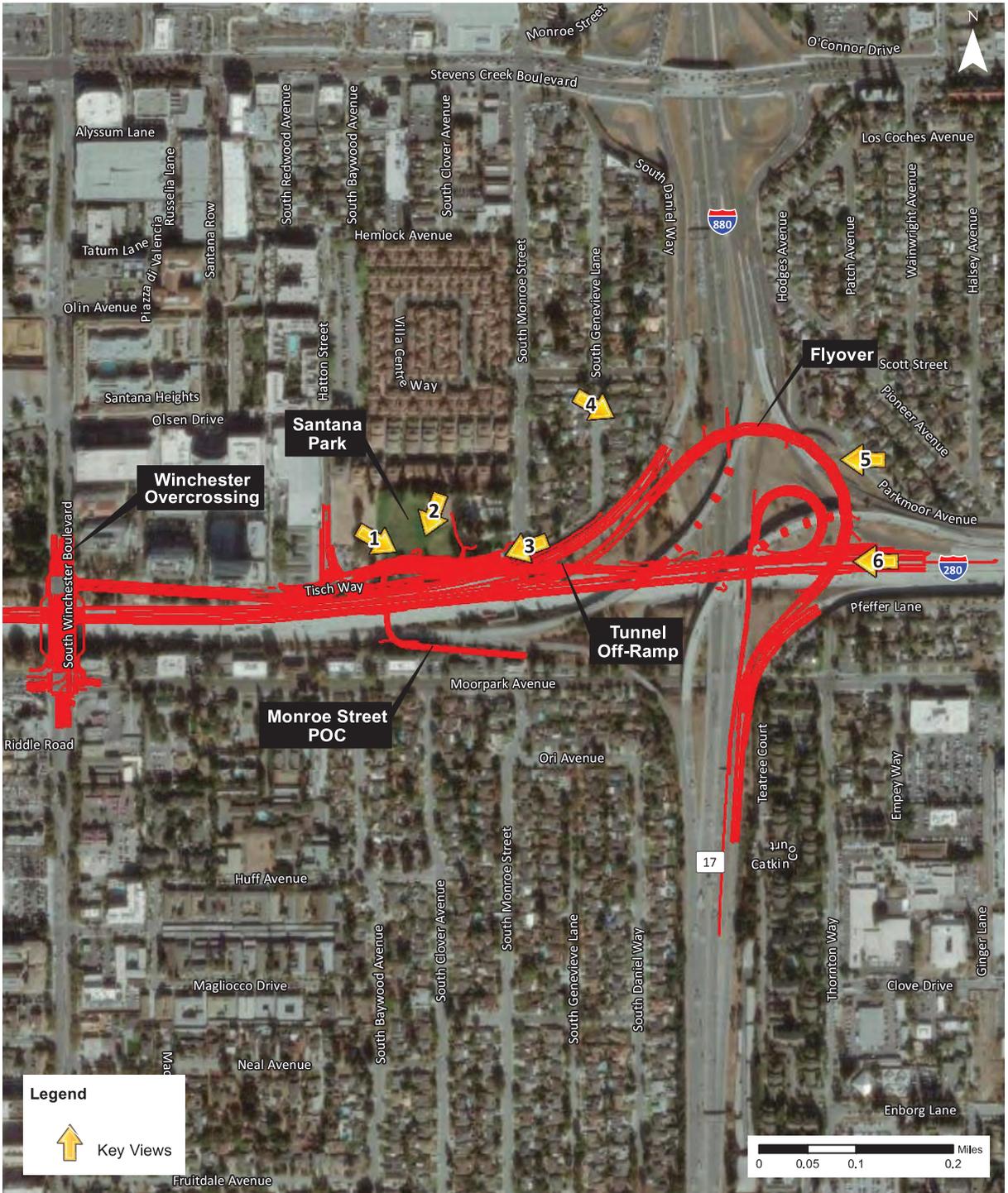
#### **Key View #1: Looking Across Santana Park from the West**

Figure 2.9-3 presents the existing and post-Project view from Key View #1, taken from the perimeter path on the west side of Santana Park. This view shows much of the park including the central lawn, trees, and playground. A small portion of the perimeter path can be seen in front of the white car. Mature trees border the park and partially screen structures inside and outside the park including the base of the Monroe POC next to the playground as well as the houses on Monroe Street beyond the playground. Tisch Way, along the right side of the park, is visually separated by a few trees and a chain link fence. Trees are the primary visual amenity in this view.

In the simulated view, the new Monroe POC and new perimeter walking path are depicted along the southern end of the park. The 16-foot-wide POC ramp extends from the southeast corner of the park toward the west for approximately 420 feet. The POC then turns south to cross Tisch Way and I-280 at a maximum height of approximately 30 feet off the ground. Mature trees have been removed from the southern end of the park to accommodate the new POC.

The simulated view from Key View #1 is dominated by the new POC. It changes the character of this view from a more insular, neighborhood park to a more urban park. The loss of mature trees and addition of elevated hardscape create a high level of resource change from this vantage point in the short-term. As described subsequently in Section 2.9.4, new landscaping would be planted in the park by the Project that would add greenery and visual complexity to the park. In addition, soundwalls would be treated with color and/or texture to avoid graffiti and the potential for glare.

To summarize, Project features would create a moderately high level of long-term resource change from this vantage point. Combined with a moderate level of viewer response, the Project would create a moderately high level of visual impact from Key View #1.



Source: Caltrans, February 2022.

LOCATIONS OF KEY VIEWS

FIGURE 2.9-2



Existing Condition



Simulated Condition

Source: Caltrans, February 2022.

## **Key View #2: Looking Across Santana Park from the North**

Figure 2.9-4 presents the existing and post-Project view from Key View #2, which was taken from the softball field in Santana Park looking south-southwest. This view captures the edge of the ballfield, the lawn, and the row of trees on the south side of the park. A chain link fence separates the park from Tisch Way, a narrow two-lane road with a soundwall on its south side, partially covered in vines. I-280, on the other side of Tisch Way, is hidden from view by the soundwall. Trees and vines provide at least partial screening of the soundwall. The focal point of this view is the row of trees along the south end of the park.

In the simulated view, the new Monroe POC is depicted across the south side of the park. The 16-foot-wide POC ramp extends from the southeast corner of the park toward the west for approximately 420 feet. The POC then turns south to cross Tisch Way and I-280 at a maximum height of approximately 30 feet off the ground. A staircase from the west side of the park connects to the POC. The soundwall would be demolished and rebuilt at the same height.

The new POC is now the focal point of the view rather than mature trees. The loss of trees and addition of elevated hardscape creates a moderately high to high level of resource change from this vantage point in the short term. As described subsequently in Section 2.9.4, new landscaping would be planted in the park by the Project that would add more color and diverse visual forms to the park. In addition, soundwalls would be treated with color and/or texture to avoid graffiti and the potential for glare.

To summarize, Project features would create a moderately high level of long-term resource change from this vantage point. Combined with a moderate level of viewer response, the Project would create a moderately high level of visual impact from Key View #2.

## **Key View #3: Looking West from Monroe Street at Tisch Way**

Figure 2.9-5 presents the existing and post-Project view from Key View #3, looking west toward Santana Park from the intersection of Monroe Street and Tisch Way. From this vantage point, the spiral structure of the Monroe POC rises from the corner of the park and extends over narrow Tisch Way and the soundwall. An old warning siren is visible to the right of the POC, a memorable feature of the view. Multi-colored playground equipment is visible in the park. Beyond the playground is the central lawn. The open park space provides a view of structures in the distance.

The character of the view is dominated by the bulky POC structure that has a concrete ramp and support poles as well as a complicated sequence of fencing. The POC is almost as tall as surrounding trees and blocks a portion of sky over Tisch Way. The visual mass and industrial look of the POC contrasts with the green space of the park and diminishes the intactness and unity of the view. The visual mass of the POC is somewhat balanced



Existing Condition



Simulated Condition

Source: Caltrans, February 2022.



Existing Condition



Simulated Condition

by the visual mass of the trees and its industrial style is somewhat softened by the trees. Similarly, the industrial style of the soundwall is softened by vines. Trees and vines around the POC and soundwall add vivid color and hide portions of the hardscape.

In the simulated view from Key View #3, the existing Monroe POC has been removed and replaced with a new POC. The new POC touches down at approximately the same place as the original POC but its alignment has changed. Instead of a spiral ramp, the new ramp gradually rises to the west for approximately 420 feet then south to cross Tisch Way and I-280. The soundwall would be demolished and rebuilt at the same height.

Approximately 24 trees on the south side of the park have been removed to accommodate the new POC and off-ramp. Trees have also been removed on the other side of the soundwall along the freeway shoulder. Though removal of mature trees diminishes the vividness of the view, this is somewhat compensated for by the removal of the old POC, whose visual mass and industrial look were discordant with the surroundings. The new POC has less visual mass from this vantage point since it rises gradually away from the viewer. It presents a wider and more accessible-looking pathway and provides a greater view of the sky and a clearer view to buildings in the distance. The warning siren has been removed.

Though the view appears more urban overall with the expansion of freeway elements, it is more open overall from this vantage point and has cleaner lines. As described subsequently in Section 2.9.4, new landscaping would be planted in the park by the Project that would add more color and diverse visual forms to the park that would enhance park aesthetics.

To summarize, Project features would create a moderate level of long-term resource change from this vantage point. Combined with a moderately high viewer response, the Project would create a moderately high level of visual impact from Key View #3.

#### **Key View #4: Looking Southeast down Genevieve Lane**

Figure 2.9-6 presents the existing and post-Project view from Key View #4, looking southeast down Genevieve Lane. Visual character is suburban residential with low-slung homes interspersed with landscaping that provides visual interest with pattern and color. Key View #4 shows partial views of three houses. Behind the house on the left, a small portion of freeway ramp is just visible in the distance above the roofline and between trees. This freeway ramp is part of the existing flyover from southbound I-280 to northbound I-880 and is approximately 35 feet above the elevation of Genevieve Lane. Key View #4 represents frontal views from at least eight houses on the west side of Genevieve Lane. These residents have high exposure to similar views from the front of their houses and are assumed to have high sensitivity.

In the simulated view from Key View #4, the new direct connector ramp from northbound SR-17 to northbound I-280 that would “fly over” the interchange as a fourth-level ramp is



Existing Condition



Simulated Condition

depicted. From this vantage point, the new ramp is visible above the roofline of the house on the left, above the existing freeway ramp. Thus, the Project adds a second higher ramp to this view. The new ramp blends in somewhat with the existing setting because it is not much taller than the rooflines and is lower than surrounding trees. However, like the existing ramp, the new ramp would attract attention and be more visible with moving traffic, especially larger vehicles such as the one pictured.

To summarize, Project features would create a moderate level of long-term resource change from this vantage point. Combined with a high level of viewer response, the Project would create a moderately high level of visual impact from Key View #4.

### **Key View #5: Looking West from Parkmoor Avenue**

Figure 2.9-7 presents the existing and post-Project view from Key View #5, looking west from Parkmoor Avenue toward the I-280 northbound to I-880 northbound connector. The view features elevated freeway ramps at close range and a landscaped foreground that slopes up to meet the ramps. Landscaping includes a rock pattern, wood chips, small trees, bushes, and patches of ground cover. The landscaping was installed as part of the I-880/I-280/SR-17 and I-880/Stevens Creek Boulevard Interchange Improvements Project less than two years ago and is expected to mature 15 to 25 years after planting. A soundwall ranging in height from 12 to 16 feet starts halfway down the block and follows the curvature of the street. A few tall trees are visible beyond the freeway.

Visual character is dominated by hardscape and the straight lines of transportation infrastructure including freeway ramps, bare soundwalls, and a geometric rock pattern. The soundwall follows the curvature of the road in a series of angular segments that provide discontinuous visual flow. Plants provide splashes of color and softness but the sparse planting and current small scale of plants makes them a minor part of the view and hardscape dominates. Key View #5 represents frontal views from at least nine single-family homes on the east side of Parkmoor Avenue. These residents have high exposure to similar views from the front of their houses and are assumed to have high sensitivity.

The simulated view from Key View #5 depicts the new direct connector ramp that would provide access from northbound SR-17 to northbound I-280 and would “fly over” the interchange as a fourth-level ramp. The new ramp would reach a maximum height of approximately 70 feet above the surface of the freeway below. The simulation includes vehicles such as large trucks as well as signs that would be present.

The new ramp is visible well above the existing freeway infrastructure, covering what was a previously an unobstructed view of sky. The new ramp is a massive structure out of scale with the single-family homes on Parkmoor Avenue and, because of its proximity, dominates the view. The new ramp has replaced the landscaping as the focal point of the view.



Existing Condition



Simulated Condition

Overall, the project would create a high level of resource change from Key View #5. With incorporation of mitigation measures described in Section 2.9.4, landscaping along the west side of Parkmoor Avenue would be increased by planting a row of tall tree species. The trees would create a wall as they mature that would block views of at least some freeway infrastructure and add greenery to the view. However, given the height of the proposed ramp, the trees may never reach heights that block views of the new ramp or would only do so after 40 or more years.

To summarize, because of the height of the new ramp, the long-term adverse resource change would remain high despite the implementation of mitigation measures. Combined with a high level of viewer response, the Project would create a high level of visual impact from Key View #5.

### **Key View #6: Looking West from Northbound I-280**

Figure 2.9-8 presents the existing and post-Project view from Key View #6, looking west from northbound I-280 toward the SR-17/I-280/I-880 freeway-to-freeway interchange. The view is of a heavily-used, multi-lane freeway with two levels of connector ramps crossing the foreground. Views toward hills in the background are blocked by the ramps but a wide view of the sky is still available. The broad freeway surface and the crisscrossing ramps dominate the view. Vegetation on the shoulders is sparse and consists of weedy grasses and a few trees.

Key View #6 represents the perspective of freeway motorists. Motorists on I-280 travel at speeds ranging from stop to 65 or more miles per hour and are exposed to a view similar to Key View #6 for approximately 15 seconds at high travel speeds and for longer during periods of congestion. Motorists are assumed to have relatively low expectations for visual quality and character on urban freeway corridors, particularly on sections of freeway that have views of interchanges. Viewers are likely to have a moderately low response to views from Key View #6

The simulated view from Key View #6 depicts the new direct connector ramp that would connect northbound SR-17 to northbound I-280 and “fly over” the interchange as a fourth-level ramp. This vantage point features the eastern terminus of the new ramp, which does not appear taller than the existing second-level ramp. However, the project increases the visual mass of the interchange and blocks out more sky from this vantage point. However, the new ramp is visually similar to existing elements of the view.

To summarize, Project features would create a moderately low level of resource change from this vantage point. Combined with a moderately low level of viewer response, the Project would create a moderately-low level of visual impact from Key View #6.



Existing Condition



Simulated Condition

## **View from Winchester Boulevard Bridge over I-280**

Figure 2.9-9 presents the existing view from the Winchester Boulevard bridge over I-280 looking in a northerly direction toward Tisch Way. It also provides existing and proposed cross-sections.

The existing Winchester Boulevard bridge over I-280 would be widened by the Project in both directions to provide enhanced bicycle and pedestrian facilities. The widened bridge would still have four lanes of traffic in both directions but instead of 8-foot pedestrian walkways, there would be 6-foot buffered bike lanes and buffered pedestrian zones in both directions. The pedestrian zones would include landscaping that visually separates the walkway from the bike lane and from I-280. Sixteen trees would be removed from I-280 to accommodate the widening.

For pedestrians in particular, the widened bridge would create a beneficial change. The existing pedestrian walkway feels narrow and constrained. The new pedestrian walkway is expansive and flanked by vegetation. This vegetation would also improve views for bicyclists and motorists on the bridge. Motorists' views from I-280 would not be substantially different than they are now because the widened bridge would be a visually similar structure and represent an incremental visual change. As noted in Section 2.9-4, replacement landscaping would compensate for loss of trees on I-280. The visual impact of widening the Winchester Boulevard overcrossing would be beneficial on the whole.

### **2.9.3.3 *Light and Glare Impacts***

Under certain conditions, sunlight reflecting off new, unstained concrete surfaces can create glare at some sun angles. As described in Section 2.9-4, new concrete surfaces on the new Monroe POC, Winchester Boulevard bridge, retaining walls of the tunnel off-ramp, and soundwalls would receive treatment such as texturing and/or staining that would reduce potential for glare. In addition, as described in Section 2.9-4, all lighting installed by the Project would be designed to limit light pollution.

An evaluation of potential headlight glare from vehicles traversing the proposed northbound SR-17 to northbound SR-280 flyover was completed. Headlights at the typical height used to determine stopping sight distance will be blocked from illuminating neighboring properties by the flyover's concrete bridge railing. As a result, headlight glare specific mitigation measures are not recommended.

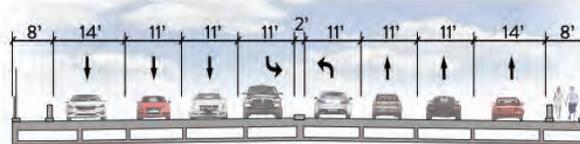
### **2.9.4 Avoidance, Minimization, and/or Mitigation Measures**

The following measures are included in the Project for the purpose of avoiding, minimizing, and mitigating its visual effects. However, as stated previously, visual effects at Key View #5 would be substantial even with implementation of MM-VIS-1.1.

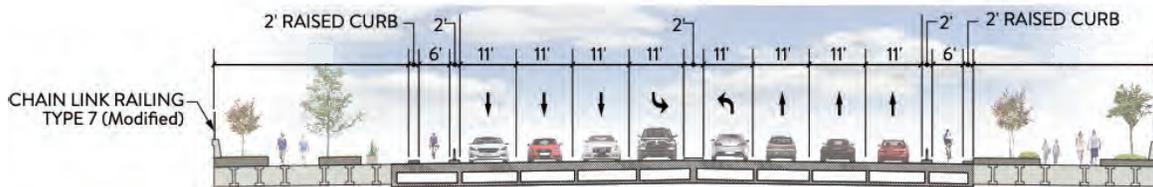


Existing Condition

Existing Overcrossing



Proposed Overcrossing



Section Diagram of the Winchester Boulevard Overcrossing

Source: Caltrans, February 2022.

- MM-VIS-1.1:** To diminish the loss of visual quality caused by the construction of the new SR-17/I-280 flyover connector ramp, the existing landscaping that was planted along the westside of Parkmoor Avenue as part of the I-880/Stevens Creek Interchange Project will be enhanced. The enhanced landscaping will consist of one or more rows of rapidly growing (i.e., at least 2 feet per year), tall tree species such as canary island pine or coast redwood that are spaced as closely as recommended by an arborist such that the trees will eventually form a dense visual barrier to freeway infrastructure from Parkmoor Avenue. Design and construction of this landscaping will be implemented in conjunction with roadway construction.
- MM-VIS-1.2:** To offset the loss of visual quality caused by tree removal, replacement landscaping will be provided for Santana Park. The number of trees to be planted and their location within Santana Park will be determined based on coordination with, and to the satisfaction of, the City's PRNS Department and an arborist. The tree replacement ratios and sizes listed in Table 2.4-1 will be utilized.
- MM-VIS-1.3:** The Project will incorporate treatments to improve aesthetics and reduce the opportunity for graffiti, which may include aesthetic fence treatments, public art, unique lighting, texture, landscaping, and/or color on project features, including the new Monroe POC, northbound SR-17 to northbound I-280 flyover, Winchester Boulevard bridge, retaining walls of the tunnel off-ramp, and the replacement soundwall constructed for the Project.
- MM-VIS-1.4:** Highway replacement planting will be provided in areas of damaged and/or removed vegetation in accordance with Caltrans policy and guidance where feasible. Design and construction of replacement planting will be implemented such that it closely follows the completion of roadway construction. A plant establishment period will be provided to ensure replacement plantings reach maturity.
- MM-VIS-1.5:** All lighting on new ramps, roads, and structures will be designed to limit light pollution and have minimum impact on the surrounding environment. All light fixtures will have light-emitting diodes (LEDs) configured with the minimum necessary number of bulbs, optimal mounting height, mast-arm length, and angle to restrict light to the roadways. Where applicable, shields on the fixtures to prevent light trespass to adjacent properties will be evaluated and incorporated where necessary during the detailed design phase.
- MM-VIS-1.6:** Construction lighting during nighttime work will be limited to the work area by using directional lighting and shielding of light fixtures.

## **2.10 CULTURAL RESOURCES**

### **2.10.1 Regulatory Setting**

The term “cultural resources,” as used in this document, refers to the “built environment” (e.g., structures, bridges, railroads, water conveyance systems, etc.), places of traditional or cultural importance, and archaeological sites (both prehistoric and historic), regardless of significance. Under federal and state laws, cultural resources that meet certain criteria of significance are referred to by various terms including “historic properties,” “historic sites,” “historical resources,” and “tribal cultural resources.” Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act (NHPA) of 1966, as amended, sets forth national policy and procedures for historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and to allow the Advisory Council on Historic Preservation (ACHP) the opportunity to comment on those undertakings, following regulations issued by the ACHP (36 CFR 800). On January 1, 2014, the First Amended Section 106 Programmatic Agreement (PA) among the FHWA, the ACHP, the California State Historic Preservation Officer (SHPO), and Caltrans went into effect for Caltrans projects, both state and local, with FHWA involvement. The PA implements the ACHP’s regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans. The FHWA’s responsibilities under the PA have been assigned to Caltrans as part of the Surface Transportation Project Delivery Program (23 USC 327).

CEQA requires the consideration of cultural resources that are historical resources and tribal cultural resources, as well as “unique” archaeological resources. California Public Resources Code (PRC) Section 5024.1 established the California Register of Historical Resources (CRHR) and outlined the necessary criteria for a cultural resource to be considered eligible for listing in the CRHR and, therefore, a historical resource. Historical resources are defined in PRC Section 5020.1(j). In 2014, Assembly Bill 52 (AB 52) added the term “tribal cultural resources” to CEQA, and AB 52 is commonly referenced instead of CEQA when discussing the process to identify tribal cultural resources (as well as identifying measures to avoid, preserve, or mitigate effects to them). Defined in PRC Section 21074(a), a tribal cultural resource is a CRHR or local register eligible site, feature, place, cultural landscape, or object which has a cultural value to a California Native American tribe. Tribal cultural resources must also meet the definition of a historical resource. Unique archaeological resources are referenced in PRC Section 21083.2.

PRC Section 5024 requires state agencies to identify and protect state-owned historical resources that meet the NRHP listing criteria. It further requires Caltrans to inventory

state-owned structures in its rights-of-way. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the NRHP or are registered or eligible for registration as California Historical Landmarks. Procedures for compliance with PRC Section 5024 are outlined in a MOU between Caltrans and SHPO, effective January 1, 2015. For most Federal-aid projects on the State Highway System, compliance with the Section 106 PA will satisfy the requirements of PRC Section 5024.

## **2.10.2 Affected Environment**

The information in this section is based primarily on a technical Archaeological Survey Report/Extended Phase 1 Testing Report (January 2021), Supplemental Archaeological Survey Report (September 2021), Historic Resources Evaluation Report (September 2021), and Historic Property Survey Report (September 2021) that were prepared for the Project. These reports also document the results of subsurface testing for archaeological resources. These studies are incorporated into this EIR/EA by reference. With the exception of the archaeological reports, these studies are available for review at the locations listed inside the front cover of this document.<sup>18</sup>

A prehistoric and historic site record and literature search by the California Historical Resources Information System, Northwest Information Center at Sonoma State University was undertaken to determine if known resources are present within the Project's area of potential effects (APE). The APE consists of the area within the footprint of the Project, as well as those areas directly adjacent to the Project where indirect impacts could occur. A field survey was also undertaken by qualified archaeologists.

The above-described tasks determined that there are no recorded archaeological sites within or adjacent to the APE. Nonetheless, due to the fact that the Project will require substantial excavation and the fact that the area is considered archaeologically-sensitive, subsurface geoarchaeological explorations were undertaken as a good-faith effort to identify obscured or buried archaeological resources that could be impacted by Project construction. None of the trenches produced prehistoric Native American materials and the isolated historic-era materials identified were determined to be exempt from evaluation under Attachment 4 of the PA.

One building located on a parcel within the APE was determined to meet the criteria for listing in the NRHP and CRHR. It is thus a historic property under Section 106 and a historical resource for the purposes of CEQA. The building is located at 3031 Tisch Way on Assessor's Parcel Number 277-39-001. It consists of a a 12-story tower, one-story west wing, one-story south wing, and two-story east wing (see Figure 2.10.1).

---

<sup>18</sup> Under Federal and State laws, the archaeological reports are not public documents as they contain confidential information regarding the location(s) of cultural resources.



12-Story Tower from Tisch/Dudley intersection, camera facing northwest (August 2020).



East Wing from Dudley Avenue, camera facing northwest (August 2020).

This property is eligible for its architectural merits under NRHP Criterion C / CRHR Criterion 3 at the local level of significance with a period of significance of 1973, the year construction of the building concluded.

None of the structures or buildings that are located on the other parcels within the APE are historically significant. None of the bridges or other transportation structures located within the APE are historically significant.

As required by the Section 106 PA, Native American consultation was undertaken during the studies conducted for this project. A request for a search of the Sacred Lands File and list of tribal representatives was sent to the Native American Heritage Commission (NAHC) on March 25, 2020. The NAHC responded on April 2, 2020, with positive results for sacred lands within the vicinity of the project area and suggested coordination with the Tribes listed as representatives for Santa Clara County. Consultation letters under CEQA's AB 52 and Section 106 of the National Historic Preservation Act (NHPA) were sent to all Tribes listed by the NAHC on April 16, 2020. A response was received from the North Valley Yokuts Tribe requesting a site visit and to monitor construction activity and follow-up attempts were made in August 2020. The Ohlone Indian Tribe also requested a copy of the records search and survey report, which were subsequently sent. Consultation is ongoing.

### **2.10.3 Environmental Consequences**

Based upon the research, technical studies, and field testing described above, there is no indication of prehistoric or historic archaeological resources within the Project's APE.

One historic architectural resource, the building at 3031 Tisch Way, is located within the Project's APE. It was determined, however, that the Project would not adversely affect this resource since the only nearby Project-related work would consist of restriping and repaving on existing Tisch Way.

On January 12, 2022, the SHPO concurred that a ***Finding of No Historic Properties Affected*** is appropriate for the Project.

Therefore, construction of the proposed Project is not expected to result in effects on cultural resources.

### **2.10.4 Avoidance, Minimization, and/or Mitigation Measures**

Discovery of Archaeological Materials: If archaeological materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and substance of the find.

Discovery of Human Remains: If remains are discovered during excavation, all work within 60 feet of the discovery will halt and Caltrans' Office of Cultural Resource Studies (OCRS) will be called. OCRS staff will assess the remains and, if determined to be human, will contact the County Coroner in accordance with Public Resources Code (PRC) Sections 5097.98, 5097.99, and Section 7050.5 of the California Health and Safety Code. If the Coroner determines the remains to be Native American, the Coroner will contact the Native American Heritage Commission, which will assign a Most Likely Descendant. Caltrans will consult with the Most Likely Descendent on treatment and reburial of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

# PHYSICAL ENVIRONMENT

## 2.11 WATER QUALITY AND STORMWATER RUNOFF

### 2.11.1 Regulatory Setting

#### 2.11.1.1 *Federal Requirements: Clean Water Act*

In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. This act and its amendments are known today as the Clean Water Act (CWA). Congress has amended the act several times. In the 1987 amendments, Congress directed dischargers of stormwater from municipal and industrial/construction point sources to comply with the NPDES permit scheme. The following are important CWA sections:

- Sections 303 and 304 require states to issue water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the U.S. to obtain certification from the state that the discharge will comply with other provisions of the act. This is most frequently required in tandem with a Section 404 permit request (see below).
- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. Regional Water Quality Control Boards (RWQCBs) administer this permitting program in California. Section 402(p) requires permits for discharges of stormwater from industrial/construction and municipal separate storm sewer systems (MS4s).
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the U.S. This permit program is administered by the U.S. Army Corps of Engineers (USACE).

The goal of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

The USACE issues two types of 404 permits: General and Individual. There are two types of General permits: Regional and Nationwide. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Regional or Nationwide Permit may be permitted under one of the USACE's Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual permits, the USACE decision to approve is based on compliance with U.S. Environmental Protection Agency's (U.S. EPA) Section 404 (b)(1) Guidelines (40 CFR Part 230), and whether the permit approval is in the public interest. The Section 404(b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S. and not have any other significant adverse environmental consequences. According to the Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause "significant degradation" to waters of the U.S. In addition, every permit from the USACE, even if not subject to the Section 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4. A discussion of the LEDPA determination, if any, for the document is included in the Wetlands and Other Waters section.

#### **2.11.1.2 State Requirements: Porter-Cologne Water Quality Control Act**

California's Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. It predates the CWA and regulates discharges to waters of the state. Waters of the State include more than just waters of the U.S., like groundwater and surface waters not considered waters of the U.S. Additionally, it prohibits discharges of "waste" as defined, and this definition is broader than the CWA definition of "pollutant." Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA.

The State Water Resources Control Board (SWRCB) and RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with the water quality standards. Details about water quality standards in a project area are included in the applicable RWQCB Basin Plan. In California, RWQCBs designate beneficial uses for all water body segments in their jurisdictions and then set criteria necessary to protect those uses. As a result, the water quality standards developed for particular water segments are based on the designated use and vary depending on that use. In addition, the SWRCB identifies waters failing to meet standards for specific pollutants. These waters are then state-listed in accordance with CWA Section 303(d). If a state determines that waters are impaired

for one or more constituents and the standards cannot be met through point source or non-point source controls (NPDES permits or WDRs), the CWA requires the establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

### **State Water Resources Control Board and Regional Water Quality Control Boards**

The SWRCB administers water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWCQB's are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

#### **2.11.1.3 National Pollutant Discharge Elimination System (NPDES) Program**

##### **Municipal Separate Storm Sewer Systems (MS4)**

Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of stormwater discharges, including Municipal Separate Storm Sewer Systems (MS4s). An MS4 is defined as "any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over stormwater, that is designed or used for collecting or conveying stormwater." The SWRCB has identified Caltrans as an owner/operator of an MS4 under federal regulations. Caltrans' MS4 permit covers all Caltrans rights-of-way, properties, facilities, and activities in the state. The SWRCB or the RWQCB issues NPDES permits for five years, and permit requirements remain active until a new permit has been adopted.

Caltrans' MS4 Permit, Order No. 2012-0011-DWQ (adopted on September 19, 2012 and effective on July 1, 2013), as amended by Order No. 2014-0006-EXEC (effective January 17, 2014), Order No. 2014-0077-DWQ (effective May 20, 2014) and Order No. 2015-0036-EXEC (conformed and effective April 7, 2015) has three basic requirements:

- Caltrans must comply with the requirements of the Construction General Permit (see below);
- Caltrans must implement a year-round program in all parts of the State to effectively control stormwater and non-stormwater discharges; and
- Caltrans' stormwater discharges must meet water quality standards through implementation of permanent and temporary (construction) Best Management Practices (BMPs), to the maximum extent practicable, and other measures as the SWRCB determines to be necessary to meet the water quality standards.

To comply with the permit, Caltrans developed the Statewide Stormwater Management Plan (SWMP) to address stormwater pollution controls related to highway planning, design, construction, and maintenance activities throughout California. The SWMP assigns responsibilities within Caltrans for implementing stormwater management procedures and practices as well as training, public education and participation, monitoring and research, program evaluation, and reporting activities. The SWMP describes the minimum procedures and practices Caltrans uses to reduce pollutants in stormwater and non-stormwater discharges. It outlines procedures and responsibilities for protecting water quality, including the selection and implementation of BMPs. The proposed project will be programmed to follow the guidelines and procedures outlined in the latest SWMP to address stormwater runoff.

### **Construction General Permit**

Construction General Permit, Order No. 2009-0009-DWQ (adopted on September 2, 2009 and effective on July 1, 2010), as amended by Order No. 2010-0014-DWQ (effective February 14, 2011) and Order No. 2012-0006-DWQ (effective on July 17, 2012). The permit regulates stormwater discharges from construction sites that result in a Disturbed Soil Area (DSA) of one acre or greater, and/or are smaller sites that are part of a larger common plan of development. By law, all stormwater discharges associated with construction activity where clearing, grading, and excavation result in soil disturbance of at least one acre must comply with the provisions of the General Construction Permit. Construction activity that results in soil disturbances of less than one acre is subject to this Construction General Permit if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to develop Stormwater Pollution Prevention Plans (SWPPPs); to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the Construction General Permit.

The Construction General Permit separates projects into Risk Levels 1, 2, or 3. Risk levels are determined during the planning and design phases, and are based on potential erosion and transport to receiving waters. Requirements apply according to the Risk Level determined. For example, a Risk Level 3 (highest risk) project would require compulsory stormwater runoff pH and turbidity monitoring, and before construction and after construction aquatic biological assessments during specified seasonal windows. For all projects subject to the permit, applicants are required to develop and implement an effective SWPPP. In accordance with Caltrans' SWMP and Standard Specifications, a Water Pollution Control Program (WPCP) is necessary for projects with DSA less than one acre.

## **2.11.2 Affected Environment**

The information in this section is based primarily on a technical Water Quality Report (May 2022), which is incorporated into this EIR/EA by reference. This report is available for review at the locations listed inside the front cover of this document.

There are no surface waters (e.g., creeks, streams, rivers, lakes, or other water bodies) located within the project area. The project area southwest of I-280/Winchester Boulevard overcrossing, and northwest of the I-280/I-880/SR-17 interchange is part of the San Tomas Watershed, while the area to the southeast of the I-280/Winchester Boulevard overcrossing and northeast of the I-280/I-880/SR-17 interchange is part of the Guadalupe River Watershed.

The project area within the San Tomas Watershed outfalls to the San Tomas Aquino Creek approximately 2.7 miles west of the project site. The portion of the Project located in the Guadalupe River Watershed outfalls to Los Gatos Creek approximately 1.8 miles east of the Project. Both creeks flow north until ultimately discharging into the San Francisco Bay.

Beneficial uses for Los Gatos Creek and San Tomas Aquino Creek, as set forth by the Santa Clara Valley Urban Runoff Pollution Prevention Program, are limited to cold freshwater habitats and wildlife habitats.

Section 303(d) of the CWA requires that states develop a list of water bodies that do not meet water quality standards. The current (2016) version of the list of impaired water bodies, maintained by the San Francisco Bay RWQCB and approved by the US EPA, includes Los Gatos Creek, San Tomas Aquino Creek and San Francisco Bay. For Los Gatos Creek and San Tomas Aquino Creek, the listed impairing constituents include trash, diazinon and pesticide-related toxicity.

## **2.11.3 Environmental Consequences**

### **2.11.3.1 *Long-Term/Operational Phase Effects***

The Project would increase impervious surfaces by approximately 3.48 acres within the combined San Tomas and Guadalupe River watersheds area that encompasses 215 square miles. The increase in impervious area due to the Project would proportionately increase runoff and contaminant loading and potentially impact the water quality in Los Gatos Creek and San Tomas Aquino Creek. New biofiltration facilities would be constructed in the Project area to ensure water quality is not impacted in the receiving waters of Los Gatos Creek and San Tomas Aquino Creek.

The Project would result in a net new impervious area that would exceed one acre, triggering the requirements for both Design Pollution Prevention best management practices (BMPs) and postconstruction treatment measures. Based on preliminary

assessment of the post-construction treatment area, the available treatment area within the Project limits (3.18 acres) will exceed the post-construction treatment area (2.94 acres) and therefore, alternative compliance will not be necessary. This is a relatively minor increase in impervious surfaces, especially in view of the fact that most of the project site is already covered by existing impervious surfaces (i.e., the existing freeway). Therefore, the increase in pollutant-containing runoff would not be substantial.

Biofiltration strips and swales are vegetated land areas that remove pollutants from the runoff as the runoff percolates in the soil. Biofiltration strips and swales are proposed along the sides of the roadway and on northbound I-880 where the ramp to I-280 is being removed, as well as alongside the mainline I-280 freeway to capture stormwater runoff in the project area. The locations of biofiltration strips and swales would be determined during final design of the Project.

Because high levels of trash are found within the project limits, the Project will include implementation of full trash capture devices to remove litter and other solids from runoff. A variety of screening technologies may be considered and further designed in future phases of the Project.

The additional impervious area to be added by the Project is small in relation to the size of the groundwater basin located within the project limits; therefore, groundwater recharge impacts would be insignificant.

### **2.11.3.2      *Short-Term/Construction Phase Effects***

Construction is anticipated to last through multiple rainy seasons. Elevated levels of contaminants could be generated due to both the types of construction activities employed and the construction materials that would be used. Typical construction activities include clearing and grubbing, major grading, utility excavations, and landscaping operations. Materials used during construction that have the potential to contribute contaminants to stormwater discharges, if not properly contained, include automotive fluids (oil, grease and petroleum), concrete curing compounds, asphaltic emulsions (associated with asphalt concrete paving operations), paints, solvents and thinners, and base and sub-base materials.

At this location, the water quality of various creeks could be affected by construction activities because most of the storm drains discharge into the creeks. Since these creeks support numerous wildlife and plant species, a short-term degradation of water quality could adversely affect such species.

## **2.11.4 Avoidance, Minimization, and/or Mitigation Measures**

During the Project development process, the Project Engineer would incorporate specific Design Pollution Prevention BMPs into the Project to minimize potential impacts to water quality. The design objectives of the Design Pollution Prevention BMPs are as follows:

- Prevent downstream erosion
- Stabilize disturbed soil areas
- Maximize vegetated surfaces consistent with existing Caltrans policies.

### **2.11.4.1 *Measures to Avoid or Minimize Long-Term Effects***

**MM-WQ-1.1:** Although long-term water quality effects of the Project would not be substantial, the design of the Project includes BMPs to reduce the pollutant component of stormwater runoff, as required by the Caltrans NPDES permit (see above discussion). In addition to the requirements of the NPDES permit, compliance with the requirements of the Caltrans Stormwater Management Plan (SWMP) is also required. The SWMP describes the programs to reduce the discharge of pollutants associated with the stormwater drainage systems, and describes how Caltrans will comply with the provisions of the NPDES permit.

Based on the availability of the fill sections with side slopes, the potential permanent BMPs considered for the Project include Biofiltration Strips and Gross Solids Removal Devices (GSRDs), which will be further designed in the PS&E phase of the Project. GSRDs remove litter and other solids from runoff through various screening technologies. Because the receiving water bodies have trash as one of the pollutants of concern, the goal of the GSRDs is to have 100 percent trash capture. Permanent BMPs would meet hydromodification requirements and other Caltrans' requirements. Chapter 7 in the Santa Clara Valley C.3 Stormwater Handbook contains criteria for hydromodification requirements.

**MM-WQ-1.2:** In addition, the Project would implement permanent design pollution control BMPs to improve stormwater quality by reducing erosion, stabilizing disturbed soil areas, and maximizing vegetated surfaces. These measures could include a combination of source and sediment control measures to prevent and minimize erosion from disturbed soil areas. Source controls would utilize erosion control netting in combination with hydroseeding. Outlet protection and velocity dissipation devices will also be considered.

#### **2.11.4.2      *Measures to Avoid or Minimize Short-Term Effects***

In order to avoid/minimize the potential for water quality impacts to occur, the Project would implement the following measures:

**MM-WQ-1.3:** Active paved construction areas will be swept and washed as needed.

**MM-WQ-1.4:** Silt fencing or straw wattles will be used to retain sediment on the project site.

**MM-WQ-1.5:** Temporary cover of disturbed surfaces or temporary slope protection measures will be provided per regulatory requirements and Caltrans' guidelines to help control erosion. Permanent cover/revegetation will be provided to stabilize the disturbed surfaces after construction has been completed.

**MM-WQ-1.6:** 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 any waterways.

**MM-WQ-1.7:** BMPs will be utilized by the contractor(s) during construction. The BMPs will be incorporated into a Stormwater Pollution Prevention Plan for the project, as required by the Caltrans NPDES permit.

## 2.12 GEOLOGY/SOILS/SEISMIC/TOPOGRAPHY

### Regulatory Setting

For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects “outstanding examples of major geological features.” Topographic and geologic features are also protected under CEQA.

This section also discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures. Structures are designed using Caltrans’ Seismic Design Criteria (SDC). The SDC provides the minimum seismic requirements for highway bridges designed in California. A bridge’s category and classification will determine its seismic performance level and which methods are used for estimating the seismic demands and structural capabilities. For more information, please see the *Caltrans Division of Engineering Services, Office of Earthquake Engineering, Seismic Design Criteria*.

### 2.12.1 Affected Environment

The information in this section is based primarily on a technical Preliminary Geotechnical Design Report (April 2022) that was prepared for the Project. This study is incorporated into this EIR/EA by reference. A copy of this study is available for review at the locations listed inside the front cover of this document.

The Project is located in the Santa Clara Valley on the plain between San Francisco Bay and the Santa Cruz Mountains and within the geologically complex and seismically active California Coast Ranges Geomorphic Province. The Santa Clara Valley is a broad relatively flat valley enclosed by the Santa Cruz Mountains to the west and the Diablo Range to the east.

The project area is relatively flat. Ground elevations in the area range from approximately 138 to 145 feet above sea level. Geologic hazards such as rockfalls, debris flows, landslides, or slope failures are not expected and existing embankments appear stable. The project site is not located where the previous occurrence of landslide movement, or local topographic, geological, geotechnical, and subsurface water conditions indicate a potential for permanent ground displacements.

The majority of the project site is mapped as having a moderate expansive soil potential. A transition to a high expansive soil potential occurs near the western end of the project

site. The Project is not located in an area where historical occurrence of liquefaction<sup>19</sup>, or local geological, geotechnical, and groundwater conditions indicate a potential for permanent ground displacements.

No active faults cross under the project area.<sup>20</sup> However, the Project is located in a seismically active part of Northern California. Many faults capable of producing earthquakes exist in the San Francisco Bay Area, which may cause strong ground shaking in the vicinity of the project area. The closest active faults to the project site are the Monte Vista, Hayward, and San Andreas faults, approximately two miles to the east, approximately eight miles to the east, and nine miles to the west, respectively.

## **2.12.2 Environmental Consequences**

The proposed Project will involve typical highway excavation and grading practices necessary to construct the additional lanes and ramp modifications, tunnel, and new ramps. There are no geologic features on the project site that would pose special or unique hazards to users of the proposed improvements. The Project will implement standard engineering practices to ensure that geotechnical and soil hazards do not result from its construction.

As noted above, the site is within the seismically active San Francisco Bay Area and severe ground shaking is probable during the anticipated life of the Project. Users of the freeways and interchanges would be exposed to hazards associated with such severe ground shaking during a major earthquake on one of the region's active faults. This hazard is not unique to the Project, because it applies to all locations throughout the greater Bay Area. The proposed Project will not increase the existing exposure to hazards associated with earthquakes; the hazards in the area will be the same with or without the Project.

The Project, including the new ramp, tunnel, and bridge structures, will be designed and constructed in accordance with Caltrans' Design guidelines for Seismic Zone 4 to avoid or minimize potential damage from seismic shaking on the site. Potential seismic effects will be minimized by the use of standard engineering techniques mandated by the Uniform Building Code and Caltrans' Design Standards.

---

<sup>19</sup> Liquefaction is a process that occurs under certain conditions, when saturated, granular soils are subjected to prolonged shaking during an earthquake. The material experiences a rapid loss of shear strength, resulting in fluid-like behavior. Loose, clean, fine sands and silts that are relatively free of clay most commonly experience liquefaction. Liquefaction can result in catastrophic ground failure, as soils lose all weight-bearing capacity.

<sup>20</sup> An "active" fault is defined as a fault that has had surface displacement within Holocene time (approximately the last 10,000 years).

### **2.12.3 Avoidance, Minimization, and/or Mitigation Measures**

As discussed in the previous section, the Project would be designed to comply with both the Uniform Building Code and Caltrans' Design Standards. This will avoid the need for adoption of any non-standard avoidance, minimization, and/or mitigation measures.

In addition, some of the measures that will avoid or minimize long-term effects to water quality will also serve to minimize or avoid impacts associated with erosion. For a list of these measures, please see Section 2.11.4

## **2.13 PALEONTOLOGY**

### **2.13.1 Regulatory Setting**

Paleontology is a natural science focused on the study of ancient animal and plant life as it is preserved in the geologic record as fossils.

A number of federal statutes specifically address paleontological resources, their treatment, and funding for mitigation as a part of federally authorized projects.

- 23 USC 1.9(a) requires that the use of Federal-aid funds must be in conformity with all federal and state laws.
- 23 USC 305 authorizes the appropriation and use of federal highway funds for paleontological salvage as necessary by the highway department of any state, in compliance with state law.

Under California law, paleontological resources are protected by CEQA.

### **2.13.2 Affected Environment**

The information in this section is based primarily on a technical Paleontological Identification Report/Paleontological Evaluation Report (November 2020), which is incorporated into this EIR/EA by reference. This report is available for review at the locations listed inside the front cover of this document.

Results of a records search<sup>21</sup> indicate that no previous fossil localities have been recorded within the project area, but fossils are known from 17 localities in Pleistocene alluvium within Santa Clara County.<sup>22</sup> The nearest localities with extinct animals are between 4.75 and 6.25 miles north of the project site where Harlan's ground sloth, Columbian mammoth, horse, camel, and bison were recovered from less than 12 feet below the surface. Extinct animals from other nearby localities include Harlan's ground sloth, Columbian mammoth, mastodon, horse, dwarf pronghorn, camel, bison, and a kangaroo rat. Fossils of animals that are still living today include cat, bear, deer, rabbits, rodents and squirrels, reptiles, bony fish, and snails.

A paleontological field survey of the project area was undertaken on May 28, 2020. The project area was covered with summer grasses and hardscaping. No fossil resources were observed during the survey.

---

<sup>21</sup> Records were searched at the University of California's Museum of Paleontology, the California Academy of Sciences Paleontology Database, and the Paleobiological Database.

<sup>22</sup> Pleistocene is the geologic period from 2.5 million to 11,700 years ago. Holocene is the geologic period from 11,700 years ago to the present.

The project surface is mapped as Holocene alluvial fan deposits. Locally, mammoths have been recovered from as shallow as seven feet below the surface. Generally, fossils of extinct Pleistocene animals start appearing at about eight feet below the surface of California's large valleys in areas of Holocene and Pleistocene alluvium. Accordingly, for areas mapped as Holocene at the surface, native sediments less than eight feet below the original surface are given a low sensitivity, and those that are more than eight feet deep are given a high sensitivity.

### **2.13.3 Environmental Consequences**

As described in the previous section, paleontological resources have been found at various locations in the greater project area. Although no fossils have previously been discovered within the project limits, the soils present onsite may contain such resources. Areas at depths of eight feet or greater have the highest sensitivity of containing fossils.

Construction of the Project would involve excavation at various locations at depths of eight or more feet. If paleontological resources are present, the construction activities would impact those resources and could destroy scientifically important fossils.

### **2.13.4 Avoidance, Minimization, and/or Mitigation Measures**

The following measures are included in the Project. Implementation of these measures will avoid substantial impacts to paleontological resources.

**MM-PALEO-1.1:** Prior to the start of excavations, preparation of a Paleontological Mitigation Plan (PMP) will be prepared by a qualified Principal Paleontologist (M.S. or PhD in paleontology or geology familiar with paleontological procedures and techniques). The PMP will include monitoring of cuts more than eight feet below the historic grade (i.e., below an elevation of about 132 feet msl) by a qualified Paleontological Monitor. The PMP, at a minimum, also would include the following:

- Areas where preconstruction survey and salvage are needed will be identified. This will apply to any areas where paleontologically sensitive strata are exposed at the surface and will be disturbed by project construction.
- The PMP will identify all areas where excavation will disturb in situ surface exposures of strata assigned to geologic units identified as highly sensitive for paleontological resources. Monitoring will be required for all disturbance of highly sensitive units. Monitoring will not be needed for shallow (less than about eight feet deep) disturbance in areas mapped as underlain by units of low paleontological sensitivity, or where disturbance would be entirely confined (in three dimensions) within existing

artificial fill. However, monitoring will be required where disturbance more than eight feet deep will be required in areas where highly sensitive strata are present in the subsurface beneath a veneer of low-sensitivity material.

- All geologic work will be performed under the supervision of a California Professional Geologist.
- The qualified Principal Paleontologist will be present at pre-grading meetings to consult with grading and excavation contractors.
- Before excavation begins, a training session in employee environmental awareness and fossil identification will be conducted by the Principal Paleontologist for all personnel involved in earthmoving for the project.
- A Paleontological Monitor, approved by the qualified Principal Paleontologist, will be on-site to inspect cuts more than eight feet deep for fossils at all times during original grading involving sensitive geologic formations.
- When fossils are discovered, the Principal Paleontologist (or paleontological monitor) will be called to recover them. Construction work in these areas will be halted or diverted to allow recovery of fossil remains in a timely manner.
- Bulk sediment samples will be recovered from fossiliferous horizons and processed for microvertebrate remains as determined necessary by the Principal Paleontologist.
- Fossil remains collected during the monitoring and salvage portion of the mitigation program will be cleaned, repaired, sorted, and cataloged.
- Prepared fossils, along with copies of all pertinent field notes, photos, and maps, will be deposited in a scientific institution with paleontological collections. The repository institution shall be identified in advance of construction (typically as part of PMP development), and the PMP shall include information on the repository agreement.
- A final report will be completed that outlines the results of the mitigation program and will be signed by the Principal Paleontologist and Professional Geologist. Copies of the final report will be sent to appropriate institutions so that the documentation will be available to the scientific community.

**MM-PALEO-1.2:** If unanticipated discoveries of paleontological resources occur during project construction, all work within 25 feet of the discovery must cease and the find must be protected in place until it can be evaluated by a qualified paleontologist. Work may resume immediately outside of the 25-foot radius.

## **2.14 HAZARDOUS WASTE/MATERIALS**

### **2.14.1 Regulatory Setting**

Hazardous materials, including hazardous substances and wastes, are regulated by many state and federal laws. Statutes govern the generation, treatment, storage, and disposal of hazardous materials, substances, and waste, and also the investigation and mitigation of waste releases, air and water quality, human health, and land use.

The primary federal laws regulating hazardous wastes/materials are the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, and the Resource Conservation and Recovery Act (RCRA) of 1976 (RCRA). The purpose of CERCLA, often referred to as “Superfund,” is to identify and cleanup abandoned contaminated sites so that public health and welfare are not compromised. The RCRA provides for “cradle to grave” regulation of hazardous waste generated by operating entities. Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

In addition to the acts listed above, Executive Order (EO) 12088, Federal Compliance with Pollution Control Standards, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

California regulates hazardous materials, waste, and substances under the authority of the CA Health and Safety Code and is also authorized by the federal government to implement RCRA in the state. California law also addresses specific handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning of hazardous waste. The Porter-Cologne Water Quality Control Act also restricts disposal of wastes and requires cleanup of wastes that are below hazardous waste concentrations but could impact ground and surface water quality. California regulations that address waste management and prevention and cleanup of contamination include Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection.

Worker and public health and safety are key issues when addressing hazardous materials that may affect human health and the environment. Proper management and disposal of

hazardous material is vital if it is found, disturbed, or generated during project construction.

## **2.14.2 Affected Environment**

The information in this section is based primarily on a technical February 2021 Initial Site Assessment (ISA), which is incorporated into this EIR/EA by reference. This report is available for review at the locations listed inside the front cover of this document.

### **2.14.2.1 *Contamination from Prior Leaks and Spills***

The ISA determined that there are numerous sites within a 1-mile radius of the project area where hazardous materials are generated, used, or stored and/or where some type of spill/leakage/contamination has occurred. For most locations where soil or groundwater contamination has been found, the source of the contamination was leaking storage tanks. In virtually all of these cases, the leaking tanks have been removed and remediation has occurred (or is occurring) under the supervision of various governmental entities. Many of the listed sites are either down/cross gradient or too far up gradient to impact the subject area.

The ISA focused on sites where hazardous materials contamination has been reported that are (1) under active regulatory oversight, and (2) within/adjacent to the footprint of the improvements that would be constructed by the Project. There are several sites that meet this criteria. These sites are described below.

*Site #1 - Intersection of I-880 and I-280:* This site is listed on a database for release and subsequent cleanup of 25 gallons of Epicon, a paint hardener used on I-280, in 1987. Based on the subsequent cleanup, this site should not pose an adverse environmental impact to the Project.

*Site #2 - San José Fire Station No. 10:* This site is listed in several databases for diesel impacts to soil and groundwater. The cleanup status of the site is “Completed, Case Closed” as of October 16, 1995. This site is downgradient and was considered due to its proximity to the Project. Review of the regulatory database report in conjunction with the site visit indicates that the site should not pose an adverse environmental impact to the Project.

*Site #3 - Arco/Valero/BP Station, 602 South Winchester Boulevard:* This site is listed in several databases for release of petroleum hydrocarbons to soil and groundwater. The cleanup status of the site is “Completed, Case Closed” as of November 6, 1990. However, the last assessment report indicates the presence of petroleum hydrocarbons in groundwater at more than 60 feet below grade. This site is upgradient and groundwater is impacted based on the review of the last groundwater monitoring report.

Site #4 - Hansra/Sabek/Regal Arco Station/ Gas-N-Shop, 625 S. Winchester Boulevard:

This site is listed on several databases for release of petroleum hydrocarbons to the soil and groundwater. The cleanup status of the site is “Completed, Case Closed” as of August 15, 1995. Review of closure documents indicates groundwater is impacted with petroleum hydrocarbons. Review of groundwater monitoring data indicates the groundwater gradient to be in the northeasterly direction and places this site directly upgradient of the Project. Groundwater is at more than 50 feet below grade.

Site #5 - Unocal #6028/Jerry’s Town & Country Union/Union Oil/3102 Moorpark Avenue:

This site had soil and groundwater contamination from diesel fuel. The cleanup status of the site is “Completed, Case Closed” as of June 25, 1996. Based on review of the case closure summary, the site was listed for discovery of impacts to soil during removal of underground storage tanks. The impacts were addressed and formal closure decision documents were issued for the site. No groundwater sampling was performed or deemed necessary. Based on the review of the closure report, this site should not pose an adverse impact to the Project.

#### **2.14.2.2 Aerially-Deposited Lead (ADL)**

Until recently, lead was commonly added to gasoline.<sup>23</sup> As a result, lead was emitted as a component of motor vehicle exhaust. Soil sampling along many roadways has found that concentrations of lead exceed applicable thresholds for classification as a hazardous material. This phenomenon known as aerially-deposited lead (ADL) is widespread. Because the freeways and roadways in the project area were built prior to the phaseout of lead as a gasoline additive, elevated concentrations of ADL are likely to be present in the soil along the highways.

#### **2.14.2.3 Asbestos-Containing Materials and Lead-Based Paints**

Due to the age of the structures located within the project limits, there is a potential for the presence of asbestos-containing materials<sup>24</sup> and/or lead-based paint.

#### **2.14.3 Environmental Consequences**

Lead-based paints, ADL, and/or asbestos-containing materials, are likely present within the project footprint. As such, various construction activities could expose workers to these substances, which could result in adverse health impacts. Such exposure will be avoided by implementing the measure described below in Section 2.14.4.

---

<sup>23</sup> Lead is a heavy metal that is found in many products. Lead is poisonous to humans. It is especially toxic to the nervous system, although it can adversely effect many systems and organs. In recent years, lead has been removed from certain products such as paint and gasoline in order to reduce the potential for chronic exposure.

<sup>24</sup> Asbestos is a mineral that is found in many products because of its resistance to damage from chemicals and heat, as well as its noise absorption properties. However, asbestos is toxic, especially when inhaled. It can cause diseases such as lung cancer, mesothelioma, and asbestosis.

It is unknown whether groundwater contamination associated with the gas stations located on the corner of Winchester Boulevard and Moorpark Avenue extends to the project impact area. If contamination does extend to that area, and if pile driving or the drilling of piles extends to where groundwater is encountered (i.e., more than 50 feet below the ground surface), construction workers could be exposed. Such exposure will be avoided by implementing the measure described below in Section 2.14.4.

#### **2.14.4      Avoidance, Minimization, and/or Mitigation Measures**

The Project will implement the following measures during final design and construction to avoid impacts associated with exposing construction workers to unsafe levels of hazardous substances:

**MM-HAZMAT-1.1:** As part of project development, a soil investigation will be conducted to determine whether ADL has affected soils that will be excavated as part of the proposed Project. The investigation for ADL will be performed in accordance with Caltrans' Lead Testing Guidance Procedure. The analytical results will be compared against applicable hazardous waste criteria. Based on analytical results, the investigation will provide recommendations regarding management and disposal of affected soils in the project area including the reuse potential of ADL-affected soil during project development. The provisions of a variance granted to Caltrans by the California Department of Toxic Substances Control on September 22, 2000 (or any subsequent variance in effect when the Project is constructed) regarding aeri ally-deposited lead will be followed.

**MM-HAZMAT-1.2:** Testing for the presence of lead-based paint on existing structures that will be modified or demolished by the Project will occur. If this substance is found to be present, applicable regulations pertaining to its removal and disposal will be followed.

**MM-HAZMAT-1.3:** Testing for the presence of asbestos-containing materials on existing structures that will be modified or demolished by the Project will occur. If these materials are found to be present, applicable regulations pertaining to their removal and disposal will be followed.

**MM-HAZMAT-1.4:** If work in the vicinity of Winchester Boulevard will involve drilling to groundwater and extraction of groundwater, the groundwater will be tested to determine if contamination is present in levels that exceed regulatory thresholds. If elevated levels of contamination are determined to be present and dewatering or extraction is anticipated, the investigation report will provide recommendations regarding

proper treatment, if necessary, and disposal or reuse of affected groundwater.

The costs for sampling, testing, special handling, and disposal of potentially hazardous materials are unknown at this stage of preliminary design and environmental review. It is estimated that costs could range from \$75,000 to \$100,000 or more depending on the number of samples collected, the laboratory analyses used, and quantity of material that requires special disposal. The costs for special handling, if required, of contaminated building materials from structures that have to be removed would be estimated during final design.

## 2.15 AIR QUALITY

### 2.15.1 Regulatory Setting

The Federal Clean Air Act (FCAA), as amended, is the primary federal law that governs air quality while the California Clean Air Act (CCAA) is its companion state law. These laws, and related regulations by the U.S. EPA and the California Air Resources Board (ARB), set standards for the concentration of pollutants in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). NAAQS and state ambient air quality standards have been established for six criteria pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), particulate matter (PM)—which is broken down for regulatory purposes into particles of 10 micrometers or smaller (PM<sub>10</sub>) and particles of 2.5 micrometers and smaller (PM<sub>2.5</sub>), Lead (Pb), and sulfur dioxide (SO<sub>2</sub>). In addition, state standards exist for visibility reducing particles, sulfates, hydrogen sulfide (H<sub>2</sub>S), and vinyl chloride. Table 2.15-1 lists primary air pollutants, their effects on health and the environment, and their typical sources. The NAAQS and state standards are set at levels that protect public health with a margin of safety, and are subject to periodic review and revision. Both state and federal regulatory schemes also cover toxic air contaminants (air toxics); some criteria pollutants are also air toxics or may include certain air toxics in their general definition.

**Table 2-15-1: Air Pollutant Effects and Sources**

Pollutant	Principal Health and Atmospheric Effects	Typical Sources
<p align="center"><b>Ozone (O<sub>3</sub>)</b></p>	<p>High concentrations irritate lungs. Long-term exposure may cause lung tissue damage and cancer. Long-term exposure damages plant materials and reduces crop productivity. Precursor organic compounds include many known toxic air contaminants. Biogenic VOC may also contribute.</p>	<p>Low-altitude ozone is almost entirely formed from reactive organic gases/volatile organic compounds (ROG or VOC) and nitrogen oxides (NO<sub>x</sub>) in the presence of sunlight and heat. Common precursor emitters include motor vehicles and other internal combustion engines, solvent evaporation, boilers, furnaces, and industrial processes.</p>
<p align="center"><b>Carbon Monoxide (CO)</b></p>	<p>CO interferes with the transfer of oxygen to the blood and deprives sensitive tissues of oxygen. CO also is a minor precursor for photochemical ozone. Colorless, odorless.</p>	<p>Combustion sources, especially gasoline-powered engines and motor vehicles. CO is the traditional signature pollutant for on-road mobile sources at the local and neighborhood scale.</p>

<b>Pollutant</b>	<b>Principal Health and Atmospheric Effects</b>	<b>Typical Sources</b>
<b>Respirable Particulate Matter (PM<sub>10</sub>)</b>	Irritates eyes and respiratory tract. Decreases lung capacity. Associated with increased cancer and mortality. Contributes to haze and reduced visibility. Includes some toxic air contaminants. Many toxic & other aerosol and solid compounds are part of PM <sub>10</sub> .	Dust- and fume-producing industrial and agricultural operations; combustion smoke & vehicle exhaust; atmospheric chemical reactions; construction and other dust-producing activities; unpaved road dust and re-entrained paved road dust; natural sources.
<b>Fine Particulate Matter (PM<sub>2.5</sub>)</b>	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and produces surface soiling. Most diesel exhaust particulate matter – a toxic air contaminant – is in the PM <sub>2.5</sub> size range. Many toxic & other aerosol and solid compounds are part of PM <sub>2.5</sub> .	Combustion including motor vehicles, other mobile sources, and industrial activities; residential and agricultural burning; also formed through atmospheric chemical and photochemical reactions involving other pollutants including NO <sub>x</sub> , sulfur oxides (SO <sub>x</sub> ), ammonia, and ROG.
<b>Nitrogen Dioxide (NO<sub>2</sub>)</b>	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown. Contributes to acid rain & nitrate contamination of stormwater. Part of the “NO <sub>x</sub> ” group of ozone precursors.	Motor vehicles and other mobile or portable engines, especially diesel; refineries; industrial operations.
<b>Sulfur Dioxide (SO<sub>2</sub>)</b>	Irritates respiratory tract; injures lung tissue. Can yellow plant leaves. Destructive to marble, iron, steel. Contributes to acid rain. Limits visibility.	Fuel combustion (especially coal and high-sulfur oil), chemical plants, sulfur recovery plants, metal processing; some natural sources like active volcanoes. Limited contribution possible from heavy-duty diesel vehicles if ultra-low sulfur fuel not used.
<b>Lead (Pb)</b>	Disturbs gastrointestinal system. Causes anemia, kidney disease, and neuromuscular and neurological dysfunction. Also a toxic air contaminant and water pollutant.	Lead-based industrial processes like battery production and smelters. Lead paint, leaded gasoline. Aerially deposited lead from older gasoline use may exist in soils along major roads.
<b>Sulfates</b>	Premature mortality and respiratory effects. Contributes to acid rain. Some toxic air contaminants attach to sulfate aerosol particles.	Industrial processes, refineries and oil fields, mines, natural sources like volcanic areas, salt-covered dry lakes, and large sulfide rock areas.

Pollutant	Principal Health and Atmospheric Effects	Typical Sources
<b>Hydrogen Sulfide (H<sub>2</sub>S)</b>	Colorless, flammable, poisonous. Respiratory irritant. Neurological damage and premature death. Headache, nausea. Strong odor.	Industrial processes such as: refineries and oil fields, asphalt plants, livestock operations, sewage treatment plants, and mines. Some natural sources like volcanic areas and hot springs.
<b>Visibility Reducing Particles (VRP)</b>	Reduces visibility. Produces haze. NOTE: not directly related to the Regional Haze program under the Federal Clean Air Act, which is oriented primarily toward visibility issues in National Parks and other "Class I" areas. However, some issues and measurement methods are similar.	See particulate matter above. May be related more to aerosols than to solid particles.
<b>Vinyl Chloride</b>	Neurological effects, liver damage, cancer. Also considered a toxic air contaminant.	Industrial processes

Federal air quality standards and regulations provide the basic scheme for project-level air quality analysis under NEPA. In addition to this environmental analysis, a parallel "Conformity" requirement under the FCAA also applies.

**Conformity**

The conformity requirement is based on FCAA Section 176(c), which prohibits the USDOT and other federal agencies from funding, authorizing, or approving plans, programs, or projects that do not conform to State Implementation Plan (SIP) for attaining the NAAQS. "Transportation Conformity" applies to highway and transit projects and takes place on two levels: the regional (or planning and programming) level and the project level. The proposed project must conform at both levels to be approved.

Conformity requirements apply only in nonattainment and "maintenance" (former nonattainment) areas for the NAAQS, and only for the specific NAAQS that are or were violated. U.S. EPA regulations at 40 CFR 93 govern the conformity process. Conformity requirements do not apply in unclassifiable/attainment areas for NAAQS and do not apply at all for state standards regardless of the status of the area.

Regional conformity is concerned with how well the regional transportation system supports plans for attaining the NAAQS for carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), and in some areas (although not in California), sulfur dioxide (SO<sub>2</sub>). California has nonattainment or maintenance areas for

all of these transportation-related “criteria pollutants” except SO<sub>2</sub>, and also has a nonattainment area for lead (Pb); however, lead is not currently required by the FCAA to be covered in transportation conformity analysis. Regional conformity is based on emission analysis of Regional Transportation Plans (RTPs) and Federal Transportation Improvement Programs (FTIPs) that include all transportation projects planned for a region over a period of at least 20 years (for the RTP) and 4 years (for the FTIP).

RTP and FTIP conformity uses travel demand and emission models to determine whether or not the implementation of those projects would conform to emission budgets or other tests at various analysis years showing that requirements of the FCAA and the SIP are met. If the conformity analysis is successful, the Metropolitan Planning Organization (MPO), FHWA, and Federal Transit Administration (FTA) make the determinations that the RTP and FTIP are in conformity with the SIP for achieving the goals of the FCAA. Otherwise, the projects in the RTP and/or FTIP must be modified until conformity is attained. If the design concept and scope and the “open-to-traffic” schedule of a proposed transportation project are the same as described in the RTP and FTIP, then the proposed project meets regional conformity requirements for purposes of project-level analysis.

Project-level conformity is achieved by demonstrating that the project comes from a conforming RTP and TIP; the project has a design concept and scope that has not changed significantly from those in the RTP and TIP; project analyses have used the latest planning assumptions and EPA-approved emissions models; and in PM areas, the project complies with any control measures in the SIP. Furthermore, additional analyses (known as hot-spot analyses) may be required for projects located in CO and PM nonattainment or maintenance areas to examine localized air quality impacts.

### **2.15.2 Affected Environment**

The information in this section is based primarily on a technical Air Quality Report (April 2022), which is incorporated into this EIR/EA by reference. This report is available for review at the locations listed inside the front cover of this document.

The Norman Y. Mineta San José International Airport climatological station, maintained by the National Weather Service, is located approximately three miles from the Project site and is representative of meteorological conditions near the Project. The climate of the Project area is generally Mediterranean in character, with cool winters and warm, dry summers. Mountains surround the city on three sides, and its location on the rain shadow side of the Santa Cruz Mountains has a significant influence on the climate. The prevailing winds in the Project area flow mainly from the northwest off the San Francisco Bay. Annual average rainfall is 15.9 inches.

### 2.15.2.1 Existing Air Quality

The Bay Area Air Quality Management District (BAAQMD) monitors air quality conditions at over 30 locations throughout the Bay Area. The closest monitoring station is in the City of San José on Jackson Street, about 3.5 miles east of the Project site.

Table 2.15-2 identifies the state and federal attainment status for regulated pollutants in the San Francisco Bay Area Air Basin. The area complies with ambient air quality standards for all pollutants except O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>.

**Table 2.15-2: State and Federal Attainment Status for San Francisco Bay Area**

Pollutant	State Attainment Status	Federal Attainment Status	Attainment Plan (O <sub>3</sub> , PM and CO)
Ozone (O <sub>3</sub> )	Nonattainment	Nonattainment (Marginal)	Revised San Francisco Bay Area Ozone Attainment Plan for the 1-Hour National Ozone Standard (2001)
Respirable PM (PM <sub>10</sub> )	Nonattainment	Unclassifiable/Attainment	--
Fine PM (PM <sub>2.5</sub> )	Nonattainment	Nonattainment (Moderate)	Bay Area Winter Emissions Inventory for Primary PM <sub>2.5</sub> & PM Precursors: Year 2010 (2012)
Carbon Monoxide (CO)	Attainment	Attainment/Maintenance	2004 Revision to the California State Implementation Plan for Carbon Monoxide (2004)
Nitrogen Dioxide (NO <sub>2</sub> )	Attainment	Unclassifiable/Attainment	--
Sulfur Dioxide (SO <sub>2</sub> )	Attainment	Unclassifiable/Attainment	--
Lead (Pb)	Attainment	Unclassifiable/Attainment	--
Visibility-Reducing Particles	Unclassified	N/A	--
Sulfates	Attainment	N/A	--
Hydrogen Sulfide	Unclassified	N/A	--
Vinyl Chloride	No Information Available	N/A	--

Unclassifiable generally indicates that there is a lack of representative data to classify a basin.

Source: Air Quality Report for I-280/Winchester Boulevard Interchange Improvements, 2022.

O<sub>3</sub> is the air pollutant of greatest concern in summer. Prevailing summertime wind conditions tend to cause a build up of ozone in Santa Clara County. In the 5-year period from 2016 to 2020, ozone levels measured in San José exceeded the 1-hour state

standard for 3 days in 2017, 1 day in 2019, and 1 day in 2020. In the same period, exceedances of the national and state 8-hour ozone standards occurred for 4 days in 2017, 2 days in 2019, and 2 days in 2020.

PM<sub>10</sub> and PM<sub>2.5</sub> is another pollutant of concern in the project area. Under stagnant air quality conditions in late fall and winter, the combination of vehicle exhaust and wood smoke leads to a buildup of particulates. In the 5-year period from 2016 to 2020, measured exceedances of the State PM<sub>10</sub> standards occurred on 19 days in 2017, 12 days in 2018, 12 days in 2019, and 30 days in 2020. In the same period, exceedance of the federal PM<sub>2.5</sub> standards occurred on 6 days in 2017, 15 days in 2018, and 12 days in 2020.

### 2.15.2.2 Sensitive Receptors

Sensitive receptors are generally defined as facilities and land uses that include members of the population who are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of sensitive receptors include residential dwellings (including single-family houses and multi-family residential buildings, townhouses, and apartments), schools, daycare centers, hospitals, and senior-care facilities. Figure 2.15-1 shows the locations of sensitive receptors relative to the footprint of the Project. Table 2.15-3 lists the type of sensitive receptors and the number identified within 500 feet of the Project’s footprint. This area represents the zone of greatest concern for pollutants near roadways, including CO, diesel particulate matter, sulfur dioxide, and CO<sub>2</sub> emitted as vehicle exhaust. Sensitive receptors would not be directly affected by emissions of regional pollutants, such as ozone precursors (ROG and NO<sub>x</sub>).

**Table 2.15-3: Sensitive Receptors Located Within 500 Feet of the Project Footprint**

<b>Sensitive Receptor Group</b>	<b>Number of Receptors Identified</b>	<b>Receptor Names</b>	<b>Distance Between Receptor and Project (ft)</b>
Hospitals/Health Care Centers	1	Santa Clara Valley Medical Center	444
Schools and Daycares	2	Giving Tree Montessori Action Day Primary Plus	265 439
Parks	1	Frank M. Santana Park	87
Senior Care-Residential Facilities	2	San José Assisted Living Belmont Village Senior Living	283 159
Residences	Approx. 290	N/A multiple locations	120 - 500

Source: Air Quality Report for I-280/Winchester Boulevard Interchange Improvements, 2022



### **2.15.3 Environmental Consequences**

This section describes the short- and long-term air quality effects of the Project. The analysis utilizes the methodology for highway improvement projects adopted by the FHWA and Caltrans.<sup>25</sup>

#### **2.15.3.1 *Long-Term Operational Air Quality Effects***

##### **Clean Air Act Conformity**

This Project is exempt from regional conformity requirements per 40 CFR 93.127 as it meets the definition of an interchange reconfiguration project. Therefore, the Project will not interfere with timely implementation of Transportation Control Measures identified in the applicable SIP. Additionally, a separate listing of the Project in *Plan Bay Area 2050*, MTC's financially constrained 2021 TIP, and their associated regional emissions analyses, is not necessary.

Despite being exempt from regional conformity requirements, the Project is listed in *Plan Bay Area 2050* (RTP ID 21-T06-017). The RTP is financially constrained and has been determined to conform to the SIP (i.e., 2017 CAP).<sup>26</sup>

MTC's financially constrained 2021 TIP also includes the Project (Project ID SCL150014) and has been found to conform to the SIP by FHWA and FTA as part of their approval of the Federal-Statewide TIP (FSTIP). The design concept and scope of the Project listed in the TIP and FSTIP are consistent with the project description in the RTP and the TIP.

Project-level conformity requires project sponsors to demonstrate that their transportation project will not cause or contribute to any new localized CO, PM<sub>10</sub>, and/or PM<sub>2.5</sub> violations, increase the frequency or severity of any existing CO, PM<sub>10</sub>, and/or PM<sub>2.5</sub> violations, or delay timely attainment of any NAAQS or any required interim emission reductions or other SIP milestones. This is demonstrated through a hot-spot analysis where Build and No-Build emissions are modeled, both with and without any mitigation measures committed to in the RTP. The Project is in an attainment/maintenance area for CO and a nonattainment area for PM<sub>2.5</sub>. Thus, a project-level conformity analysis applies to the Project for both pollutants under 40 CFR 93.109. However, current guidance from FHWA and Caltrans states that a project-level CO hot-spot analysis is no longer required to demonstrate project-level conformity. Similarly, hot-spot analysis for PM<sub>2.5</sub> is only required for projects found to meet the definition of a Project of Air Quality Concern (POAQC) by the MTC's Air Quality Conformity Task Force (AQCTF). The Project was

---

<sup>25</sup> BAAQMD thresholds are utilized for local development projects and are not applicable to this type of project. For additional information, see the guidance published in Caltrans' Standard Environmental Reference at <https://dot.ca.gov/programs/environmental-analysis/standard-environmental-reference-ser/volume-1-guidance-for-compliance/ch-11-air-quality>.

<sup>26</sup> In a letter to Caltrans and MTC dated December 3, 2021, FHWA and FTA determined that *Plan Bay Area 2050* conforms to the SIP.

found not to be a POAQC by MTC’s AQCTF on March 24, 2022. Therefore, a PM<sub>2.5</sub> hot-spot analysis is not required.

The determination by MTC is subject to public review as part of this Draft EIR/EA. Public comment is requested regarding the project-level conformity analysis and determination. Following the close of the public review and comment period for the Draft EIR/EA, all comments received on the air quality conformity determination will be included in an air quality conformity report to be submitted to FHWA for their review and concurrence. The final determination on project-level conformity will be made by FHWA.

### Criteria Air Pollutant Emissions

Emissions of criteria air pollutants from vehicles on roadways in the project area were calculated for existing/baseline conditions, the Project’s opening year (2025), the previous RTP horizon year (2040), the Project’s design year (2045) and the current RTP horizon year (2050). Air pollutant emissions were estimated using specific traffic data and conditions provided by the Project’s traffic consultant, DKS Associates, and Caltrans’ CT-EMFAC2017 emissions model. Emissions produced by CT-EMFAC2017 were adjusted to account for the Safer Affordable Fuel-Efficient (SAFE) Vehicle Rule Part 2, which updated fuel economy standards for new vehicles.

As shown in Table 2.15-4, emissions in the future will decrease as older vehicles are replaced by newer vehicles with more stringent emissions and fuel economy standards. Additionally, based on the operational period emission data in Table 2-15.4, the Build Alternative, when compared to the No-Build Alternative, would reduce emissions further within the project study area. Emissions of each analyzed pollutant would decrease with implementation of the Build Alternative for all study years.

**Table 2.15-4: Criteria Air Pollutant Emissions**

Year	Scenario	CO (lbs/day)	PM <sub>2.5</sub> (lbs/day)	PM <sub>10</sub> (lbs/day)	ROG (lbs/day)	NO <sub>x</sub> (lbs/day)
2015	Existing/Baseline	7,856	142	441	876	1,810
2025	No Build Alternative	3,430	140	492	455	604
	Build Alternative	3,426	140	492	454	604
2040	No Build Alternative	2,994	168	608	337	550
	Build Alternative	2,988	168	607	336	549
2045	No Build Alternative	3,105	178	647	333	577
	Build Alternative	3,099	178	645	332	577
2050	No Build Alternative	3,265	189	686	339	611
	Build Alternative	3,258	188	683	338	610

CO = carbon monoxide  
PM<sub>2.5</sub> = particulate matter, 2.5 microns in size  
PM<sub>10</sub> = particulate matter, 10 microns in size  
ROG = reactive organic gases  
NO<sub>x</sub> = nitrogen oxides

Source: Air Quality Report for I-280/Winchester Boulevard Interchange Improvements, 2022.

When compared to the No Build Alternative, the reduction in emissions under the Build Alternative would in large part result from the overall decrease in VMT. Please see Section 3.2.17 of this EIR/EA for a discussion of VMT.

### **MSAT Emissions**

Mobile source air toxics (MSATs) are emitted from highway vehicles and non-road equipment. Some toxic compounds are present in fuel and are emitted to the air when the fuel evaporates or passes through the engine unburned. Other toxics are emitted from the incomplete combustion of fuels or as by-products. Metal air toxics result from engine wear or from impurities in oil or gasoline.

The U.S. EPA has identified nine priority MSATs with significant contributions from mobile sources. These are 1,3-butadiene, acetaldehyde, acrolein, benzene, diesel particulate matter, ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter. The 2007 U.S. EPA rule on the Control of Hazardous Air Pollutants from Mobile Sources requires controls that will dramatically decrease MSAT emissions through cleaner fuels and cleaner engines. According to an FHWA analysis, even if vehicle activity (i.e., vehicle-miles traveled) increases by 45 percent from 2010 to 2050 as forecast, a combined reduction of 91 percent in the total annual emission rate for the priority MSATs is projected for the same time period.

Similar to the process used for calculating criteria pollutant emissions, above, emissions of MSATs were calculated using the CT-EMFAC2017 model for baseline/existing conditions and each study year. The results are depicted in Table 2.15-5. The data show that future emissions of nine priority MSATs under the Build Alternative would be the same as or lower than under the No-Build Alternative largely due to a reduction in VMT.

Regardless of the alternative chosen, the data in Table 2.15-5 show that emissions would be approximately 70 percent lower than present levels in the horizon years (2040 and 2050) and design year (2045) as a result of U.S. EPA's national control programs that are projected to reduce annual MSAT emissions by over 90 percent between 2010 and 2050.

Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the U.S. EPA-projected reductions is so great (even after accounting for VMT associated with planned growth) that MSAT emissions in the study area, including at sensitive receptors (e.g., residences, parks, schools, etc.) are likely to be lower in the future for both the No-Build and Build Alternatives.

**Table 2.15-5: MSAT Emissions**

Year	Scenario	1,3-butadiene (lbs/day)	Acetaldehyde (lbs/day)	Acrolein (lbs/day)	Benzene (lbs/day)	Diesel PM (lbs/day)	Ethylbenzene (lbs/day)	Formaldehyde (lbs/day)	Naphthalene (lbs/day)	POM (lbs/day)
2015	Existing/Baseline	2.59	7.87	0.57	17.18	25.90	12.98	19.75	1.04	0.540
2025	No Build Alternative	0.94	1.47	0.21	7.45	2.58	7.10	4.42	0.58	0.156
	Build Alternative	0.94	1.46	0.21	7.44	2.57	7.09	4.41	0.58	0.156
2040	No Build Alternative	0.81	1.46	0.18	5.85	2.45	5.23	4.13	0.43	0.118
	Build Alternative	0.80	1.46	0.18	5.83	2.43	5.22	4.12	0.43	0.118
2045	No Build Alternative	0.84	1.53	0.18	5.90	2.53	5.15	4.31	0.43	0.121
	Build Alternative	0.83	1.52	0.18	5.88	2.52	5.14	4.30	0.43	0.120
2050	No Build Alternative	0.88	1.61	0.19	6.09	2.65	5.25	4.53	0.44	0.126
	Build Alternative	0.87	1.60	0.19	6.07	2.64	5.23	4.51	0.43	0.126

POM = polycyclic organic matter

Source: Air Quality Report for I-280/Winchester Boulevard Interchange Improvements, 2022.

### 2.15.3.2 Short-Term Construction Air Quality Effects

Site preparation and construction would involve clearing, cut-and-fill activities, grading, removing, or improving existing roadways and bridges, and paving roadway surfaces. During construction, short-term degradation of air quality is expected from the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Dust can result in adverse health effects (e.g., irritation of the eyes and respiratory tract) as well as visual effects (e.g., haze and reduced visibility). Emissions from construction equipment and on-road vehicles powered by gasoline and diesel engines are also anticipated and would include CO, NO<sub>x</sub>, ROG, directly emitted PM<sub>10</sub> and PM<sub>2.5</sub>, and toxic air contaminants (TACs) such as diesel exhaust particulate matter. See Table 2.15-1 for a description of these pollutants and their health effects.

Construction emissions were estimated using the latest Sacramento Metropolitan Air Quality Management District’s Road Construction Model (RCEM) version 9.0, which uses emission factors from EMFAC2017. RCEM-provided equipment quantities and construction phases were used along with the scheduling durations and cut-fill quantities provided by the Project’s design engineering team.

Construction was divided into two concurrent construction stages (structures and roadway) with four phases for each stage: grubbing/land clearing (including mobilization), grading/excavation, drainage/utilities/sub-grade, and paving. Data on construction durations, equipment, quantities, etc. were provided by the Project’s design engineering team.

Using the RCEM model and based on the above-described inputs, estimated construction emissions for the Project, excluding fugitive dust, are presented in Table 2.15-6. It is important to note that the data in Table 2.15-6 represent uncontrolled construction-related emissions, meaning that no measures to reduce emissions are assumed. Because of this conservative scenario, actual emissions would be less.

The RCEM model estimated that maximum emissions of fugitive dust during construction would be 20 lbs/day of PM<sub>10</sub> and 4.16 lbs/day of PM<sub>2.5</sub>. As with the data in Table 2.15-6, these are uncontrolled emissions, meaning that no measures to reduce emissions are assumed. Because of this conservative scenario, actual dust emissions would be less.

Implementation of the measures listed in Section 2.15.4 will reduce air quality impacts resulting from construction activities. These reductions cannot be quantified at this time because pollutant emissions would vary daily depending on the level of activity, specific operations, and prevailing weather. In addition, a Transportation Management Plan (TMP) will be prepared prior to construction. The TMP will address all traffic-related aspects of construction and avoid routing truck traffic near sensitive receptors, such as Santana Park, to the extent feasible.

**Table 2.15-6: Construction Emissions**

Stage	Phase/ Activity	ROG (lbs/day)	CO (lbs/day)	NO <sub>x</sub> (lbs/day)	Exhaust PM <sub>10</sub> (lbs/day)	Exhaust PM <sub>2.5</sub> (lbs/day)	CO <sub>2e</sub> (MT/ Phase)
Roadway	Grubbing/Land Clearing	0.87	9.50	8.30	0.37	0.32	63.6
	Grading/Excavation	2.01	22.66	18.43	0.83	0.71	1,351.2
	Drainage/Utilities/ Sub-Grade	0.88	9.91	8.12	0.36	0.31	579.6
	Paving	0.37	5.17	3.36	0.18	0.14	292.2
Structures (Flyover Ramp, Over- crossings, etc.)	Grubbing/Land Clearing	1.00	10.36	9.04	0.41	0.36	46.0
	Grading/Excavation	3.61	35.60	33.26	1.46	1.27	2,661.1
	Drainage/Utilities/ Sub-Grade	1.81	16.02	16.84	0.72	0.61	1,046.6
	Paving	0.0	0.0	0.0	0.0	0.0	0.0
Average Daily Emissions (lbs/day)*		6.69 lbs/day	68.96 lbs/day	61.72 lbs/day	2.73 lbs/day	2.35 lbs/day	2,013 MT/Year
Roadway Construction (tons)		0.96 tons	11.11 tons	8.82 tons	0.40 tons	0.34 tons	2,287 MT
Structures Construction (tons)		1.69 tons	16.20 tons	15.62 tons	0.68 tons	0.59 tons	3,753 MT
Total Construction (tons)		2.65 tons	27.31 tons	24.44 tons	1.08 tons	0.93 tons	6,040 MT
*Based on 792 workdays MT = metric tons							
Source: Air Quality Report for I-280/Winchester Boulevard Interchange Improvements, 2022.							

Construction activities will not last for more than 5 years at one general location, so construction-related emissions do not need to be included in regional and project-level conformity analysis (40 CFR 93.123(c)(5)).

### **2.15.3.3      *Climate Change***

Neither the U.S. EPA nor the FHWA has issued explicit guidance or methods to conduct project-level greenhouse gas analysis. FHWA emphasizes concepts of resilience and sustainability in highway planning, project development, design, operations, and maintenance. Because there have been requirements set forth in California legislation and executive orders on climate change, the issue is addressed in the CEQA chapter of this document (see Section 3.3). The CEQA analysis may be used to inform the NEPA determination for the project.

### **2.15.3.4      *Cumulative Air Quality Effects***

As previously discussed, transportation plans that have been found to conform with the SIP are not considered to cause or contribute to violations of ambient air quality standards. Furthermore, a project included in a conforming plan would not result in a cumulatively considerable net increase of any criteria pollutant for which the project area is in non-attainment under an applicable federal or state ambient air quality standard. Conforming transportation plans are subject to a threshold of no net increase in emissions. Because the proposed Project is included in MTC's *Plan Bay Area* and 2021 TIP, which conform to the SIP, the proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant.

Furthermore, as shown in Tables 2.15-4 and 2.15-5, operational emissions of air pollutants would be lower under the Build Alternative than under the No Build Alternative. Therefore, since the Project would have no adverse effect on emissions, it would not, by definition, contribute to a cumulative air quality impact.

## **2.15.4      Avoidance, Minimization, and/or Mitigation Measures**

### **2.15.4.1      *Long-Term (Operational)***

No avoidance, minimization, or mitigation measures are required.

### **2.15.4.2      *Short-Term (Construction)***

The following measures will be implemented for the purpose of minimizing or avoiding the short-term/construction-related air quality effects of the Project that pertain to equipment exhaust:

**MM-AIR-1.1:**      The contractor for the Project shall submit a list of all off-road equipment greater than 25 horsepower (hp) that would be operated

for more than 20 hours over the entire duration of Project construction, including equipment from subcontractors, to BAAQMD for review and certification. The list shall include all information necessary to ensure the equipment meets the following requirement:

- Equipment shall be zero emissions or have engines that meet or exceed either EPA or ARB Tier 4 off-road emission standards, and it shall have engines that are retrofitted with a ARB Level 3 Verified Diesel Emissions Control Strategy (VDECS), if one is available for the equipment being used. Equipment with engines that meet Tier 4 Interim or Tier 4 Final emission standards automatically meet this requirement; therefore, a VDECS would not be required.

**MM-AIR-1.2:** Idling time of diesel-powered construction equipment and trucks shall be limited to no more than two minutes. Clear signage of this idling restriction shall be provided for construction workers at all access points.

**MM-AIR-1.3:** All construction equipment shall be maintained and properly tuned in accordance with the manufacturers' specifications.

**MM-AIR-1.4:** Portable diesel generators shall be prohibited. Grid power electricity should be used to provide power at construction sites; or propane and natural gas generators may be used when grid power electricity is not feasible.

The following measures will be implemented for the purpose of minimizing or avoiding the short-term/construction-related air quality effects of the Project that pertain to the generation of dust. The measures are best management practices (BMPs) required of all projects, which have been shown to reduce dust by up to 62%.

**MM-AIR-2.1:** All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

**MM-AIR-2.2:** On-site dirt piles or other stockpiled PM shall be covered, wind breaks installed, and water and/or soil stabilizers employed to reduce wind-blown dust emissions. The use of approved nontoxic soil stabilizers shall be incorporated according to manufacturers' specifications to all inactive construction areas.

**MM-AIR-2.3:** 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. Dry power sweeping should only be performed in conjunction with thorough watering of the subject roads.

- MM-AIR-2.4:** All vehicle speeds on unpaved roads and surfaces shall be limited to 15 mph when hauling material and operating non-earth moving equipment, and 10 mph when operating earth-moving equipment..
- MM-AIR-2.5** All roadway, driveway, and sidewalk paving shall be completed as soon as possible.
- MM-AIR-2.6:** All construction sites shall provide a posted sign visible to the public with the telephone number and person to contact at the lead agency regarding dust complaints. The recommended response time for corrective action shall be within 48 hours. BAAQMD's Complaint Line (1-800-334-6367) shall also be included on posted signs to ensure compliance with applicable regulations.
- MM-AIR-2.7:** All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- MM-AIR-2.8:** Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
- MM-AIR-2.9:** Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
- MM-AIR-2.10:** The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
- MM-AIR-2.11:** All transfer processes involving a free fall of soil or other PM shall be operated in such a manner as to minimize the free fall distance and fugitive dust emissions.
- MM-AIR-2.12:** Site accesses to a distance of 100 feet from the paved road shall be treated with a 6-to 12-inch compacted layer of wood chips, mulch, or gravel.
- MM-AIR-2.13:** Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.

**MM-AIR-2.14:** Open burning shall be prohibited at the project site. No open burning of vegetative waste (natural plant growth wastes) or other legal or illegal burn materials (e.g., trash, demolition debris) may be conducted at the project site. Vegetative wastes shall be chipped or delivered to waste-to-energy facilities (permitted biomass facilities), mulched, composted, or used for firewood. It is unlawful to haul waste materials off-site for disposal by open burning.

## **2.16 NOISE**

### **2.16.1 Introduction**

Noise is measured in "decibels" (dB), which is a numerical expression of sound levels on a logarithmic scale. A noise level that is 10 dB higher than another noise level has ten times as much sound energy and is perceived as being twice as loud. A sound change of less than 3 dB is just barely perceptible, and then only in the absence of other sounds. Intense sounds of 140 dB are so loud that they are painful and can cause damage with only brief exposure. These extremes are not commonplace in our normal working and living environments. An "A-weighted decibel" (dBA) approximates the frequency response of the average young ear when listening to most ordinary everyday sounds. Thus, traffic noise impact analyses commonly use the dBA.

With regard to traffic-generated noise, noise levels rise as vehicle speeds, overall volumes, and truck volumes increase. In general, a doubling of traffic results in a 3 dBA increase in noise at a nearby receptor, assuming a relatively homogeneous traffic composition (i.e., mainly passenger cars). The peak noise hour is typically not the peak commute hour due to lower operating speeds during the latter. The combination of volumes and speeds that produces the peak noise hour is that which is associated with traffic level of service C/D.

### **2.16.2 Regulatory Setting**

NEPA and CEQA provide the broad basis for analyzing and abating highway traffic noise effects. The intent of these laws is to promote the general welfare and to foster a healthy environment. The requirements for noise analysis and consideration of noise abatement and/or mitigation, however, differ between NEPA and CEQA.

#### **California Environmental Quality Act**

CEQA requires a strictly baseline versus build analysis to assess whether a proposed project will have a noise impact. If a proposed project is determined to have a significant noise impact under CEQA, then CEQA dictates that mitigation measures must be incorporated into the project unless those measures are not feasible. The rest of this section will focus on the NEPA/Title 23 Part 772 of the Code of Federal Regulations (23 CFR 772) noise analysis; please see Section 3 of this document for further information on noise analysis under CEQA.

#### **NEPA and 23 CFR 772**

For highway transportation projects with FHWA involvement (and Caltrans, as assigned), the Federal-Aid Highway Act of 1970 and its implementing regulations (23 CFR 772) govern the analysis and abatement of traffic noise impacts. The regulations require that

potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations include noise abatement criteria (NAC) that are used to determine when a noise impact would occur. The NAC differ depending on the type of land use under analysis. For example, the NAC for residences (67 dBA) is lower than the NAC for commercial areas (72 dBA). Table 2.16-1 lists the NAC for use in the NEPA/23 CFR 772 analysis.

**Table 2.16-1: Noise Abatement Criteria**

<b>Activity Category</b>	<b>NAC, Hourly A-Weighted Noise Level, Leq(h)<sup>1</sup></b>	<b>Description of Activity Category</b>
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B <sup>2</sup>	67 (Exterior)	Residential.
C <sup>2</sup>	67 (Exterior)	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (Interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72 (Exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A–D or F
F	No NAC - reporting only	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical, etc.), and warehousing.
G	No NAC - reporting only	Undeveloped lands that are not permitted.
<sup>1</sup> The Leq[h] activity criteria values are for impact determination only and are not design standards for noise abatement measures. All values are A-weighted decibels (dBA). <sup>2</sup> Includes undeveloped lands permitted for this activity category.		

Figure 2.16-1 lists the noise levels of common activities to enable readers to compare the actual and predicted highway noise levels discussed in this section with common activities.

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Jet Fly-over at 300m (1000 ft)	110	Rock Band
Gas Lawn Mower at 1 m (3 ft)	100	
Diesel Truck at 15 m (50 ft), at 80 km (50 mph)	90	Food Blender at 1 m (3 ft)
Noisy Urban Area, Daytime	80	Garbage Disposal at 1 m (3 ft)
Gas Lawn Mower, 30 m (100 ft)	70	Vacuum Cleaner at 3 m (10 ft)
Commercial Area		Normal Speech at 1 m (3 ft)
Heavy Traffic at 90 m (300 ft)	60	
Quiet Urban Daytime	50	Large Business Office
		Dishwasher Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime		Library
Quiet Rural Nighttime	30	Bedroom at Night, Concert Hall (Background)
	20	Broadcast/Recording Studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Figure 2.16-1: Noise Levels of Common Activities

According to the Caltrans *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects* (April 2020), a noise impact occurs when the predicted future noise level with the project substantially exceeds the existing noise level (defined as a 12 dBA or more) or when the future noise level with the project approaches or exceeds the NAC. A noise level is considered to approach the NAC if it is within 1 dBA of the NAC.

If it is determined that the project will have noise impacts, then potential abatement measures must be considered. Noise abatement measures that are determined to be reasonable and feasible at the time of final design are incorporated into the project plans

and specifications. This document discusses noise abatement measures that would likely be incorporated in the project.

Caltrans' Traffic Noise Analysis Protocol sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise abatement is basically an engineering concern. Noise abatement must be predicted to reduce noise by at least 5 dB at an impacted receptor to be considered feasible from an acoustical perspective. It must also be possible to design and construct the noise abatement measure for it to be considered feasible. Factors that affect the design and constructability of noise abatement include, but are not limited to, safety, barrier height, topography, drainage, access requirements for driveways, presence of local cross streets, underground utilities, other noise sources in the area, and maintenance of the abatement measure. The overall reasonableness of noise abatement is determined by the following three factors: 1) the noise reduction design goal of 7 dB at one or more impacted receptors; 2) the cost of noise abatement; and 3) the viewpoints of benefited receptors (including property owners and residents of the benefited receptors).

### **2.16.3 Affected Environment**

The information in this section is based primarily on the Project's Noise Study Report (March 2022) and Construction Vibration Report (2022), which are incorporated into this EIR/EA by reference. These reports are available for review at the locations listed inside the front cover of this document.

The project area is exposed to a relatively high level of noise from vehicular traffic. Vehicles traveling on the freeways and local streets such as Winchester Boulevard and Moorpark Avenue produce  $Leq(h)$  noise levels that exceed FHWA's NAC at various land uses that are located adjacent to these roadways.

Existing peak-hour noise levels were quantified within the project limits where there are existing or proposed residences, schools, parks/recreation areas, and churches. These locations are shown on Figures 2.16-2 through 2.16-4. The analysis of existing conditions focuses on locations with outdoor activity areas such as residential backyards and recreational areas like Santana Park and school playgrounds.

Existing exterior noise levels range from 50 to 71 dBA  $Leq(h)$ , as shown in Table 2.16-2. The existing noise levels shown in Table 2.16-2 take into account the existing soundwalls along I-280, I-880, and SR-17, which range in height from approximately 12 feet to 16 feet.

Table 2.16-2 shows that future (year 2040) noise levels under "No Build" conditions will be up to three decibels higher than existing levels, reflecting increases in traffic that will occur as a result of planned growth in the area. A 3-dB increase is barely perceptible to the human ear.



Source: Illingworth & Rodkin, Inc., January 2022.

NOISE RECEPTORS AND SOUNDWALLS WEST OF WINCHESTER BOULEVARD FIGURE 2.16-2



Source: Illingworth & Rodkin, Inc., January 2022.

NOISE RECEPTORS AND SOUNDWALLS BETWEEN WINCHESTER BOULEVARD AND I-880/SR17

FIGURE 2.16-3



Source: Illingworth & Rodkin, Inc., January 2022.

NOISE RECEPTORS AND SOUNDWALLS EAST OF I-880/SR17

FIGURE 2.16-4

**Table 2.16-2: Existing and Future Loudest Hour Leq Exterior Noise Levels**

Recep- tor Nمبر	Land Use	NAC Activity Cat- egory	Exist- ing Sound- wall In Place?	Exist- ing Noise Level	Year 2040 No Build Noise Level	Year 2040 Build Noise Level	Year 2040			
							No Build Increase Over Existing	Build Increase Over Existing	Build Increase Over No Build	Impact Type <sup>c</sup>
S1	Residential	B(67)	Yes	65	66	66	1	1	0	A/E
S2	Residential	B(67)	Yes	70	73	73	3	3	0	A/E
S3	Residential	B(67)	Yes	59	61	61	2	2	0	None
S4	Residential	B(67)	Yes	66	67	67	1	1	0	A/E
S5	Residential <sup>b</sup>	B(67)	No	63	63	63	0	0	0	None
S6	Residential	B(67)	No	71	73	73	2	2	0	A/E
S7	Residential	B(67)	No	57	58	58	1	1	0	None
S8	Recreation area <sup>b</sup>	C(67)	No	64	64	64	0	0	0	None
S9	Residential	B(67)	Yes	69	69	76 <sup>a</sup>	0	7 <sup>a</sup>	7 <sup>a</sup>	A/E
S10	Residential	B(67)	No	60	61	61	1	1	0	None
S11	Santana Park Ballfield	C(67)	Yes	60	61	65 <sup>a</sup>	1	5 <sup>a</sup>	4 <sup>a</sup>	None
S12	Residential	B(67)	No	65	68	68	3	3	0	A/E
S13	Residential	B(67)	Yes	60	61	63	1	3	2	None
S14	Residential	B(67)	Yes	63	64	67 <sup>a</sup>	1	4 <sup>a</sup>	3 <sup>a</sup>	A/E
S15	Residential	B(67)	No	71	73	73	2	2	0	A/E
S16	Residential	B(67)	Yes	57	58	58	1	0	0	None
S17	Residential	B(67)	No	60	61	61	1	1	0	None
S18	Residential	B(67)	Yes	60	60	61	0	1	1	None
S19	Residential	B(67)	Yes	64	65	65	1	1	0	None
S20	Residential	B(67)	No	60	60	61	0	1	1	None
S21	Residential	B(67)	Yes	68	69	69	1	1	0	A/E
S22	Validation Point	n/a	Yes	70	73	73	3	3	0	n/a
S23	Residential	B(67)	No	61	62	62	1	1	0	None
S24	Residential	B(67)	Yes	67	68	68	1	1	0	A/E
S25	Residential	B(67)	No	58	58	59	0	1	1	None
R1	Residential	B(67)	Yes	57	58	58	1	1	0	None
R2	Residential	B(67)	Yes	65	67	67	2	2	0	A/E
R3	Residential	B(67)	Yes	60	62	61	2	1	-1	None
R4	Residential <sup>b</sup>	B(67)	No	55	55	55	0	0	0	None
R5	Residential	B(67)	Yes	57	58	58	1	1	0	None
R6	Residential <sup>b</sup>	B(67)	No	62	63	63	1	1	0	None
R7	Residential	B(67)	No	54	55	55	1	1	0	None
R8	Residential	C(67)	No	57	58	58	1	1	0	None
R9	Residential <sup>b</sup>	B(67)	No	62	63	63	1	1	0	None
R10	Residential	B(67)	No	64	65	65	1	1	0	None
R11	Recreation <sup>b</sup>	C(67)	No	62	63	63	1	1	0	None
R12	Residential	B(67)	No	61	62	62	1	1	0	None
R13	Other (Winchester Mystery House)	E(72)	No	69	70	70	1	1	0	None
R14	Art School of SF Bay/ Commercial	D(52)/ E(72)	No	67	67	67	0	0	0	None
R15	Residential	B(67)	No	70	71	71	1	1	0	A/E

Receptor Nbr	Land Use	NAC Activity Category	Existing Sound-wall In Place?	Existing Noise Level	Year 2040 No Build Noise Level	Year 2040 Build Noise Level	Year 2040				Impact Type <sup>c</sup>
							No Build Increase Over Existing	Build Increase Over Existing	Build Increase Over No Build		
R16	Playground at Action Day Daycare	C(67)	No	58	59	59	1	1	0	None	
R17	Residential	B(67)	No	59	60	60	1	1	0	None	
R18	West Valley Christian Church	D(52)	No	78	78	78	0	0	0	None	
R19	William Jessup and National Universities/Eden Church	D(52)	No	52	52	53	0	1	1	None	
R19	Office	C67	No	52	52	53	0	1	1	None	
R20	Calstar Church	D(52)	No	60	61	61	1	1	0	None	
R21	Calstar Church	D(52)	No	69	72	71	3	2	-1	A/E	
R22	Residential	B(67)	No	56	58	57	2	1	-1	None	
R23	Residential	B(67)	No	54	55	55	1	1	0	None	
R24	Residential	B(67)	No	50	52	52	2	2	0	None	
R25	Residential	B(67)	No	60	61	61	1	1	0	None	
R26	Santana Park Ballfield	C(67)	Yes	62	63	67 <sup>a</sup>	1	5 <sup>a</sup>	4 <sup>a</sup>	A/E	
R27	Santana Park Playground	C(67)	Yes	64	65	72 <sup>a</sup>	1	8 <sup>a</sup>	7 <sup>a</sup>	A/E	
R28	Residential	B(67)	No	69	71	71	2	2	0	A/E	
R29	Residential	B(67)	No	62	63	63	1	1	0	None	
R30	Residential	B(67)	No	63	64	64	1	1	0	None	
R31	Residential	B(67)	Yes	63	64	64	1	1	0	None	
R32	Residential	B(67)	Yes	60	60	60	0	0	0	None	
R33	Residential	B(67)	No	65	65	65	0	0	0	None	
R34	Residential	B(67)	No	62	62	62	0	0	0	None	
R35	Residential	B(67)	Yes	57	58	58	1	1	0	None	
R36	Residential	B(67)	Yes	62	62	62	0	0	0	None	
R37	Residential	B(67)	No	58	59	59	1	1	0	None	
R38	Residential	B(67)	Yes	63	64	64	1	1	0	None	
R39	Residential	B(67)	No	67	67	67	0	0	0	A/E	
R40	Residential	B(67)	No	62	63	63	1	1	0	None	
R41	Residential	B(67)	Yes	65	65	65	0	0	0	None	
R42	Residential	B(67)	Yes	64	64	65	0	1	1	None	
R43	Residential	B(67)	Yes	59	59	59	0	0	0	None	
R44	Residential	B(67)	No	58	59	59	1	1	0	None	
R45	Residential	B(67)	No	63	64	64	1	1	0	None	
R46	Residential	B(67)	Yes	59	60	61	1	2	1	None	
R47	Residential	B(67)	No	57	57	58	0	1	1	None	
R48	Residential	B(67)	No	60	61	61	1	1	0	None	
R49	Giving Tree School & Playground	C(67)/D(52)	Yes	60	62	62	2	2	0	None	
R50	Residential	B(67)	Yes	61	62	63	1	2	1	None	
R51	Residential	B(67)	Yes	56	57	57	1	1	0	None	
R52	Residential	B(67)	Yes	56	57	57	1	1	0	None	

Receptor Nbr	Land Use	NAC Activity Category	Existing Soundwall In Place?	Existing Noise Level	Year 2040 No Build Noise Level	Year 2040 Build Noise Level	Year 2040			Impact Type <sup>c</sup>
							No Build Increase Over Existing	Build Increase Over Existing	Build Increase Over No Build	
R53	Residential	B(67)	Yes	64	65	65	1	1	0	None
R54	Residential	B(67)	Yes	59	59	60	0	1	1	None
R55	Residential	B(67)	Yes	63	64	64	1	1	0	None
R56	Residential	B(67)	Yes	64	65	65	1	1	0	None
R57	Residential	B(67)	Yes	69	69	69	1	1	0	A/E
R58	Residential	B(67)	Yes	70	71	71	1	1	0	A/E
R59	Residential	B(67)	Yes	63	64	64	1	1	0	None

<sup>a</sup>Receptors S9, S11, S14, R26, and R27 are shielded by an existing soundwall that would be removed by the Project. The 2040 Build Alternative noise levels shown in this table reflect the noise levels with the soundwall removed and do not reflect the lower noise levels that would result from construction of the replacement soundwall. See Table 2.16-7 for the lower noise levels with the replacement soundwall.

<sup>b</sup>Receptors R4, R6, R9, R11, S5, and S8 will be demolished and replaced with the Winchester Ranch Residential Development project that was approved by the City of San José. The new development will be designed to an exterior noise standard of 60 dBA Ldn, more restrictive than the 67 dBA Leq[h] NAC for residences.

<sup>c</sup>Impact Type:

S = Substantial Increase (12 dBA or more);

A/E = Approach or Exceed NAC;

None = Increase is less than 12 decibels and noise levels do not approach or exceed the NAC.

Receptor locations are shown on Figures 2.16-2 through 2.16-4.

Source: Noise Study Report for I-280/Winchester Boulevard Interchange Improvements Project, 2022.

At the schools and churches within the project limits where the NAC identifies maximum interior noise levels  $\leq 52$  dBA Leq(h), existing levels do not exceed that criterion. Existing and future interior noise levels at those locations are described in Section 2.16.5.

## 2.16.4 Environmental Consequences

### 2.16.4.1 *Long-Term Operational Noise Impacts*

#### Exterior Noise

Future traffic-related noise levels at land uses adjacent to SR-17, I-280, and I-880 within the project limits were quantified in accordance with FHWA and Caltrans procedures. Projected noise levels were then compared to FHWA's NAC shown in Table 2.16-1 to determine whether the consideration of noise abatement measures was warranted. Projected noise levels were also compared with existing noise levels to determine whether the increase (if any) would be substantial.

As shown in Table 2.16.2, future noise increases, and the contribution of the Project to those increases, would vary by location, summarized as follows:

- When compared to existing conditions, long-term changes in noise levels under 2040 No Build conditions would range from 0 to +3 dBA.
- When compared to 2040 No Build conditions, the effect of the Project on long-term noise levels would range from -1 to +2 dBA.
- When compared to existing conditions, changes in long-term noise levels under 2040 Build conditions would range from 0 to +3 dBA. As noted previously, a 3 dB increase in noise is just perceptible to the human ear.

For several residences along Tisch Way and for areas within Santana Park, there would be a short-term increase in noise during construction. However, long-term increases in noise at these locations would not occur. See Section 2.16.4.2 for a discussion of the short-term noise increases.

None of the exterior noise level increases that would result from the Project are considered substantial as they would be well below the Caltrans 12 dBA threshold. Noise levels would, however, exceed FHWA's NAC at multiple locations, as is the case under existing conditions. Please see Section 2.16.5 for a discussion of the feasibility of noise abatement for those locations.

### **Interior Noise**

For the schools and churches within the project limits, the NAC identifies maximum interior noise levels of  $\leq 52$  dBA Leq(h). The following text presents the assessment as to whether interior noise levels would exceed this criterion with the Project in place.

*Action Day Primary Plus Daycare (3030 Moorpark Avenue):* This facility is located approximately 500 feet south of I-280 and is represented by Receptor R16. Interior noise levels at Action Day Primary Plus would not approach or exceed 52 dBA Leq[h] with windows open or closed, as a minimum 10 dBA Leq[h] noise reduction from outdoor noise levels would bring interior noise levels to 49 dBA Leq[h]. See Table 2.16-3.

*William Jessup University and National University (3031 Tisch Way):* These two colleges are both located approximately 225 feet north of I-280 and represented by Receptor R19. The colleges are occupants in the 3031 Tisch Way building, which is a large office building of modern construction and is anticipated to provide about 30 dB of exterior-to-interior noise reduction with windows closed. The 3031 Tisch Way building includes mechanical ventilation, allowing occupants the option of closing windows to control noise. Based on these facts, noise levels within the 3031 Tisch Way building are not anticipated to approach or exceed 52 dBA Leq[h]. See Table 2.16-3.

*National Holistic Institute (3031 Tisch Way):* As described above, noise levels within this building (Receptor R19) are not anticipated to approach or exceed 52 dBA Leq[h].

*Art School of SF Bay (700 S. Winchester Boulevard):* This facility is located approximately 750 feet south of I-280 and represented by Receptor R14. Interior noise levels could approach or exceed 52 dBA Leq(h) with windows open. However, the building in which the school is located has mechanical ventilation, allowing occupants the option of closing windows to control noise. The building is of modern construction and is anticipated to receive about 30 dB of exterior-to-interior noise reduction with windows closed. As a result, interior noise levels are not anticipated to approach or exceed 52 dBA Leq[h]. See Table 2.16-3.

*Giving Tree Montessori (2555 Moorpark Avenue):* This facility is located approximately 330 feet south of I-280 and represented by Receptor R49. Interior noise levels could approach or exceed 52 dBA Leq(h) with windows open. However, the building in which the school is located has mechanical ventilation, allowing occupants the option of closing windows to control noise. The building is of modern construction and is anticipated to receive about 30 dB of exterior-to-interior noise reduction with windows closed. As a result, interior noise levels are not anticipated to approach or exceed 52 dBA Leq[h]. See Table 2.16-3.

*Eden Church (3031 Tisch Way):* This church is located approximately 225 feet north of I-280 and represented by Receptor R19. As described above, noise levels within this building are not anticipated to approach or exceed 52 dBA Leq[h].

*West Valley Christian Alliance (3003 Moorpark Avenue):* This church is located approximately 140 feet south of I-280 and represented by Receptor R18. Interior noise levels could approach or exceed 52 dBA Leq(h) with windows open. However, the building in which the church is located has mechanical ventilation, allowing occupants the option of closing windows to control noise. The building is of modern construction and is anticipated to receive about 30 dB of exterior-to-interior noise reduction with windows closed. As a result, interior noise levels are not anticipated to approach or exceed 52 dBA Leq[h]. See Table 2.16-3.

*Calstar Christian Church (2970 Moorpark Avenue):* This church is located approximately 350 feet south of I-280 and represented by Receptor R21. Interior noise levels within this building could potentially approach or exceed 52 dBA Leq[h] with windows open. However, the building in which the church is located has mechanical ventilation, allowing occupants the option of closing windows to control noise. The building is of older construction and is anticipated to receive about 20 dB of exterior-to-interior noise reduction with windows closed. As a result, interior noise levels are not anticipated to approach or exceed 52 dBA Leq[h]. See Table 2.16-3.

In conclusion, none of the interior noise levels at schools and churches would approach or exceed the 52 dBA Leq(h) criterion with the Project in place.

**Table 2.16-3: Calculated Interior Noise Levels**

Facility	Receptor Number	Existing Exterior Leq(h)	2040 No Build Exterior Leq(h)	2040 Build Exterior Leq(h)	2040 Build Interior Leq(h)
Action Day Primary Plus Daycare	R16	58	59	59	49 <sup>a</sup>
William Jessup University	R19	52	52	53	23
National University	R19	52	52	53	23
National Holistic Institute	R19	52	52	53	23
Art School of SF Bay	R14	67	67	67	37
Giving Tree Montessori	R49	60	62	62	32
Eden Church	R19	52	52	53	23
West Valley Christian Alliance Church	R18	78	78	78	48
Calstar Christian Church	R21	69	72	71	51
<sup>a</sup> The calculated interior noise level at R16 represents the noise reduction provided by the structure with windows open.  Receptor locations are shown on Figures 2.16-2 through 2.16-4.  Source: Noise Study Report for I-280/Winchester Boulevard Interchange Improvements Project, 2022.					

**2.16.4.2 Short-Term Noise Impacts During Construction**

Construction of the Project is estimated to be completed in a period of approximately 36 months. Noise generated by project-related construction activities would be a function of the noise levels generated by individual pieces of construction equipment, the type and amount of equipment operating at any given time, the timing and duration of construction activities, the proximity of nearby sensitive land uses, and the presence or lack of shielding at these sensitive land uses. Construction noise levels would vary on a day-to-day basis during each phase of construction depending on the specific task being completed. Caltrans’ standard specifications state that construction noise should not exceed 86 dBA L<sub>max</sub> at 50 feet from the job site activities from 9:00 p.m. to 6:00 a.m.

Pile driving may be used as a method of construction for structure foundation. Construction of the tunnel off-ramp to Tisch Way would utilize a cut and cover method. Cut and cover involves methods typical of roadway and bridge construction which will be utilized throughout other areas of the Project, including grading, excavation, and paving. Blasting would not be required. Construction noise would primarily result from the operation of heavy construction equipment and arrival/departure by heavy-duty trucks.

Based on calculations conducted in FHWA’s Roadway Construction Noise Model, Table 2.16-4 presents construction noise levels calculated for each major phase of the Project

at distances of 50 and 100 feet. Note that noise generated by construction equipment drops off at a rate of 6 dB per doubling of distance between the noise source and receiver.

**Table 2.16-4: Noise Levels by Construction Phase at 50 Feet and 100 Feet**

Construction Type	Construction Phase	Maximum Noise Level (L <sub>max</sub> , dBA)		Hourly Average Noise Level (L <sub>eq</sub> [h], dBA)	
		50 Feet	100 Feet	50 Feet	100 Feet
		Roadway Construction	Grubbing / Land Clearing	84	78
Grading / Excavation	85		79	89	83
Drainage / Utilities	85		79	88	82
Paving	84		78	84	78
Bridge / Structures Construction	Grubbing / Land Clearing	84	78	83	77
	Grading / Excavation	85	79	90	84
	Drainage / Utilities	85	79	89	83
	Paving	81	75	83	77
Impact Pile Driving		101	95	94	88

Note: Saw cutting of pavement will likely occur on occasion at locations where new pavement meets (i.e., conforms with) existing pavement. Noise levels produced during saw cutting exceed 86 dBA L<sub>max</sub> at a distance of 50 feet.

Although the overall construction schedule is anticipated to occur over a period of three years, roadway construction activities typically occur for relatively short periods of time in any specific location as construction proceeds along the project's alignment. Construction noise would mostly be of concern in areas where heavy construction would be concentrated for extended periods of time in areas adjacent to noise sensitive receptors, where noise levels from individual pieces of equipment are substantially higher than ambient conditions, or when construction activities would occur during noise-sensitive early morning, evening, or nighttime hours.

Most construction phases would generate average noise levels that would exceed ambient daytime noise levels at adjacent land uses by 15 to 20 dBA Leq[h]. Receptors shielded by existing soundwalls would be exposed to a similar increase in noise, albeit at lower overall noise levels because the shielding provided by the existing soundwalls would attenuate construction noise at a similar rate to traffic noise.

With the exception of short periods of pile driving, heavy demolition, and site preparation, construction noise levels would not be expected to exceed the quantitative noise limits established by Caltrans.

Facilities in Santana Park and nearby residences (i.e., Receptors S9, S11, S14, R26, and R27) where the existing soundwall would be removed and replaced would experience increased traffic noise levels during the period of time between removal of the existing

wall and construction of the replacement wall. As shown in Table 2.16-2, short-term noise level increases at those locations were calculated to reach up to 8 dBA over existing conditions with the removal of the existing barrier, with resulting worst-hour traffic noise levels calculated to be as high as 76 dBA Leq[h]. The interval between the removal of the existing soundwall and the installation of the replacement soundwall is estimated to be up to one year.

#### **2.16.4.3 Short-Term Vibration Impacts During Construction**

Construction activities would include grubbing/land cleaning, grading/excavation, drainage/utilities, and paving. Pile driving could be used as a method of construction for structure foundation. As the cut and cover method would be utilized for construction of the tunnel off-ramp to Tisch Way, blasting, which has the potential to result in high levels of vibration, would not be utilized. Traffic, including heavy trucks traveling on a highway, rarely generates vibration high enough to cause structural or cosmetic damage.

Due to the short-term nature of construction, the primary concern is the potential for vibration to damage a structure. Demolition and construction activities often generate perceptible vibration levels and levels that could affect nearby structures when heavy equipment or impact tools (e.g. jackhammers, hoe rams) are used in the vicinity of nearby sensitive land uses. Building damage generally falls into three categories:

- Cosmetic damage (also known as threshold damage) is defined as hairline cracking in plaster, the opening of old cracks, the loosening of paint or the dislodging of loose objects.
- Minor damage is defined as hairline cracking in masonry or the loosening of plaster.
- Major structural damage is defined as wide cracking or the shifting of foundation or bearing walls.

Critical factors pertaining to the impact of construction vibration on sensitive receptors include the proximity of the existing structures to the project site, soil conditions, the soundness of the structures, and the methods of construction used.

Vibration is measured in terms of peak particle velocity (PPV) and the units are inches per second (in/sec). Caltrans identifies a vibration limit of 0.5 in/sec PPV as the threshold at which there is a potential risk of damage to new residential and modern commercial/industrial structures, 0.3 in/sec PPV for older residential structures, and a conservative limit of 0.25 in/sec PPV for historic and some old buildings.

Table 2.16-5 presents typical vibration levels that could be expected from representative construction equipment at a reference distance of 25 feet. Vibration levels are highest close to the source, and then attenuate with increasing distance depending on soil conditions. Assuming normal propagation, Table 2.16-5 also shows how vibration levels would vary by distance from the source.

Table 2.16-6 depicts the distances between the most vibration-critical pieces of construction equipment and nearby buildings with regard to potential exceedance of the applicable Caltrans vibration threshold.

**Table 2.16-5: Representative Vibration Levels from Construction Equipment**

Equipment		PPV (in/sec) at Distance from Source			
		10 Feet	25 Feet	50 Feet	100 Feet
Pile Driver (Impact)	upper range	3.173	1.158	0.540	0.252
	typical	1.764	0.644	0.300	0.140
Pile Driver (Sonic)	upper range	2.011	0.734	0.342	0.160
	typical	0.466	0.17	0.079	0.037
Clam Shovel Drop		0.553	0.202	0.094	0.044
Hydromill (Slurry Wall)	in soil	0.022	0.022	0.004	0.002
	in rock	0.047	0.047	0.008	0.004
Vibratory Roller		0.575	0.210	0.098	0.046
Hoe Ram		0.244	0.089	0.042	0.019
Large bulldozer		0.244	0.089	0.042	0.019
Caisson drilling		0.244	0.089	0.042	0.019
Loaded trucks		0.208	0.076	0.035	0.017
Jackhammer		0.096	0.035	0.016	0.008
Small bulldozer		0.008	0.003	0.001	0.001

**Table 2.16-6: Distance to Exceedance of Vibration Limit by Structure Type**

Structure Type	Threshold	Distance Between Source and Structure Within Which Exceedance of Threshold Is Likely to Occur	
		Impact Pile Driving	Heavy Construction
Historic Buildings	0.25 in/sec PPV	100 feet	22 feet
Older Residences	0.3 in/sec PPV	85 feet	18 feet
New Residential and Commercial/Industrial Buildings	0.5 in/sec PPV	55 feet	12 feet

Distances were calculated assuming normal propagation conditions.

As shown in Table 2.16-6, heavy construction located within 22 feet of historic buildings and impact pile driving located within 100 feet of historic buildings would have the potential to exceed the 0.25 in/sec PPV threshold. Based on review of the City of San José’s Historic Resource Inventory, two historic structures are located within 500 feet of the project limits: the Century 21 Theater at 3161 Olsen Drive and the Winchester Mystery House at 525 Winchester Boulevard. Both of these structures are located more than 300 feet from the location of the nearest potential construction activity. In addition, the 12-story office building located at 3031 Tisch Way, which was constructed in 1973, is

considered historic. That structure is located more than 300 feet from the nearest heavy construction activity. Thus, there are no historic structures located within 100 feet of construction.

Heavy construction located within 18 feet of older residential structures or within 12 feet of new residential and modern commercial/industrial structures, and impact pile driving within 85 feet of older residential structures or within 55 feet of new residential and modern commercial/industrial structures, would have the potential to exceed the 0.3 and 0.5 in/sec PPV thresholds, respectively. Based on these distances, vibration limits could potentially be exceeded during pile driving located adjacent to structures. However, construction vibration limits are not anticipated to be exceeded during periods of construction not involving pile driving.

## **2.16.5 Avoidance, Minimization, and/or Mitigation Measures**

This section describes the avoidance, minimization, and mitigation measures that were evaluated for inclusion in the Project.

### **2.16.5.1 *Measures for Long-Term Operational Noise Impacts***

Although the Project would not result in a substantial increase in traffic-related noise, projected noise levels will, however, exceed FHWA's NAC at many locations, as they do under existing conditions. As a result, the feasibility and reasonableness allowances of noise abatement measures were considered. This process involved two situations:

- At each location where no soundwall exists, the feasibility and reasonableness allowance for constructing a new soundwall was evaluated.
- At locations that are already shielded by soundwalls, where noise levels approached or exceeded the NAC, the amount of noise reduction provided by the soundwall was calculated. If the existing soundwall meets the feasibility and acoustical reasonableness requirements for noise reduction, no modifications to the existing soundwall or additional abatement were considered. If the existing soundwall fails to meet feasibility and acoustical reasonableness requirements, analysis was undertaken to determine whether it would be feasible to achieve a further noise reduction of at least five decibels by raising the heights of the soundwalls. Soundwall heights in excess of 16 feet were not considered, per the Caltrans Protocol.

The feasibility of soundwalls was determined by the 5-dBA minimum reduction in noise level as well as overall constructability. The reasonableness of soundwalls was determined using the following three factors contained in the Protocol:

- The noise reduction design goal (a barrier must be predicted to provide at least 7 dB of noise reduction at one or more benefited receptors).

- The cost of noise abatement (reasonable allowance per benefited receptor of \$107,000 for barrier heights of 8-10 feet, \$214,000 for barrier heights of 12 feet, \$321,000 for barrier heights of 14 feet, \$428,000 for barrier heights of 16 feet).
- The viewpoints of benefited receptors (including property owners and residents of the benefited receptors).

## **Evaluation of Modifications to Existing Soundwalls**

### Existing Soundwall A

As shown on Figure 2.16-2, existing Soundwall A, which is 12 feet in height, is located along the northside of I-280 west of Winchester Boulevard. Outdoor areas of first row residences represented by Receptors S1 and S4, located between Inez Way and Papac Way, have been identified for noise abatement because 2040 Build Alternative noise levels would approach or exceed the NAC. Existing Soundwall A was calculated to provide 11 dBA of noise reduction to S1, and 13 dBA of noise reduction to S4. Therefore, existing Soundwall A meets the feasibility requirement of providing a 5 dB reduction at an impacted receptor and also achieves the 7 dB noise reduction design goal for reasonableness. Based on these facts, existing Soundwall A was not evaluated further and no modifications are proposed.

### Existing Soundwall B

As shown on Figure 2.16-2, existing Soundwall B, which is 12 feet in height, is located along the southside of I-280 west of Winchester Boulevard. Outdoor areas of first row residences represented by Receptors S2, S6, and R2, located between Ardis Way and Winchester Boulevard, have been identified for noise abatement because 2040 Build Alternative noise levels would approach or exceed the NAC. Soundwall B was calculated to provide 4 dBA of noise reduction to S2, 1 dBA of noise reduction to S6, and 4 dBA of noise reduction to R2. Since the existing soundwall does not meet the feasibility requirements and does not reduce noise to below the NAC; the feasibility of increasing its height was assessed.

It was determined that raising Soundwall B to a height of 14 feet would feasibly abate traffic noise but would not meet the 7 dB design goal, even at a height of 16 feet. Overall noise reduction provided by Soundwall B at residential receptors to the south is limited due to the presence of Moorpark Avenue, which acts as the dominant source of traffic noise to receptors in the vicinity. There is no feasible location for a noise barrier between Moorpark Avenue and residential receptors in this area as it would block driveways and access to local residential streets. Therefore, a reasonable allowance was not calculated for existing Soundwall B and no modifications are proposed.

### Existing Soundwall C

As shown on Figure 2.16-3, existing Soundwall C, which is 12-14 feet in height, is located in the northwest quadrant formed by I-280 and I-880. Although shielded by Soundwall C,

Santana Park (represented by Receptor R27) has been identified for noise abatement because 2040 Build Alternative noise levels would approach the NAC. Soundwall C also shields receptors where noise levels did not approach or exceed the NAC, such as S11, S13, S14, R26, and R31. Soundwall C was calculated to provide 6 dBA of noise reduction to R27, therefore meeting the noise reduction standard for feasibility. The soundwall was calculated to provide noise reduction at other receptors in the area, including 8 dBA at S14, therefore meeting the noise reduction design goal. Based on these results, existing Soundwall C was not evaluated further and no modifications are proposed.

#### Existing Soundwall D

As shown on Figure 2.16-4, existing Soundwall D, which is 16 feet in height, is located in the southeast quadrant formed by I-280 and SR-17. Although partially or fully shielded in Soundwall D, first and second row residences represented by Receptors S21, S24, R57, and R58 have been identified for noise abatement because 2040 Build Alternative noise levels would approach or exceed the NAC. Soundwall D was calculated to provide 10 to 11 dBA of noise reduction to residential Receptors S21 and S24 and, therefore, meets the noise reduction standard for feasibility and the noise reduction design goal. Based on these results, existing Soundwall D was not evaluated further and no modifications are proposed.

### **Evaluation of New Soundwalls**

#### New Soundwall 1

Projected 2040 Build Alternative noise levels would approach or exceed the NAC at receptors located to the east of existing Soundwall B. Those receptors, represented by Receptor S6, are not shielded by existing soundwalls. As shown on Figure 2.16-2, new Soundwall 1 was modeled along the I-280 southbound off-ramp to Winchester Boulevard, extending approximately 530 feet east from the terminus of existing Soundwall B. The evaluation determined that new Soundwall 1 would not feasibly abate traffic noise or meet the 7 dB noise reduction goal. Similar to existing Soundwall B, noise reduction provided by a new Soundwall 1 would be limited due to the dominant traffic noise source at this location being Moorpark Avenue. New Soundwall 1 would not meet the noise reduction standard for feasibility or the noise reduction design goal. Based on this determination, reasonable allowances were not calculated for new Soundwall 1, nor is it proposed to be constructed.

#### New Soundwall 2

Projected 2040 Build Alternative noise levels would approach or exceed the NAC at receptors located south of Moorpark Avenue east of Winchester Boulevard. As shown on Figure 2.16-3, those locations include exterior worship space represented by Receptor R21 and residences represented by Receptors S12, S15, R15, R28, and R39. Those receptors are not shielded by existing soundwalls but are partially shielded by developer

walls and fences reaching 5 to 7 feet in height, a berm, and existing structures. Therefore, the feasibility of a new soundwall was evaluated.

New Soundwall 2 was modeled to begin approximately 470 feet east of Winchester Boulevard and continue for approximately 1,975 feet, terminating at the I-280 off-ramp to southbound SR-17 bridge over Moorpark Avenue. However, the evaluation of Soundwall 2 determined that it would not feasibly abate traffic noise at any impacted receptors, even at a height of 16 feet. Based on this determination, reasonable allowances were not calculated for new Soundwall 2, nor is it proposed to be constructed.

### Evaluation of Replacement Soundwall

As described previously, the Project would remove and replace the existing soundwall along Tisch Way, which is 12-15 feet in height, that partially shields Receptors S9, S11, S14, R26, and R27. During the interim period between when the soundwall is removed and when it is replaced, noise would increase by up to 7 dBA at these receptors. However, with the replacement soundwall in place, the net result would be no increase in noise. Projected Leq[h] noise levels with the replacement soundwall of various heights are shown in Table 2.16-7.

**Table 2.16-7: Leq[h] Noise Levels with Replacement Soundwall**

Receptor Nbr	Land Use	No Wall Leq[h]	With 8-Ft Soundwall		With 10-Ft Soundwall		With 12-Ft Soundwall		With 14-Ft Soundwall		With 16-Ft Soundwall	
			Leq[h]	I.L. <sup>a</sup>	Leq[h]	I.L. <sup>a</sup>	Leq[h]	I.L. <sup>a</sup>	Leq[h]	I.L. <sup>a</sup>	Leq[h]	I.L. <sup>a</sup>
S9	Residential	76	69	7	68	8	67	9	66	10	65	11
S11	Santana Park Ballfield	65	63	2	62	3	62	3	61	4	60	5
S13	Residential	63	62	1	62	1	61	2	61	2	61	2
S14	Residential	67	65	2	64	3	64	3	64	3	64	3
R26	Santana Park Ballfield	67	65	2	64	3	64	3	62	5	62	5
R27	Santana Park Playground	72	69	3	68	4	66	6	66	6	65	7

<sup>a</sup>I.L. = Insertion Loss, which is the reduction in noise in decibels with the soundwall in place.

Receptor locations are shown on Figure 2.16-3.

Source: Noise Study Report for I-280/Winchester Boulevard Interchange Improvements Project, 2022.

### Preliminary Noise Abatement Recommendation and Decision

The Project proposes to construct the replacement soundwall described above. The proposed soundwall height would approximate the height of the existing soundwall that is being removed by the Project, such height being 12-15 feet. That height would feasibly and

reasonably abate noise at the adjacent residential and recreational receptors, the latter that are located within Frank Santana Park. The soundwall height of at least 12 feet would break the line-of-sight between an 11.5-ft truck exhaust stack and a 5-ft high receptor.

The preliminary noise abatement decision presented above is based on preliminary project alignments and profiles, which may be subject to change. As such, the physical characteristics of noise abatement described herein also may be subject to change. If pertinent parameters change substantially during the final project design, the preliminary noise abatement decision may be changed or eliminated from the final project design. A final decision to construct noise abatement will be made upon completion of the project design.

#### **2.16.5.2 Measures for Short-Term Construction Noise and Vibration Impacts**

For the purpose of minimizing and avoiding short-term construction noise impacts, the following measures will be implemented by the Project:

- MM-NOI-1.1:** All construction equipment shall conform to Section 14-8.02, Noise Control, of the latest Caltrans Standard Specifications.
- MM-NOI-1.2:** When feasible, noise-generating construction activities shall be restricted to between 7:00 a.m. and 7:00 p.m. on weekdays, with no construction occurring on weekends or holidays. If work is necessary outside of these hours, Caltrans shall require the contractor to implement a construction noise monitoring program and provide additional noise controls where practical and feasible. As part of the noise monitoring program, construction schedules for noise-generating activities shall be provided, as necessary, to nearby residences and businesses.
- MM-NOI-1.3:** Pile driving activities shall be limited to daytime hours only.
- MM-NOI-1.4:** All internal combustion engine driven equipment shall be equipped with manufacturer recommended intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- MM-NOI-1.5:** Unnecessary idling of internal combustion engines within 100 feet of residences shall be strictly prohibited.
- MM-NOI-1.6:** Noise generating equipment shall be located as far as practical from sensitive receptors when sensitive receptors adjoin or are near the construction project area.
- MM-NOI-1.7:** "Quiet" air compressors and other "quiet" equipment shall be utilized where such technology exists.

**MM-NOI-1.8:** The existing soundwall along Tisch Way that is planned to be removed and replaced, shall be replaced as soon as feasible after the removal of the existing barrier.

For the purpose of minimizing and avoiding short-term construction vibration impacts, the following measures will be implemented by the Project:

**MM-NOI-2.1:** Impact or vibratory pile driving methods will be prohibited when within the exceedance distances from vibration-sensitive structures as listed in Table 2.16-6. In such cases, drilled piles will be utilized if geological conditions permit their use as it produces lower vibration levels.

**MM-NOI-2.2:** A photo and crack monitoring survey will be undertaken for older residential structures and new residential, commercial, or industrial buildings exposed to vibration from impact pile driving located within the exceedance distances given in Table 2.16-6, based on the determination made as to the sensitivity of the structure to damage due to construction vibration. Preliminary review indicates that buildings including 3097 Moorpark Avenue, 2875 Moorpark Avenue, 2845 Moorpark Avenue, 2801 Moorpark Avenue, 2787 Moorpark Avenue, and 544 Dudley Avenue would have the potential to be impacted by heavy construction or impact pile driving.

**MM-NOI-2.3:** A post-construction survey of structures where complaints of damage have occurred will be undertaken. Where damage has occurred as a result of project-related construction activities, appropriate repairs will be made.

**MM-NOI-2.4:** A person responsible for registering and investigating claims of excessive vibration by project-related activities will be designated. The contact information of such person shall be clearly posted on the construction site.

## **2.17 ENERGY**

### **2.17.1 Regulatory Setting**

NEPA (42 USC Part 4332) requires the identification of all potentially significant impacts to the environment, including energy impacts.

CEQA Guidelines section 15126.2(b) and Appendix F, Energy Conservation, require an analysis of a project's energy use to determine if the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources.

### **2.17.2 Affected Environment**

The information in this section is based primarily on a technical Energy Analysis (April, 2022), which is incorporated into this EIR/EA by reference. This report is available for review at the locations listed inside the front cover of this document.

Non-renewable energy resources used in California include petroleum, natural gas, and nuclear power, while renewable energy resources include hydroelectric, biomass, wind, solar, and geothermal heat (i.e., heat given off by the Earth). Approximately 36% of California's electricity comes from renewable sources, and 42% of that renewable energy comes from solar, the State's top renewable energy source. California also relies on energy sources from out of state, receiving approximately 28% of its electricity supply in 2019 from generating facilities outside the State. As mandated by Senate Bill 100, the State is targeting 100% renewable or carbon-free energy usage by 2045.

The transportation sector is the top consumer of energy in California, comprising nearly 40% of energy consumption in 2018. The high consumption of transportation fuels in California is attributed to the state's reliance on airports, military bases, public transportation, and automobiles. In addition, major metropolitan areas, such as the San Francisco Bay Area and Los Angeles metropolitan and surrounding areas, experience extremely long commute travel times and delay because of high traffic congestion and long distances of travel between homes and jobs.

Fossil fuels have been the leading transportation fuels in the country and state. California's fossil fuel consumption for transportation is shown in Table 2.17-1. Gasoline is the most consumed fuel in California at approximately 55.79% of total fossil fuel consumption for the state's transportation sector.

Alternatives to fossil fuels for transportation have helped decrease the dependence on gasoline and other fossil fuels. In addition to traditional petroleum fuels, California currently uses the following "alternative" fuels and energy sources: compressed natural gas, electric, ethanol, hydrogen, liquefied natural gas, and liquefied petroleum gas.

**Table 2.17-1: Fossil Fuel Use in California for the Transportation Sector (2018)**

Fuel Type	California Consumption	
	Trillion BTUs	Percent of Total
Natural Gas	44.8	1.42%
Aviation Gasoline	2.2	0.07%
Distillate Fuel Oil	483.8	15.30%
Hydrocarbon Gas Liquid	0.7	0.02%
Jet Fuel	684.8	21.65%
Lubricants	13.2	0.42%
Motor Gasoline	1,764.4	55.79%
Residual Fuel Oil	168.8	5.34%
<b>Total</b>	<b>3,162.7</b>	<b>100%</b>

BTU = British Thermal Unit. One BTU is the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

Source: Energy Analysis Report for I-280/Winchester Boulevard Interchange Improvements Project, 2022.

In the project area, there is significant congestion along the Winchester Boulevard and Stevens Creek corridors, and insufficient multi-modal access and connectivity. Traffic congestion reduces vehicle fuel economy and increases excess fuel consumption, leading to higher direct energy consumption. The Build Alternative is anticipated to curb these effects by increasing the efficiency of the transportation system in the project area, thus reducing congestion and energy consumption.

### **2.17.3 Environmental Consequences**

The Build Alternative was evaluated to determine if it would result in the inefficient and/or a substantial increased use of energy. Both direct energy usage and indirect energy uses were assessed.

#### **2.17.3.1 Methodology**

Direct energy consumption was quantified by leveraging data from the Project’s traffic and air quality reports. The study area for both reports encompasses portions of I-280, I-880, and SR-17 (mainline segment, on- and off-ramps) and local street facilities (Winchester Boulevard, Tisch Way/Hatton Street, and Moorpark Avenue). The future forecast volumes for the study area were developed using the most current VTA travel demand model that was developed and maintained by the VTA. 2015 was used as the Base Year, as that is the validation Base Year in the VTA model. Forecasts were developed for the opening year 2025 and design year 2045 for the No Build and Build Alternatives.

Daily operational vehicle-miles traveled (VMT) was used to estimate existing direct energy consumption in 2015 (Base Year), as well as future direct energy consumption in 2025 and 2045 for the No Build and Build Alternatives.

Operational gasoline and diesel fuel consumption for the Base Year, as well as the No Build and Build Alternatives in 2025 and 2045, were used to further refine the direct energy consumption estimate. Direct energy consumption in gallons was converted to direct energy consumption in British Thermal Units (BTUs), and BTUs for gasoline and diesel were recombined to obtain total energy consumption for the Base Year, as well as the No Build and Build alternatives in 2025 and 2045. Comparisons were drawn between total energy consumption in 2015, 2025, and 2045.

Direct energy usage for construction was calculated based on the project-specific results of the Sacramento Metropolitan Air Quality Management District’s Road Construction Emission Model (RCEM), as reported in the air quality report. Project total fuel consumption in gallons of diesel and gasoline were converted to direct energy consumption in BTUs, following the same logic described above.

Indirect energy usage is discussed qualitatively, as these types of energy usage are difficult to reliably quantify without speculation.

### 2.17.3.2 *Direct Energy Impacts*

#### Operational Phase

Energy consumption based on VMT is anticipated to increase over time relative to the Base Year, regardless of the chosen alternative, due to increased travel demand in the project area (Table 2.17-2). However, as stated in the following section, better energy efficiency and standards are anticipated to apply over time as older vehicles are replaced by increasingly more fuel-efficient cars and trucks. Additionally, when compared to the No Build Alternative, daily VMT would decrease by 0.84% for the Build Alternative in both 2025 and 2045.

**Table 2.17-2: Daily Operational VMT in the Study Area**

Project Alternative	Daily VMT	Change from Base Year (Daily VMT)	% Change from Base Year	Change from No Build (Daily VMT)	% Change from No Build
2015 Base Year	1,847,307	--	--	--	--
2025 No Build	2,199,499	+ 352,192	+ 19.07%	--	--
2025 Build	2,196,532	+ 349,225	+ 18.90%	- 2,967	- 0.84%
2045 No Build	2,903,884	+ 1,056,577	+ 57.20%	--	--
2045 Build	2,894,982	+ 1,047,675	+ 56.71%	- 8,902	- 0.84%

Direct energy usage based on operational fuel consumption was calculated using CT-EMFAC2017, which is an emissions model developed by Caltrans that calculates project-level emissions and fuel consumption using data from the California Air Resources Board. In order to convert fuel consumption to direct energy consumption in BTUs, it is assumed that a gallon of gasoline contains an energy content of 120,941 BTUs, and a gallon of diesel contains 137,320 BTUs.

Table 2.17-3 shows that operational energy consumption is anticipated to decrease over time relative to the Base Year, regardless of the chosen alternative. Energy consumption is anticipated to decrease by over 11% in both 2025 and 2045, regardless of the chosen alternative. This is associated with better energy efficiency and standards, as stated above. Total energy consumption is similar with the Build and No Build Alternatives, with a 0.14% decrease in energy consumption with the Build Alternative in 2025, and a 0.29% decrease with the Build Alternative in 2045, relative to the No Build Alternative.

**Table 2-17-3: Operational Daily Fuel Consumption for the Project Area**

Project Alternative	Gasoline Consumption (Gallons)	Diesel Consumption (Gallons)	Total Energy Consumption (100,000 BTUs)	Change from Base Year (100,000 BTUs)	% Change from Base Year	Change from No Build (100,000 BTUs)	% Change from No Build
2015 Base Year	80,584.69	8,523.91	109,164.96	--	--	--	--
2025 No Build	70,429.39	8,402.34	96,716.10	-12,448.85	-11.40%	--	--
2025 Build	70,329.97	8,391.81	96,581.40	-12,583.56	-11.53%	-134.70	-0.14%
2045 No Build	69,646.11	9,207.35	96,874.24	-12,290.72	-11.26%	--	--
2045 Build	69,437.30	9,183.36	96,588.75	-12,576.21	-11.52%	-285.49	-0.29%

Note: Assumes an energy content of 120,941 BTUs per gallon of gasoline and 137,320 BTUs per gallon of diesel.

Source: Energy Analysis Report for I-280/Winchester Boulevard Interchange Improvements Project, 2022.

### Construction Phase

Project construction would be a temporary commitment of energy, necessary for any infrastructure improvement project. Energy consumption during construction would be conserved and minimized to the maximum extent feasible. Energy conservation in

construction activities is assumed, as the construction contractor would have a financial incentive and statutory mandate to minimize waste and externalities, respectively. Regulations that stipulate the reduction of energy-related externalities include CARB Title 13, Section 2485 of California Code of Regulations. This regulation limits the idling time of diesel construction equipment to five minutes.<sup>27</sup>

Direct energy usage for construction was calculated using the results of the RCEM scenarios run for the air quality report. Separate models were run for roadway and bridge construction and those results were combined to calculate total energy usage for construction. The analysis assumes 100 percent diesel equipment would be used for construction, with the exception of worker commute vehicles, which are conservatively assumed to be 100 percent gasoline.

As shown in Table 2.17-4, it is anticipated that construction of the Build Alternative would require a one-time energy commitment of approximately 80.5 billion BTUs.

**Table 2.17-4: Direct Energy Usage for the Construction Phase**

<b>Emissions Scenario</b>	<b>Fuel Consumption (Gallons)</b>	<b>Energy Usage (100,000 BTUs)</b>
Build Alternative (Gasoline)	76,703.81	92,766.35
Build Alternative (Diesel)	519,116.68	712,851.02
Total	595,820.49	805,617.37
Source: Energy Analysis Report for I-280/Winchester Boulevard Interchange Improvements Project, 2022.		

### **Total Direct Energy Usage**

The Project would require a one-time energy commitment for construction, which is an unavoidable energy investment for any major infrastructure project. However, based on operational VMT and fuel consumption, it is anticipated that the Project would not substantially increase direct energy consumption in the project area. Therefore, the Project is not anticipated to result in adverse direct energy impacts.

#### **2.17.3.3 Indirect Energy Impacts**

Indirect energy usage is primarily associated with project maintenance, i.e., fuel used by equipment for periodic maintenance of the system. Many other sources contribute indirectly to the energy consumption of a transportation system, but they can be difficult to reliably quantify at the project level. Maintenance and landscaping activities are anticipated to be minimal and are necessary in order to maintain the integrity of the

<sup>27</sup> This restriction is superceded by the mitigation measures for air quality, which limit idling to two minutes.

system. Therefore, the Project is not anticipated to result in wasteful, inefficient, or unnecessary indirect consumption of energy resources.

## **2.17.4      Avoidance, Minimization, and/or Mitigation Measures**

### **2.17.4.1      *Long-Term (Operational)***

No avoidance, minimization, or mitigation measures are required.

### **2.17.4.2      *Short-Term (Construction)***

Reducing emissions during construction would have the dual benefit of increasing energy efficiency and minimizing the effect of energy consumption. For a listing of the emissions reduction measures that would be implemented by the Project during construction, please see Section 2.15.4.2.

# BIOLOGICAL ENVIRONMENT

## 2.18 ANIMAL SPECIES

### 2.18.1 Regulatory Environment

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries), and the California Department of Fish and Wildlife (CDFW) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under the federal or state Endangered Species Act. [Note: Species listed or proposed for listing as threatened or endangered are not discussed in the EIR/EA because, based on the analysis contained in the Natural Environment Study (HT Harvey & Associates (November 2021), all such species were determined to be absent from the project's biological study area.] All other special-status animal species are discussed here, including CDFW fully protected species and species of special concern, and USFWS or NOAA Fisheries candidate species.

Federal laws and regulations relevant to wildlife include the following:

- NEPA
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act

State laws and regulations relevant to wildlife include the following:

- CEQA
- Sections 1600 – 1603 of the California Fish and Game Code
- Sections 4150 and 4152 of the California Fish and Game Code

### 2.18.2 Affected Environment

The information in this section is based primarily on a technical Natural Environment Study (November, 2021), which is incorporated into this EIR/EA by reference. This report is available for review at the locations listed inside the front cover of this document.

The list of special-status animal species occurring in the region was evaluated for their potential to occur within the biological study area (BSA), which consists of the footprint of the Project as well as all areas that may be affected directly or indirectly by the Project. Most of the regional special-status species were rejected for occurrence in the BSA because the project area lacks suitable habitat and/or is outside of the range of the species. Several special-status species that occur in the region may occur in the BSA but

only as uncommon to rare visitors, migrants, or transients, and are not expected to reside or breed on the site.

Special-status wildlife species listed in the California Natural Diversity Data Base as presently or historically occurring within five miles of the BSA are the western pond turtle, burrowing owl, American peregrine falcon, Cooper's hawk, hoary bat, and pallid bat. None of these species are expected to occur within the BSA. No suitable habitat is present for the western pond turtle as no aquatic habitat is present within the BSA.

Several small burrows of California ground squirrels are present within the BSA; however, the burrows are not large enough and therefore are not suitable for nesting, roosting, or refugia sites for burrowing owls. The grasslands in the BSA are small in size, isolated from larger grassland areas in the region, and are frequently disturbed by vegetation maintenance, and therefore do not provide suitable foraging habitat for the species. Although burrowing owls are known to occur at Mineta San José International Airport located approximately 2.5 miles north of the BSA, the species is not expected to frequent or make use of the BSA. Further, no burrowing owls or signs of recent owl use of the BSA (e.g., pellets, whitewash, or feathers) was observed during the site visit. This species is, therefore, determined to be absent from the BSA.

#### **2.18.2.1      *Roosting Bats***

No special-status bat species breed within the vicinity of, immediately adjacent to, or within the BSA. Very small numbers of bats may roost in trees, although no cavities or extensive areas of exfoliating bark suitable for use by large bat roosts were observed in trees in the BSA, and therefore, few bats (if any) are expected to roost in the trees. However, several species of non special-status bats, including the California myotis, big brown bat, and Brazilian free-tailed bat, may forage in the BSA, and could potentially use the soffit vents observed on the underside of the Monroe POC, located between Tisch Way and Moorpark Avenue, as roost sites. These soffit vents in the POC are the only features that could potentially support more than a few roosting bats.

#### **2.18.2.2      *Nesting Birds***

The Migratory Bird Treaty Act and California Fish and Game Code protect migratory birds, including their eggs, nests, and young. The killing or harassment of such birds, including activities that may result in the abandonment of active nests during the nesting season (generally, February 1st through October 31st), is prohibited.

Trees, shrubs, herbaceous vegetation, and bridges in the BSA provide suitable nesting habitat for small numbers of common birds protected under the MBTA and California Fish and Game Code.

As noted in Section 2.18.2.1, the existing Monroe POC has several soffit vents in the concrete, which may provide suitable roosting habitat for bats, as well as nesting habitat

for cavity-nesting birds. Roosting bats and cavity nesting birds may access the interior of the POC through the soffit vents and roost and/or nest within the interior cavity of the overpass. The soffit vents under the bridge deck of the POC show signs of use (i.e., whitewash) by nesting birds, most likely white-throated swifts. These soffit vents may also provide potential nesting sites for other cavity nesting species such as northern rough-winged swallows. Although no swallows were observed during the site visit, cliff swallows and black phoebes may also nest on the POC and the many other overpasses and bridges throughout the BSA. However, no old or existing nests of these species were observed during the biological survey.

### **2.18.3 Environmental Consequences**

#### **2.18.3.1 *Impacts to Special-Status Animal Species***

Since no special-status animal species are present within the project's impact area, construction of the Project would not impact any special-status animal species.

#### **2.18.3.2 *Impacts to Non Special-Status Roosting Bats***

Project activities may result in the loss of suitable habitat for non-special-status bats due to the removal of trees and the existing POC, which may be potentially used as breeding or roosting sites. In addition, when trees or other structures that contain roosting colonies or individual bats are removed or modified, individual bats could be physically injured or killed; subjected to physiological stress as a result of being disturbed during torpor; or be subjected to increased predation due to exposure during daylight hours. Further, project-related disturbance in close proximity to a maternity roost could potentially cause females to abandon their young.

The loss of a small colony of non-special-status bats would not result in a substantial impact on regional populations because of the regional abundance of these species. As a result, impacts to trees within the BSA, which do not provide high-quality habitat for roosting bats and could not support more than very low numbers of bats (if any), would not substantially impact bats.

In contrast, the soffit vents in the Monroe POC could potentially support larger numbers of bats, and injury or mortality of individuals in multiple colonies, or in a particularly large colony (i.e., a roost of 25 or more individuals), of non-special-status bats may substantially impact regional populations. However, due to the abundance of potential roost sites for non-special-status bats in the project vicinity, the physical loss of the roost site itself would not be considered a substantial impact. Nonetheless, the implementation of the measures listed in Section 2.18-4 will avoid and/or minimize any potential impacts of project activities on non-special-status roosting bats.

### **2.18.3.3      *Impacts to Nesting Birds***

The amount of nesting habitat suitable for common nesting birds that would be lost as a result of project activities represents a very small fraction of the habitat available for these species regionally, and all the bird species that may nest in and immediately adjacent to the BSA are regionally abundant, urban-adapted species. Thus, the loss of nesting habitat expected to occur as a result of the Project would not have a substantial adverse effect on these species' regional habitat.

Construction disturbance during the breeding season (i.e., February 1 through August 31) could potentially result in the incidental loss of eggs or nestlings, either directly through the destruction or disturbance of active nests or indirectly by causing the abandonment of nests. Due to the regional abundance of the common species of birds that potentially nest within the BSA, the Project's impacts on nesting individuals would not substantially affect regional populations of these species. This conclusion notwithstanding, the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code protect nesting birds from unlawful activities such as hunting, taking, capture, killing, possession, sale, purchase, shipment, transportation, carriage, or export of any bird, or any part, nest or egg of any such bird. The implementation of the measures listed in Section 2.18-4 will avoid the potential impacts of project activities on nesting birds.

### **2.18.3.4      *Impacts to Trees***

Based on tree surveys undertaken in 2020 and 2021, there are 381 trees within and adjacent to the footprint of the Project.<sup>28</sup> The trees consist of ornamental trees that are commonly planted along highways and in parks in this region. None of the trees identified occur within regulated habitats and do not in and of themselves constitute a sensitive habitat type.

It is estimated that up to a maximum of 159 of the 381 trees would be impacted by the Project.<sup>29</sup> Many of the trees meet the size requirements to be considered protected under San José's Municipal Code. The intent of the City's tree preservation ordinance is to maintain the benefits to the community provided by trees, including keeping public rights-of-way cooler in the summer, providing aesthetic value, and removing air pollutants. Trees also provide habitat or food sources for local wildlife including nesting birds. Damage to and/or removal of trees reduces these benefits to the community and wildlife.

While Caltrans is exempt from the City's tree ordinance, the Project will replace trees removed by the Project at ratios that are consistent with the spirit and intent of the City's tree ordinance, as described in Section 2.18.4.

---

<sup>28</sup> The tree surveys are attached to the Project's Natural Environment Study (2021), which is incorporated into this EIR/EA by reference. This report is available for review at the locations listed inside the front cover of this document.

<sup>29</sup> This is an estimate based on preliminary design and will be refined during final design.

## 2.18.4 Avoidance, Minimization, and/or Mitigation Measures

The Project includes the following measures that will avoid and/or minimize any potential impacts on non-special-status roosting bats.

**MM-BIO-1.1:** Initial Survey. A survey for roosting bats in the soffit vents of the Monroe POC will be undertaken by a qualified bat biologist prior to the breeding season (i.e., April 1) in the year in which disturbance within 100 feet of the POC is scheduled to occur. If a visual survey (e.g., a dusk emergence survey) is not adequate to determine presence or absence of bats in soffit vents of the POC, acoustic equipment will be used to determine occupancy.

**MM-BIO-1.2:** Eviction/Exclusion. If any bats are found roosting in the Monroe POC, the bats will be safely evicted under the direction of a qualified bat biologist. Eviction of bats will occur at night to decrease the likelihood of predation (compared to eviction during the day). Eviction will occur between September 1 and March 31, outside the maternity season, but will not occur during long periods of inclement or cold weather (as determined by the bat biologist) when prey are not available or bats are in torpor. Eviction activities will be performed under the supervision of a qualified bat biologist. Following eviction (or following the initial survey, if no bats are detected), bat exclusion devices will be installed to prevent bats from taking up occupancy of the POC prior to its demolition.

**MM-BIO-1.3:** Pre-construction/Pre-disturbance Survey. Because the initial survey as described in MM-BIO-1.1 above will be conducted prior to the breeding season, several months could pass between the initial survey and the initiation of project activities that could potentially result in disturbance of roosting bats. Therefore, a pre-construction survey for roosting bats, following the methods described above, will be undertaken at the Monroe POC within 15 days prior to the commencement of demolition of the POC or demolition/construction within 100 feet of the POC to ensure that exclusion measures have been successful and that bats have not occupied a roost in that structure. If no active roosts are found, then no further action is warranted prior to demolition. In the unlikely event that bats have occupied a roost in the POC (e.g., if the exclusion measures were not successful), MM-BIO-1.4 will be implemented.

**MM-BIO-1.4:** Buffer. If bats have established a maternity roost in the Monroe POC despite the installation of exclusion measures, the bat biologist will determine the extent of a construction-free buffer around the active roost that will be maintained during the breeding season (i.e., from April 1 until the young are flying, typically after August 31). After the breeding season, the bats can be evicted as described in MM-BIO-1.2 above prior to

demolition of the POC or demolition/construction within the buffer established by the bat biologist.

The Project includes the following measures that will avoid any potential impacts on nesting birds.

**MM-BIO-2.1:** Avoidance of Nesting Bird Season. To the extent feasible, project activities should be scheduled outside the avian nesting season to avoid impacts on nesting birds (including raptors) protected under the MBTA and California Fish and Game Code. The nesting season for most birds in Santa Clara County typically extends from February 1 through August 31, although some birds may nest as early as January 1.

**MM-BIO-2.2:** Preconstruction Survey. If it is not possible to schedule project activities between September 1 and December 31, then preconstruction surveys will be undertaken by a qualified biologist to identify any nests within the project area so that protection measures can be implemented to avoid disturbance to these nests. These surveys will be undertaken no more than 48 hours prior to the initiation of project activities. During these surveys, a qualified biologist will inspect all potential nesting habitats (e.g., trees, shrubs, and structures) within 300 feet of impact areas for raptor nests and within 100 feet of impact areas for nests of non-raptors. 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, will 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 project implementation.

**MM-BIO-2.3:** Nest Deterrence. If project activities will not be initiated until after the start of the nesting season, potential nesting substrate (e.g., bushes, trees, and other vegetation, and structures) scheduled to be removed by the Project may be removed prior to the start of the nesting season (e.g., prior to January 1) to reduce the potential for initiation of nests within the work area. Nest deterrence may also include the use of netting or screening to block birds' access to nest sites and blocking soffit vents so birds such as white-throated swifts and northern rough-winged swallows cannot enter them to nest. Deterrence may be particularly important on bridges that will be physically altered by project activities, to avoid constraints on the project's schedule if nesting birds are present. If netting is used, it must be inspected daily and well maintained to prevent birds from being trapped in or behind the netting. At the Monroe POC, any nesting bird deterrence measures will be coordinated with the bat measures described above to

ensure that both birds and bats can be effectively excluded without injury or mortality of individuals of either group.

The Project includes the following measures that will avoid or mitigate any potential impacts to trees.

**MM-BIO-3.1:** The project will avoid and minimize impacts by clearly indicating on all construction plan sets the trees to be removed. Trees to be retained will be protected by tree exclusion fencing placed at the dripline of the preserved trees.

**MM-BIO-3.2:** Except for within Santana Park, trees impacted by the project will be replaced at ratios that are commensurate with the size of the tree to be removed. Native trees with a diameter at breast height (DBH) of less than 12 inches will be replaced at a 2:1 ratio. Native trees with a DBH of 12 inches or more will be replaced at a 3:1 ratio. If urban trees (nonnatives and ornamentals) are replaced with native trees, a reduced mitigation ratio of 1:1 for all trees smaller than 12 inches DBH, and 2:1 for all trees with a DBH of 12 inches or more, will be implemented. Replacement 24-inch box trees will be considered where feasible. The replacement trees will be irrigated and maintained for a period of not less than three years. If trees cannot be replaced at the stated ratios within the project footprint, in-lieu fees will be paid to an appropriate fund so that trees can be planted elsewhere within the City of San José limits.

For tree removal impacts within Santana Park, the minimum tree replacement ratios and sizes listed in Table 2.4-1 will be utilized.

## **2.19 INVASIVE SPECIES**

### **2.19.1 Regulatory Setting**

On February 3, 1999, President William J. Clinton signed Executive Order (EO) 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as “any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health.” FHWA guidance issued August 10, 1999 directs the use of the State’s invasive species list, maintained by the California Invasive Species Council to define the invasive species that must be considered as part of the NEPA analysis for a proposed project.

### **2.19.2 Affected Environment**

The information in this section is based primarily on a technical Natural Environment Study (November 2021), which is incorporated into this EIR/EA by reference. This report is available for review at the locations listed inside the front cover of this document.

English ivy, an invasive non-native species with a “high” impact rating, is widely planted in the BSA, particularly along the soundwalls along I-280 and I-880. Several other invasive weeds with limited and moderate ratings were also identified in the BSA and are listed in Table 2.19-1.

All of these species are very difficult to eradicate. The removal of all parts of the plant before viable seed can develop, including roots and rhizomes, can help control infestations, although the removal of all plant material from the site is necessary to reduce the incidence of regrowth from rhizome, stolon, or stem fragments. In addition, follow-up removal of re-sprouts is essential to prevent re-infestation. The majority of non-native, invasive plant species produce seeds that germinate readily following disturbance.

### **2.19.3 Environmental Consequences**

Non-invasive species will be utilized for landscaping and the Project is not anticipated to introduce any new infestations of invasive species. However, care must be taken to avoid increasing the existing infestations by dispersing seed or viable plant material through construction equipment use when grading, particularly when removing embankment material. These measures are described in the following section.

**Table 2.19-1: Invasive Plant Species Present in the Biological Study Area**

<b>Common Name</b>	<b>Scientific Name</b>	<b>California Invasive Plant Council Rating</b>
Wild oats	<i>Avena sp.</i>	Moderate
Black mustard	<i>Brassica nigra</i>	Moderate
Common mustard	<i>Brassica rapa</i>	Limited
Ripgut brome	<i>Bromus diandrus</i>	Moderate
Italian thistle	<i>Carduus pycnocephalus</i>	Moderate
Bermuda grass	<i>Cynodon dactylon</i>	Moderate
Italian rye grass	<i>Festuca perennis</i>	Moderate
Fennel	<i>Foeniculum vulgare</i>	Moderate
Wild geranium	<i>Geranium dissectum</i>	Limited
English ivy	<i>Hedera helix</i>	High
Foxtail barley	<i>Hordeum murinum</i>	Moderate
Canary Island date palm	<i>Phoenix canariensis</i>	Limited
Narrow-leaved plantain	<i>Plantago lanceolata</i>	Limited
Firethorn	<i>Pyracantha angustifolia</i>	Limited
Callery pear	<i>Pyrus calleryana</i>	Watch
Wild radish	<i>Raphanus sativus</i>	Limited
Fiddleleaf dock	<i>Rumex pulcher</i>	Limited
Peruvian pepper tree	<i>Schinus molle</i>	Limited
Field hedge parsley	<i>Torilis arvensis</i>	Moderate

**High** – These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.

**Moderate** – These species have substantial and apparent-but generally not severe-ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.

**Limited** – These species are invasive but their ecological impacts are minor on a Statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

**2.19.4 Avoidance, Minimization, and/or Mitigation Measures**

**MM-INV-1.1:** Prior to vegetation clearing and grubbing, vehicles (including wheels, undercarriages, and bumpers) and all other equipment, will be washed before and after entering the project’s construction site. Vehicles will be cleaned at legally operating car washes before entering the construction site and at existing construction yards after they have encountered vegetation. All washing will follow appropriate stormwater BMPs. Only clean water in washing (no soap or detergent) will be used and appropriate runoff containment BMPs will be implemented. Wash water will be discharged in a way that it does not enter a storm drain (i.e., let it soak into a pervious area on site). Vegetation will be disposed of off-site. After clearing and grubbing of the vegetation has been completed, construction vehicles will use designated entrance/exits and no washing will be required.

## **2.20 CUMULATIVE IMPACTS**

### **2.20.1 Regulatory Setting**

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of the proposed project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

CEQA Guidelines Section 15130 describes when a cumulative impact analysis is necessary and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts under CEQA can be found in Section 15355 of the CEQA Guidelines. A definition of cumulative impacts under NEPA can be found in 40 CFR Section 1508.7.

### **2.20.2 Environmental Consequences**

In a cumulative impacts analysis, the identification of “past, present, and reasonably foreseeable future actions” can utilize either the “list approach” or the “adopted plan” approach. The list approach identifies specific projects in the vicinity, typically provided by a local planning department. The adopted plan approach relies on a general plan or transportation plan or other planning document, which by definition accounts for cumulative growth in a defined area.

For this analysis, the adopted plan approach is utilized as it is compatible with the nature of the proposed infrastructure project, which is to accommodate projected transportation demand over the long term. As examples, the traffic model that was utilized to project future build and no build conditions is based on the planned growth of the area, as contained in the adopted general plans of San José and Santa Clara and the surrounding cities. The traffic projections from cumulative growth were also used in the quantification of noise, air quality, and climate change impacts.

The discussion, below, addresses resource areas where the project will result in an impact and, therefore, there is a potential for a cumulative impact. Resources areas not affected by the project are not discussed because, by definition, no cumulative impact could occur. Examples of the latter include biology, cultural resources, geology, floodplains, energy, and farmlands.

#### **2.20.2.1 Cumulative Traffic Impacts**

For traffic, the Resource Study Area (RSA) was defined as the area within the project limits, as well as the surrounding area where the Project would result in measurable changes in traffic patterns. Thus, the RSA includes the freeway segments, arterial streets, and intersections identified in the tables shown in Section 2.8.

Cumulative development has resulted in a significant increase in traffic on SR-17, I-280, and I-880 and in the project area as a whole, and future increases are projected to occur with or without the Project. The improvements that would be constructed under the Build Alternative would not contribute toward this increase in traffic volumes. Instead, the new and modified facilities that would be constructed by the Project would improve traffic operations for these vehicle trips, as well as reduce out-of-direction travel, as described in Section 2.8. Therefore, the Project would not result in a cumulative traffic impact.

#### **2.20.2.2 Cumulative Noise Impacts**

For noise, the RSA was defined as the land uses adjacent to the freeway segments within the project limits. These land uses are those where project-related changes, coupled with increased traffic from ongoing growth, could result in cumulatively substantial increases in noise.

Cumulative development has resulted in a substantial increase in ambient noise levels in the project area and development is planned to continue with or without the Project. Ground traffic is the single largest source of noise, especially in the vicinity of the freeways. Noise typically associated with residential and urban environments is present, which also contributes to the cumulative ambient noise levels. The Project would incrementally contribute to overall noise levels, as described in Section 2.16. The analysis in Section 2.16 indicates, however, that future increases in noise - taking into account both the Project and planned growth - will not be substantial. Therefore, the cumulative noise impact would not be substantial.

#### **2.20.2.3 Cumulative Air Quality Impacts**

For air quality, the RSA was defined as the land uses adjacent to the freeway segments within the project limits. These land uses are those where project-related changes, coupled with increased traffic from ongoing growth, could result in cumulatively substantial increases in emissions of air pollutants.

Cumulative development has resulted in a substantial degradation in ambient air quality in the greater San Francisco Bay Area. However, due to emissions control technology, overall air quality has been improving in recent years. Although most present and future development will likely increase emissions, improvements in technology are largely expected to offset such increases. The Project would not contribute to the region's emissions because it will not generate additional vehicle trips or lead to unplanned growth. Rather, the Project is expected to reduce area-wide emissions by decreasing congestion and vehicle delay, as described in Section 2.15, *Air Quality*. Therefore, the cumulative air quality impact would not be substantial.

#### **2.20.2.4 Cumulative Visual Impacts**

The RSA for visual impacts was defined as the freeways within the project limits, as well as those adjacent areas where new/modified freeway overcrossings and ramps would be visible from various public vantage points. As discussed in Section 2.9, *Visual/Aesthetics*, the most visible feature of the Project would be an elevated direct connector ramp from northbound SR-17 to northbound I-280. This new connector would be visible from many locations in the adjacent single-family neighborhood located in the northeast quadrant of the SR-17/I-280/I-880 interchange, resulting in a substantial visual impact. Although implementation of MM-VIS-1.1 would partially reduce this impact, it would remain substantially unmitigated.

Several multi-story mixed-use residential and office buildings have been constructed in the project vicinity in the last few years. Other projects in the RSA that are planned or under construction that would contribute to visual changes consist of the following:

- The Winchester Ranch Project, which was approved in January 2020 and is under construction, will convert a mobilehome park on the west side of Winchester Boulevard between I-280 and the Winchester Mystery House into a multi-family residential development with 691 units.
- The Santana West Development Project is currently constructing two 360,000 square-foot office buildings on the west side of Winchester Boulevard across the street from Santana Row. The project includes the preservation and re-use of the historic Century 21 Theater on its property.
- The Santana Row Project will be expanded to include a 112-unit, 5-story, residential building at the northeast corner of the intersection of Tisch Way with Dudley Avenue.
- The 1073 South Winchester Boulevard Mixed-Use Project proposes to construct a 6-story building with 61 residential units and 18,000 square feet of commercial office space a quarter mile south of the project corridor.

In addition, the I-880/I-280/SR-17 and I-880/Stevens Creek Boulevard Interchange Improvements Project was completed approximately three years ago. That project modified the I-880/I-280/SR-17 interchange by constructing a direct connector ramp from northbound I-280 to northbound I-880. At its highest point, the new ramp is approximately

33 feet above ground level and is highly visible from the homes along Parkmoor Avenue. The EIR/EA for that project concluded that the visual/aesthetic impact at that location would be significant.

The net effect of the projects listed above plus the proposed Project incrementally converts project surroundings from more suburban character to more urban character. This is part of a long-term trend in which project surroundings, as part of Silicon Valley, have become increasingly urbanized over the last 50 years. From a visual perspective, this conversion is not necessarily adverse, and in many cases new development is beneficial.

With one exception, compliance with the avoidance, minimization, and mitigation measures listed in Section 2.9 would cause the contribution to cumulative visual impacts of this Project to be less than considerable. The exception is the impact of the connector flyover ramp from northbound SR-17 to northbound I-280 on the view from the neighborhood along Parkmoor Avenue. This aspect of the Project, taken together with the recently constructed flyover ramp from northbound I-280 to northbound I-880 and new soundwalls, creates a substantial cumulative impact to views from Parkmoor Avenue, which is illustrated on Figure 2.9-7. While the implementation of MM-VIS-1.1 would attenuate the cumulative impact by blocking some views of freeway infrastructure from the street over the long-term, it would not reduce this cumulative visual impact to an insubstantial level.

# **SECTION 3.0 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) EVALUATION**

---

## **3.1 DETERMINING SIGNIFICANCE UNDER CEQA**

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

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

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

### 3.2 CEQA ENVIRONMENTAL CHECKLIST

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects will indicate that there are no impacts to a particular resource. A NO IMPACT answer in the last column reflects this determination. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices (BMPs) and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below; see Sections 1 and 2 for a detailed discussion of these features. The annotations to this checklist are summaries of information contained in Section 2 in order to provide the reader with the rationale for significance determinations; for a more detailed discussion of the nature and extent of impacts, please see Section 2. This checklist incorporates by reference the information contained in Sections 1 and 2.

#### 3.2.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the Project	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? <sup>30</sup> If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<sup>30</sup> Public views are those that are experienced from publicly accessible vantage points.

For a detailed discussion of this topic, please see Section 2.9, *Visual/Aesthetics*, of this EIR/EA.

- a) Would the Project have a substantial adverse effect on a scenic vista?

**Less-than-Significant Impact.** There are no designated scenic vistas in the project vicinity. The closest scenic vista points that offer views that include the project corridor are on Montebello foothills, at least 7 miles to the west. At this distance, project features would not be distinguishable.

- b) Would the Project 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 along, nor visible from, an officially designated state scenic highway. The Project, however, is located on a section of I-280 that is classified as being eligible for state scenic highway status. This section of I-280 begins at the I-280/I-880/SR-17 interchange and extends along I-280 northbound. Motorists are likely to have low sensitivity to project elements that occur along the eligible state scenic highway, including the widened Winchester Boulevard overcrossing, the moved and widened Monroe Street POC, and the new interchange connector ramp. From a visual perspective, all these changes represent incremental expansions of existing infrastructure in and near an existing freeway interchange.

- c) Would the Project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the Project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?

**Significant and Unavoidable Impact.** Goal CD-4 in the *Envision San José 2040 General Plan* states that aesthetically pleasing streetscapes that preserve and build on the unique characteristics of the local area and contributes to a distinctive neighborhood or community identity should be provided. Goal VN-1.11 of the *Envision San José 2040 General Plan* states that residential neighborhoods should be protected from the encroachment of incompatible activities or land uses which may have a negative impact on the residential living environment.

While the Project includes aesthetic upgrades to the streetscape at the Winchester Boulevard overcrossing of I-280 that are consistent with Goal CD-4, the proposed flyover ramp from northbound SR-17 to northbound I-280 would substantially detract from the character of the neighborhood along Parkmoor Avenue. The connector ramp would be a highly visible structure adjacent to the residential neighborhood around Parkmoor Avenue that is visually incompatible with character of the neighborhood and creates a high level of visual impact. To diminish the loss of visual quality caused by the construction of the

new SR-17/I-280 flyover connector ramp, the existing landscaping that was planted along the westside of Parkmoor Avenue as part of the I-880/Stevens Creek Interchange Project will be enhanced. While the landscaping would reduce this impact, it cannot be mitigated to a less-than-significant level.

- d) Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

**Less-than-Significant Impact.** The Project would not create a new source of substantial light or glare. All permanent lighting installed would be consistent with applicable regulations and with street lighting existing in the project vicinity. Tinting and/or texturing would be added to certain project features such as the Monroe POC, Winchester Boulevard bridge, retaining walls of the tunnel off-ramp, and on soundwalls to eliminate the potential for glare.

### 3.2.2 Agriculture and Forest Resources

Would the Project:	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4) Result in a loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the Project:	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) Would the Project 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?

And

- b) Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?

And

- c) Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

And

- d) Would the Project result in a loss of forest land or conversion of forest land to non-forest use?

And

- e) Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

**No Impact.** The project area is urbanized and developed. There are no farmlands or timberlands located within or adjacent to the proposed improvements. No lands mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance are located in the project vicinity. No parcels subject to a Williamson Act contract are present.

### 3.2.3 Air Quality

Would the Project:	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

For a detailed discussion of this topic, please see Section 2.15, *Air Quality*, of this EIR/EA.

- a) Would the Project conflict with or obstruct implementation of the applicable air quality plan?

**No Impact.** As discussed in Section 2.15.3, the Project conforms to the Clean Air Act. In addition, as shown in Tables 2.15-4 and 2.15-5, operational emissions of air pollutants would be lower under the Build Alternative than under the No Build Alternative.

- b) Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

**No Impact.** As shown in Tables 2.15-4 and 2.15-5, operational emissions of air pollutants would be lower under the Build Alternative than under the No Build Alternative. Therefore, since the Project would have no adverse effect on emissions, it would not, by definition, contribute to a cumulative air quality impact.

- c) Would the Project expose sensitive receptors to substantial pollutant concentrations?

**Less-than-Significant Impact with Mitigation.** Emissions would be generated during the construction phase of the Project, which could affect nearby sensitive receptors. Implementation of the measures listed in Section 2.15.4 would avoid or mitigate these short-term impacts.

- d) Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

**No Impact.** The Project would be limited to improvements to existing transportation facilities. The new improvements would be the same use as existing conditions and would not include any new sources of emissions, including any that would create objectionable odors.

### 3.2.4 Biological Resources

Would the Project:	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 (CDFW) or United States Fish and Wildlife Service (USFWS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 CDFW or USFWS?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the Project:	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The answers to the following questions regarding biological resources are based on the Project's Natural Environment Study (2021), which is incorporated into this EIR/EA by reference. The report is available for review at the locations listed inside the front cover of this document.

- a) Would the Project 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 CDFW or USFWS?

**Less-than-Significant Impact with Mitigation.** The project area is urbanized and developed. No listed or candidate threatened or endangered species are present. However, nesting bats and birds, which are protected under federal and state law, could be adversely affected during the Project's construction phase. Implementation of the measures listed in Section 2.18.4 will avoid and minimize such impacts.

- b) Would the Project 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 CDFW or USFWS?

And

- c) Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

And

- d) Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

**No Impact.** The project area is urbanized and developed. There are no wetlands, riparian corridors, or other sensitive natural communities within or adjacent to the project footprint. The project area is not a wildlife corridor.

- e) Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

**No Impact.** Although Caltrans is not subject to the City of San José’s tree ordinance, the Project would comply with its tree replacement provisions, as listed in Section 2.18.4. Therefore, the Project would not conflict with the ordinance.

- f) Would the Project 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.** Habitats capable of supporting rare plant or animal species covered by the Santa Clara Valley Habitat Plan (VHP) are not present, nor does the Project occur within a mapped rare plant or animal survey area. No land cover fees would be required for the Project as the majority of the land cover is mapped as urban-suburban, and additionally the project is entirely sited within the “urban areas (no land cover fee)” land cover fee zone. There are no Category 1 or 2 streams present. Prior to Project construction, a VHP reporting form would be submitted to the Santa Clara Valley Habitat Agency documenting how the project will comply with applicable VHP conditions. Therefore, the Project would not conflict with the adopted VHP.

**3.2.5 Cultural Resources**

Would the Project:	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

For a detailed discussion of this topic, please see Section 2.10, *Cultural Resources*, of this EIR/EA.

- a) Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?

And

- b) Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

And

- c) Would the Project disturb any human remains, including those interred outside of dedicated cemeteries?

**No Impact.** Based upon the research, technical studies, and field testing undertaken for the Project, there is no indication of prehistoric or historic archaeological resources within the Project's APE.

One historic architectural resource, the building at 3031 Tisch Way, is located within the Project's APE. It was determined, however, that the Project would not adversely affect this resource since the only nearby Project-related work would consist of restriping and repaving on existing Tisch Way. On January, 12, 2022, the SHPO concurred that a Finding of No Historic Properties Affected is appropriate for the Project.

The Project would implement standard protocols in the event that unanticipated cultural materials or remains are encountered during Project construction, including:

If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.

If human remains are discovered, California Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who, pursuant to PRC Section 5097.98, will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact Caltrans District 4 Office of Cultural Resources Studies so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

Therefore, construction of the proposed Project is not expected to result in effects on cultural resources.

### 3.2.6 Energy

Would the Project:	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

For a detailed discussion of this topic, please see Section 2.17, *Energy*, of this EIR/EA.

- a) Would the Project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

And

- b) Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

**No Impact.** As shown in Table 2.17-3, when compared to the No Build Alternative, the direct operational energy usage by the Project would be reduced. Further, the Project would use energy-efficient equipment and implement energy-conserving practices during the construction phase, as listed in Section 2.15.4.2. For these reasons, the Project would not result in wasteful, inefficient, or unnecessary consumption of energy. Based on this conclusion, the Project would not conflict with a plan for renewable energy or energy efficiency.

### 3.2.7 Geology and Soils

Would the Project:	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				



**No Impact.** The Project is not located on a known earthquake fault. The closest active faults are the Monte Vista, Hayward, and San Andreas faults, approximately two miles to the east, approximately eight miles to the east, and nine miles to the west, respectively.

- b) Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

**Less-than-Significant Impact.** The Project is within the seismically active San Francisco Bay Area and severe ground shaking is probable during the anticipated life of the Project. Users of the freeways and interchanges would be exposed to hazards associated with such severe ground shaking during a major earthquake on one of the region's active faults. This hazard is not unique to the Project, because it applies to all locations throughout the greater Bay Area. The Project will not increase the existing exposure to hazards associated with earthquakes; the hazards in the area will be the same with or without the Project. The Project, including the new ramp, tunnel, and bridge structures, will be designed and constructed in accordance with Caltrans' Design guidelines for Seismic Zone 4 to avoid or minimize potential damage from seismic shaking on the site. Potential seismic effects will be minimized by the use of standard engineering techniques mandated by the Uniform Building Code and Caltrans' Design Standards.

- c) Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

**Less-than-Significant Impact.** The Project is not located in an area where historical occurrence of liquefaction, or local geological, geotechnical, and groundwater conditions indicate a potential for permanent ground displacements.

- d) Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

**No Impact.** The topography of the area where the Project would be constructed is flat and there is no potential for landslides.

- e) Would the Project result in substantial soil erosion or the loss of topsoil?

**No Impact.** Soil erosion would be avoided with the incorporation of standard Caltrans BMPs, including those listed in Section 2.11.4. Such BMPs would prevent erosion and the loss of topsoil by ensuring appropriate drainage on-site during construction and permanently stabilizing slopes with vegetation, netting, blankets, and/or paving where necessary. No impact would occur.

- f) Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

**No Impact.** There are no on-site conditions that would become unstable as a result of constructing the Project.

- g) Would the Project be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?

**Less-than-Significant Impact.** The majority of the project site is mapped as having a moderate expansive soil potential. A transition to a high expansive soil potential occurs near the western end of the project site. Per the geologic report prepared for the Project, expansive soil will be treated with lime or other additives to reduce expansion potential or expansive soils will be replaced with a non-expansive material to a depth where the seasonal moisture content variation becomes relatively insignificant.

- h) Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

**No Impact.** The Project would not involve the generation or disposal of wastewater.

- i) Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

**No Impact.** There are no unique geologic features located on or adjacent to the site where the Project would be constructed. Per the analysis contained in Section 2.13, *Paleontology*, there are no known paleontological resources located at the project site. As described in Section 2.13.4, measures to avoid destruction of such resources, should any be encountered during construction, will be implemented by the Project.

### 3.2.8 Greenhouse Gas Emissions

Would the Project:	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

For a detailed discussion of this topic, please see Section 3.3, *Climate Change*, of this EIR/EA.

- a) Would the Project generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?

**Less-than-Significant Impact.** GHGs would be temporarily emitted during the Project's construction phase. Such emissions would, however, be offset by projected decreases in GHG emissions during the Project's operational phase. This conclusion is based on the data in Table 3.3.2, which projects lower GHG emissions under the Build Alternative than under the No Build Alternative.

- b) Would the Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

**No Impact.** The Project is included in the current RTP and TIP, both of which contain regional strategies for reducing GHG emissions from transportation sources. One of the main strategies to reduce GHG emissions is to make transportation systems more efficient by reducing congestion and by improving facilities for alternative modes (e.g., transit, bicycling, walking). The Project would reduce congestion and lower VMT in the project area by providing additional vehicular access and by constructing new bicycle and pedestrian facilities.

### 3.2.9 Hazards and Hazardous Materials

Would the Project:	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the Project:	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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, result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

For a detailed discussion of this topic, please see Section 2.14, *Hazardous Waste-Materials*, of this EIR/EA.

- a) Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

And

- b) Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

**No Impact.** The Project would construct improvements to existing highways. As such, it would not involve the generation, use, or disposal of hazardous materials. While the highways are utilized by vehicles transporting such materials, the degree or manner in which that occurs would not change if the Project is constructed. Transporters of hazardous substances will be required to comply with safety regulations as they do under existing conditions.

During the operational phase, traffic accidents on freeways and local streets could result in the accidental release of substances such as fuel, lubricants, or hazardous freight. This

potential is the same under existing, No Build, and Build conditions. In order to account for these potential hazards, the Project would be designed and engineered to standard Caltrans engineering requirements for roadway slopes, curvature, speeds, stormwater treatment, lane orientation, and other standard roadway design criteria. Compliance with these standards would minimize the potential for hazardous material or waste release under accident conditions. The Project would be designed and operated consistent with all applicable standards and regulations for safety and would not present a unique or above-average risk for accidents involving hazardous materials.

- c) Would the Project 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 a number of existing schools and daycare centers located on streets within one-quarter mile of the proposed improvements, including on Tisch Way, Winchester Boulevard, and Moorpark Avenue. This represents existing/baseline conditions, upon which the Project would have no impact, because transportation facilities would not be moved closer to those uses. The risk to the schools from an accidental release of hazardous materials would be the same with or without the Project.

- d) Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

**Less-than-Significant Impact.** As described in Section 2.14, there are two gasoline service stations located on the corners of the Winchester Boulevard/Moorpark Avenue intersection where former leaking underground storage tanks resulted in soil and groundwater contamination. The sites are on a list compiled pursuant to Government Code Section 65962.5. Although clean-up at the sites has been completed, they are upgradient of the Project and there is a potential that contamination has migrated into areas where construction would occur. In order to avoid any adverse effects associated exposure of construction workers to hazardous substances, MM-HAZMAT-1.4 will be implemented to test, treat, and dispose of contamination in accordance with regulatory criteria.

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the project area?

**No Impact.** The Comprehensive Land Use Plan for the Norman Y. Mineta San José International Airport (SJC) sets forth noise and safety policies for land uses in the airport environs. Although the project site is approximately 2.5 miles from SJC, it is not located

within the designated Airport Influence Area (AIA), defined as the areas surrounding the Airport that are affected by noise, height, and safety considerations.<sup>31</sup>

The maximum height of the new flyover ramp from northbound SR-17 to northbound I-280 would be approximately 70 feet above the existing level, which equates to approximately 220 above mean sea level. As such, a *Notice of Proposed Construction or Alteration* (Form 7460-1) would be filed with the Federal Aviation Administration (FAA), as required by Part 77 of the Federal Aviation Regulations.<sup>32</sup> This is a standard requirement by which the FAA is notified of structures exceeding specified heights.

- f) Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

**No Impact.** The Project would not sever or adversely impact the existing emergency response routes along Tisch Way and Monroe Street from nearby San José Fire Station #10. During the construction phase of the Project, any temporary lane or road closures would be coordinated in advance with the fire department, as well as with other emergency responders (e.g., police, ambulance, etc.). Upon completion of the Project, the improvements from I-280 to Winchester Boulevard and other streets would result in improved access to the surrounding community for emergency vehicles and other public service providers from outside the project area.

- g) Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

**No Impact.** According to mapping prepared by the Santa Clara County FireSafe Council, the project site is not located within or near a Moderate, High, or Very High Fire Hazard Severity Zone. The closest fire hazard zone to the project area is the East Foothills of the Diablo Range, more than eight miles to the east.<sup>33</sup> Therefore, the Project would not increase risks associated with wildland fires.

---

<sup>31</sup> Source: Santa Clara County Airport Land Use Commission, Figure 8 (Airport Influence Area) from Comprehensive Land Use Plan for Norman Y. Mineta San José International Airport, 2012.

<sup>32</sup> Source: City of San José Airport Department, Notice Requirement Criteria for Filing FAA Form 7460-1.

<sup>33</sup> Source: <https://sccfiresafe.org/resources/do-you-reside-in-santa-clara-countys-wildland-urban-interface-wui/>, (accessed 2/15/2022).

**3.2.10 Hydrology and Water Quality**

Would the Project:	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: <ul style="list-style-type: none"> <li>- result in substantial erosion or siltation on- or off-site;</li> <li>- substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;</li> <li>- create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or</li> <li>- impede or redirect flood flows?</li> </ul>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
4) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

For a detailed discussion of this topic, please see Section 2.11, *Water Quality and Stormwater Runoff*, of this EIR/EA.

- a) Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

**Less-than-Significant Impact.** The design of the Project includes Best Management Practices (BMPs) to reduce the pollutant component of stormwater runoff, as required by the Caltrans NPDES permit. Permanent BMPs would meet hydromodification requirements and other Caltrans' requirements. Temporary BMPs would also be implemented, as listed in Section 2.11.4.2. These measures will avoid substantial effects on surface and groundwater quality.

- b) Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

**Less-than-Significant Impact.** The additional three acres of impervious area to be added by the Project is small in relation to the size of the groundwater basin located within the project limits; therefore, groundwater recharge impacts would be insignificant.

- c) Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows?

**Less-than-Significant Impact.** The Project would increase impervious surfaces by approximately 3.48 acres within the combined San Tomas and Guadalupe River watersheds area that encompasses 215 square miles. This is a relatively minor increase in impervious surfaces, especially in view of the fact that most of the project site is already covered by existing impervious surfaces (i.e., the existing freeway). Therefore, the increase in pollutant-containing runoff would not be substantial. The Project is not located in a floodplain and, therefore, would not block flood flows.

- d) In flood hazard, tsunami, or seiche zones, would the Project risk release of pollutants due to project inundation?

**No Impact.** According to floodplain maps prepared by the Federal Emergency Management Agency (FEMA), the project's impact area is not within or adjacent to any 100-year floodplain.<sup>34</sup> Based on mapping prepared by the California Geologic Survey, the

---

<sup>34</sup>Source: FEMA Flood Insurance Rate Map for City of San José (060349).

site is not located within a tsunami hazard zone.<sup>35</sup> There are no bodies of water near the project area and, therefore, inundation of the area due to a seiche would not occur.<sup>36</sup>

- e) Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

**No Impact.** Based on the above responses and the information in Section 2.11, the Project would comply with all applicable plans related to water quality and groundwater management.

### 3.2.11 Land Use and Planning

Would the Project:	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) Would the Project physically divide an established community?

**No Impact.** The Project would not physically divide an established community because construction would primarily occur within the footprints of the existing I-280/Winchester Boulevard and I-280/I-880/SR-17 interchanges. No residences would be acquired or relocated.

- b) Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

<sup>35</sup> Source: California Geologic Survey, <https://www.conservation.ca.gov/cgs/tsunami/maps/> Accessed 3/18/2022.

<sup>36</sup> A seiche is a standing wave oscillating in a body of water. According to the National Oceanic and Atmospheric Administration, “seiches are typically caused when strong winds and rapid changes in atmospheric pressure push water from one end of a body of water to the other. When the wind stops, the water rebounds to the other side of the enclosed area. The water then continues to oscillate back and forth for hours or even days. In a similar fashion, earthquakes, tsunamis, or severe storm fronts may also cause seiches along ocean shelves and ocean harbors.” <https://oceanservice.noaa.gov/facts/seiche.html> Accessed 3/18/2022.

**No Impact.** For the reasons described in Section 2.3, *Consistency with State, Regional, and Local Plans and Programs*, the Project would not conflict with any land use plans or policies.

**3.2.12 Mineral Resources**

Would the Project:	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Would the Project 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?

And

b) Would the Project 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 Communications Hill area in central San José is the only area within the City that is designated by the State Mining and Geology Board as containing mineral deposits of regional significance. The project site is not on or adjacent to Communications Hill. Therefore, the Project would not result in the loss of availability of a known mineral resource or a locally important mineral resource recovery site.

**3.2.13      Noise**

Would the Project result in:	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

For a detailed discussion of this topic, please see Section 2.16, *Noise*, of this EIR/EA.

- a) Would the Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

**Less-than-Significant Impact with Mitigation.** When compared to existing conditions, changes in operational noise levels under 2040 Build conditions would range from 0 to +3 dBA. Short-term increases in noise during construction could be significant, especially during pile driving and nighttime work. The measures listed in Section 2.16.5.2 that would be implemented by the Project during the construction phase will reduce short-term noise impacts to a less-than-significant level.

- b) Would the Project result in generation of excessive groundborne vibration or groundborne noise levels?

**Less-than-Significant Impact with Mitigation.** Due to the proximity of the proposed improvements to existing structures, there is the potential for vibration from pile driving during construction to exceed applicable thresholds. The measures listed in Section 2.16.5.2 that would be implemented by the Project during the construction phase will reduce short-term vibration impacts to a less-than-significant level.

- c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?

**No Impact.** The Comprehensive Land Use Plan for the Norman Y. Mineta San José International Airport (SJC) sets forth noise and safety policies for land uses in the airport environs. Although the project site is approximately 2.5 miles from SJC, it is not located within the designated Airport Influence Area (AIA), defined as the areas surrounding the Airport that are affected by noise, height, and safety considerations.<sup>37</sup>

### 3.2.14 Population and Housing

Would the Project:	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

**No Impact.** The Project is limited to improvements to an existing interchange and would not change land use patterns or density. The Project is located within, and is intended to serve, an urbanized and mostly-developed area of San José. The Project would not open additional areas to development and would not induce unplanned population growth.

- b) Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

**No Impact.** No residences would be acquired for the Project. No people or housing would be displaced.

<sup>37</sup> Source: Santa Clara County Airport Land Use Commission, Figure 8 (Airport Influence Area) from Comprehensive Land Use Plan for Norman Y. Mineta San José International Airport, 2012.

**3.2.15 Public Services**

	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<p>Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:</p> <p>1) Fire Protection?            2) Police Protection?            3) Schools?            4) Parks?            5) Other Public Facilities?</p>	<p><input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/></p>	<p><input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input checked="" type="checkbox"/>  <input type="checkbox"/></p>	<p><input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/></p>	<p><input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>  <input type="checkbox"/>  <input checked="" type="checkbox"/></p>

Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection, police protection, schools, parks, or other public facilities?

**Less-than-Significant Impact with Mitigation for Parks.** As described in Section 2.4.3, the footprint of the proposed off-ramp from northbound I-280 to Winchester Boulevard, including modifications to Tisch Way and the reconstruction of the Monroe POC, would require approximately 0.45 acre of right-of-way from the southerly portion of Frank Santana Park (see Figure 2.4-2). This area is currently occupied by the southerly segment of the park’s walking/jogging path and the southerly portion of the outfield of the softball field, both of which would be directly impacted. Approximately 24 trees would also be impacted. The Project would implement the mitigation measures listed in Section 2.4.4, which would reduce impacts to a less-than-significant level.<sup>38</sup>

**No Impact for Police, Fire, School, and/or Other Facilities.** The Project is limited to improvements to an existing interchange and is intended to improve traffic operations in the project area. As stated previously in Section 2.5, *Growth*, the Project would not induce

<sup>38</sup> See also Appendix A of this EIR/EA for a detailed discussion of the effects of the Project on Santana Park and the mitigation measures included in the Project.

unplanned growth but would facilitate the planned growth of the area as identified in the *Envision San José 2040 General Plan*. The General Plan contains policies that ensure that the future capacity of services (e.g., schools, utilities, police and fire protection, libraries, parks, etc.) will be adequate to serve that planned growth.

### 3.2.16 Recreation

	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

**No Impact.** The Project is limited to the construction of improvements to the existing transportation network. It would not involve the construction of housing or other uses that would lead to an increased demand for parks or recreational facilities.

- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

**No Impact.** The Project would not construct new or expanded recreational facilities as it would not generate an increase in the demand for recreational activities. The Project would, however, reconstruct the existing softball field and a portion of the existing walking/jogging path in Santana Park, as those facilities would be impacted by the Project. See Section 2.4, *Parks and Recreational Facilities*, for details.

### 3.2.17 Transportation

Would the Project:	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Would the Project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities?

**No Impact.** For the reasons stated in Section 2.3, the Project would not conflict with any transportation plan, program, ordinance, or policy.

b) Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

**No Impact.** Historically, transportation analyses prepared under CEQA have utilized delay and congestion on the roadway system as the primary metric for the identification of traffic impacts and potential roadway improvements to relieve traffic congestion that may result due to a proposed project. However, the State of California has recognized the limitations of measuring and mitigating only vehicle delay at intersections. Therefore, in 2013, Senate Bill (SB) 743 became law, which requires jurisdictions to stop using congestion and delay metrics, such as level of service (LOS), as the measurement for CEQA impacts in a transportation analysis. Per SB 743, by July 2020, all public agencies were required to base the determination of transportation impacts under CEQA on vehicle miles traveled (VMT) rather than LOS.<sup>39</sup> Section 15064.3(b)(2) of the CEQA Guidelines states that transportation projects that reduce, or have no impact on, VMT should be presumed to cause a less than significant transportation impact.

A VMT analysis of the Project was undertaken, which involved estimating the change in total VMT with and without the Project utilizing VTA's countywide travel demand model. As shown in Table 3.17-1, the Project would result in a small decrease in VMT when

<sup>39</sup> VMT measures the amount of distance people travel in personal vehicles to destinations in a day. VMT is measured by multiplying the total vehicle trips by the average distance of those trips.

compared to the No Build Alternative. Based upon the this analysis, the Project would not conflict with CEQA Guidelines Section 15064.3(b).

**Table 3.2-1: Comparison of VMT in the Study Area**

<b>Project Alternative</b>	<b>Daily VMT</b>	<b>Change from No Build (Daily VMT)</b>	<b>% Change from No Build</b>
2025 No Build Alternative	2,199,499	--	--
2025 Build Alternative	2,196,532	- 2,967	- 0.84%
2045 No Build Alternative	2,903,884	--	--
2045 Build Alternative	2,894,982	- 8,902	- 0.84%
Source: Traffic Operations Analysis Report for I-280/Winchester Boulevard Interchange Improvements Project, 2021.			

- c) Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

**No Impact.** The proposed Project has been designed to comply with current highway design standards, including those applicable to motorized vehicles, bicyclists, and pedestrians. The Project does not include any substandard geometric design features or incompatible uses that might result in a substantial increase in hazards.

- d) Would the Project result in inadequate emergency access?

**No Impact.** The Project would not sever or adversely impact the existing emergency response routes along Tisch Way and Monroe Street from nearby San José Fire Station #10. During the construction phase of the Project, any temporary lane or road closures would be coordinated in advance with the fire department, as well as with other emergency responders (e.g., police, ambulance, etc.). Upon completion of the Project, the improvements from I-280 to Winchester Boulevard and other streets would result in improved access to the surrounding community for emergency vehicles and other public service providers from outside the project area.

**3.2.18 Tribal Cultural Resources**

	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<p>Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</p> <p>Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

And

Would the Project cause a substantial adverse change in the significance of a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

**No Impact.** As described in Section 2.10, *Cultural Resources*, no tribal cultural resources are present within the Project’s Area of Potential Effects (APE). This conclusion was reached based on field studies and research within the APE, as well as consultation with the Native American Heritage Commission and representatives of local Native American tribes.

**3.2.19      Utilities and Service Systems**

Would the Project:	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5) Be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

**Less-than-Significant Impact.** Although some utility relocation within the Project's footprint would be required, the Project does not include uses that would require new or expanded utility systems. Electricity consumption associated with the Project would be limited to power for new streetlights and traffic signals. Electrical consumption by such features would be minimal because that equipment would utilize LED-bulbs.

- b) Would insufficient water supplies be available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?

**Less-than-Significant Impact.** Landscaping installed by the Project, including replaced trees, would be irrigated, which would require water use. Consistent with Caltrans policy, the trees and landscaping would be drought tolerant and would require minimal watering. For these reasons, the Project would not generate a significant demand on water use that requires new or expanded entitlements.

- c) Would the Project result in a determination by the wastewater treatment provider which serves or may serve the Project that it does not have adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?

**No Impact.** The Project would not include uses that would generate wastewater. Therefore, the Project would not result in demand on wastewater treatment systems.

- d) Would the Project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

And

- e) Would the Project be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste?

**No Impact.** Caltrans requires construction waste generated by the Project to be diverted from landfills (e.g., recycled or reused) to the extent feasible. The operation of the Project would not include uses that would generate solid waste. Therefore, the Project would not impact solid waste or landfill capacity.

**3.2.20**

**Wildfires**

	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
1) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

- a) Substantially impair an adopted emergency response plan or emergency evacuation plan?
- b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
- c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

**No Impact.** According to mapping prepared by the Santa Clara County FireSafe Council, the project site is not located within or near a Moderate, High, or Very High Fire Hazard Severity Zone. The closest fire hazard zone to the project area is the East Foothills of the Diablo Range, more than eight miles to the east.<sup>40</sup> Therefore, if the Project is constructed, none of the effects listed in the above four questions would occur.

**3.2.21 Mandatory Findings of Significance**

	Significant and Unavoidable Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

<sup>40</sup> Source: <https://sccfiresafe.org/resources/do-you-reside-in-santa-clara-countys-wildland-urban-interface-wui/> (accessed 2/15/2022).

**Less-than-Significant Impact.** The Project is located in an urbanized and developed area. No habitat for listed and candidate threatened or endangered species is present. No sensitive or regulated habitats (e.g., wetlands, riparian corridors, waterways, important wildlife corridors, etc.) are present. Vegetation impacted by the Project would be limited to ornamental landscaping located along freeways and local roadways.

- b) Does the Project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

And

- c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

**Significant and Unavoidable Impact.** With one exception, all impacts of the Project, both individually and cumulatively, would be less-than-significant with mitigation incorporated. The exception is the visual impact of the connector flyover ramp from northbound SR-17 to northbound I-280 on the view from the neighborhood along Parkmoor Avenue. This aspect of the Project, taken together with the recently constructed flyover ramp from northbound I-280 to northbound I-880 and new soundwalls, creates a substantial cumulative impact to views from Parkmoor Avenue, which is illustrated on Figure 2.9-7. While the implementation of MM-VIS-1 would attenuate the cumulative impact by blocking some views of freeway infrastructure from the street over the long-term, it would not reduce this visual impact to a less-than-significant level.

### **3.3 CLIMATE CHANGE**

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the Earth's climate system. The Intergovernmental Panel on Climate Change, established by the United Nations and World Meteorological Organization in 1988, is devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy. Climate change in the past has generally occurred gradually over millennia, or more suddenly in response to cataclysmic natural disruptions. The research of the Intergovernmental Panel on Climate Change and other scientists over recent decades, however, has unequivocally attributed an accelerated rate of climatological changes over the past 150 years to GHG emissions generated from the production and use of fossil fuels.

Human activities generate GHGs consisting primarily of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF<sub>6</sub>), and various hydrofluorocarbons (HFCs). CO<sub>2</sub> is the most abundant GHG; while it is a naturally occurring and necessary component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO<sub>2</sub> that is the main driver of climate change. In the U.S. and in California, transportation is the largest source of GHG emissions, mostly CO<sub>2</sub>.

The impacts of climate change are already being observed in the form of sea level rise, drought, more intense heat, extended and severe fire seasons, and historic flooding from changing storm patterns. Both mitigation and adaptation strategies are necessary to address these impacts. The most important mitigation strategy is to reduce GHG emissions. In the context of climate change (as distinct from CEQA and NEPA), "mitigation" involves actions to reduce GHG emissions or to enhance the "sinks" that store them (such as forests and soils) to lessen adverse impacts. "Adaptation" is planning for and responding to impacts to reduce vulnerability to harm, such as by adjusting transportation design standards to withstand more intense storms, heat, and higher sea levels. This analysis will include a discussion of both in the context of this transportation project.

#### **3.3.1 Regulatory Setting**

This section outlines federal and state efforts to comprehensively reduce GHG emissions from transportation sources.

##### **3.3.1.1 *Federal***

To date, no national standards have been established for nationwide mobile-source GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level.

NEPA (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The FHWA recognizes the threats that extreme weather, sea level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (FHWA 2022). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—“the triple bottom line of sustainability” (FHWA n.d.). Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

The federal government has taken steps to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the Energy Policy and Conservation Act of 1975 (42 USC Section 6201) as amended by the Energy Independence and Security Act (EISA) of 2007; and Corporate Average Fuel Economy (CAFE) Standards. This act established fuel economy standards for on-road motor vehicles sold in the United States. The U.S. Department of Transportation’s National Highway Traffic and Safety Administration (NHTSA) sets and enforces the CAFE standards based on each manufacturer’s average fuel economy for the portion of its vehicles produced for sale in the United States. The U.S. EPA calculates average fuel economy levels for manufacturers, and also sets related GHG emissions standards under the Clean Air Act. Raising CAFE standards leads automakers to create a more fuel-efficient fleet, which improves our nation’s energy security, saves consumers money at the pump, and reduces GHG emissions (U.S. DOT 2014).

U.S. EPA published a final rulemaking on December 30, 2021, that raised federal GHG emissions standards for passenger cars and light trucks for model years 2023 through 2026, increasing in stringency each year. The updated GHG emissions standards will avoid more than 3 billion tons of GHG emissions through 2050. In April 2022, NHTSA announced corresponding new fuel economy standards for model years 2024 through 2026, which will reduce fuel use by more than 200 billion gallons through 2050 compared to the old standards and reduce fuel costs for drivers (U.S. EPA 2022a; NHTSA 2022).

### **3.3.1.2 State**

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and executive orders (EOs) including, but not limited to, the following:

EO S-3-05 (June 1, 2005): The goal of this EO is to reduce California's GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill (AB) 32 in 2006 and Senate Bill (SB) 32 in 2016.

Assembly Bill (AB) 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals outlined in EO S-3-05, while further mandating that the California Air Resources Board (ARB) create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code [H&SC] Section 38551(b)). The law requires ARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

Senate Bill (SB) 375, Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires ARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land-use, and housing policies to plan how it will achieve the emissions target for its region.

EO B-30-15 (April 2015) establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reductions targets. It also directs ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent (MMTCO<sub>2e</sub>). [GHGs differ in how much heat each traps in the atmosphere, called global warming potential, or GWP. CO<sub>2</sub> is the most important GHG, so amounts of other gases are expressed relative to CO<sub>2</sub>, using a metric called "carbon dioxide equivalent", or CO<sub>2e</sub>. The global warming potential of CO<sub>2</sub> is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO<sub>2</sub>.] Finally, it requires the Natural Resources Agency to update the state's climate adaptation strategy, Safeguarding California, every 3 years, and to ensure that its provisions are fully implemented.

SB 32, Chapter 249, 2016, codifies the GHG reduction targets established in EO B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

SB 1386, Chapter 545, 2016, declared "it to be the policy of the state that the protection and management of natural and working lands ... is an important strategy in meeting the state's greenhouse gas reduction goals, and would require all state agencies, departments, boards, and commissions to consider this policy when revising, adopting,

or establishing policies, regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands.”

SB 743, Chapter 386 (September 2013): This bill changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to alternative methods focused on vehicle miles traveled, to promote the state’s goals of reducing greenhouse gas emissions and traffic related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety.

SB 150, Chapter 150, 2017, Regional Transportation Plans: This bill requires ARB to prepare a report that assesses progress made by each metropolitan planning organization in meeting their established regional greenhouse gas emission reduction targets.

EO B-55-18 (September 2018) sets a new statewide goal to achieve and maintain carbon neutrality no later than 2045. This goal is in addition to existing statewide targets of reducing GHG emissions.

AB 1279, Chapter 337, 2022, The California Climate Crisis Act: This bill mandates carbon neutrality by 2045 and establishes an emissions reduction target of 85% below 1990 level as part of that goal. This bill solidifies a goal included in EO B-55-18. It requires ARB to work with relevant state agencies to ensure that updates to the scoping plan identify and recommend measures to achieve these policy goals and to identify and implement a variety of policies and strategies that enable carbon dioxide removal solutions and carbon capture, utilization, and storage technologies in California, as specified.

### **3.3.2 Environmental Setting**

The proposed project is in an urban area of Santa Clara County with a well-developed road and street network. The land uses in the project area primarily consist of commercial, residential, institutional, and recreational facilities. Traffic congestion during peak hours is not uncommon in the project area. The RTP prepared by the Metropolitan Transportation Commission (MTC) guides transportation and housing development in the project area. The City of San José’s GHG Reduction Strategy addresses GHGs in the project area.

#### **3.3.2.1 *Existing GHG Emissions Inventories***

A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. U.S. EPA is responsible for documenting GHG emissions nationwide, and the ARB does so for the state, as required by H&SC Section 39607.4. Cities and other local jurisdictions may also conduct local GHG inventories to inform their GHG reduction or climate action plans.

## National GHG Inventory

The annual GHG inventory submitted by the U.S. EPA to the United Nations provides a comprehensive accounting of all human-produced sources of GHGs in the United States. Total GHG emissions from all sectors in 2020 were 5,222 million metric tons (MMT), factoring in deductions for carbon sequestration in the land sector. Of these, 79 percent were CO<sub>2</sub>, 11 percent were CH<sub>4</sub>, and 7 percent were N<sub>2</sub>O; the balance consisted of fluorinated gases. Total GHGs in 2020 decreased by 21% from 2005 levels and 11% from 2019. The change from 2019 resulted primarily from less demand in the transportation sector during the COVID-19 pandemic. The transportation sector was responsible for 27 percent of total U.S. GHG emissions in 2020, more than any other sector (Figure 3.3-1), and for 36% of all CO<sub>2</sub> emissions from fossil fuel combustion. Transportation CO<sub>2</sub> emissions for 2020 decreased 13 percent from 2019 to 2020, but were 7 percent higher than transportation CO<sub>2</sub> emissions in 1990 (Figure 3.3-1) (U.S. EPA 2022b).

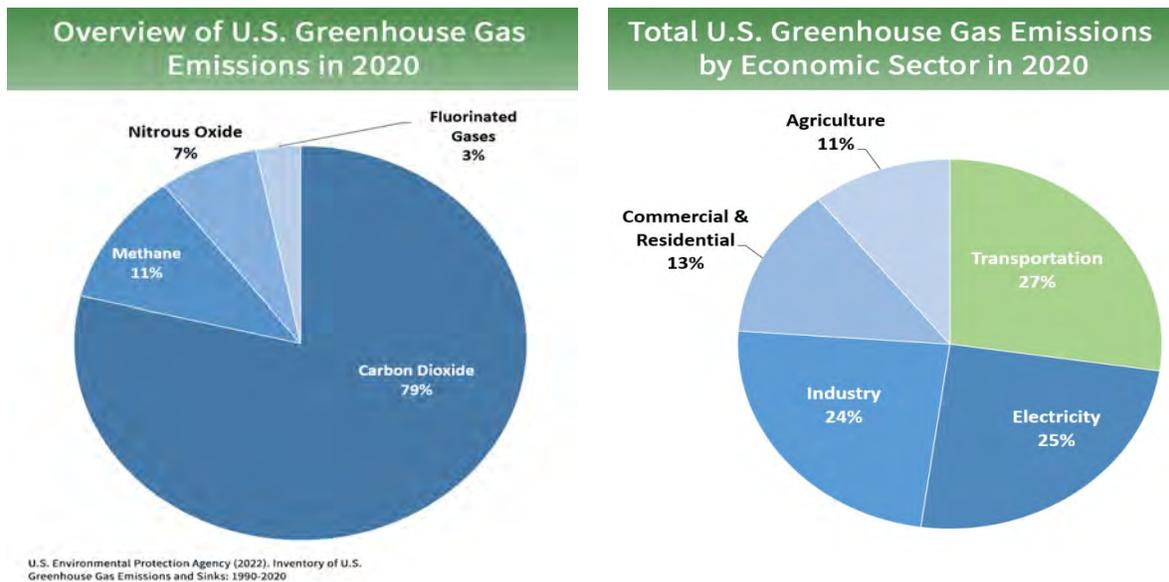


Figure 3.3-1: U.S. 2020 Greenhouse Gas Emissions

## State GHG Inventory

ARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. The 2022 edition of the GHG emissions inventory reported emissions trends from 2000 to 2020. Total California GHG emissions in 2020 were 369.2 MMTCO<sub>2</sub>e, a reduction of 35.3 MMTCO<sub>2</sub>e from 2019 and 61.8 MMTCO<sub>2</sub>e below the 2020 statewide limit of 431 MMTCO<sub>2</sub>e. Much of the decrease from 2019 to 2020, however, is likely due to the effects of the COVID-19 pandemic on the transportation sector, during which vehicle miles traveled declined under stay-at-home orders and reductions in goods movement. Nevertheless, transportation remained the largest source of GHG emissions,

accounting for 37 percent of statewide emissions (Figure 3.3-2). (Including upstream emissions from oil extraction, petroleum refining, and oil pipelines in California, transportation was responsible for about 47 percent of statewide emissions in 2020; however, those emissions are accounted for in the industrial sector.) California’s gross domestic product (GDP) and GHG intensity (GHG emissions per unit of GDP) both declined from 2019 to 2020 (Figure 3.3-3). It is expected that total GHG emissions will increase as the economy recovers over the next few years (ARB 2022a).

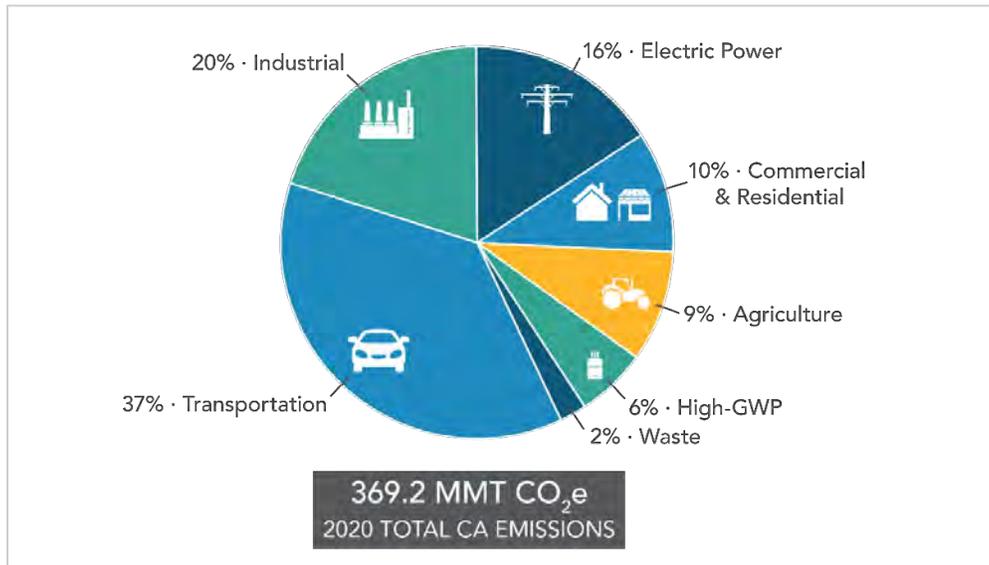


Figure 3.3-2: California 2020 GHG Emissions by Scoping Plan Category

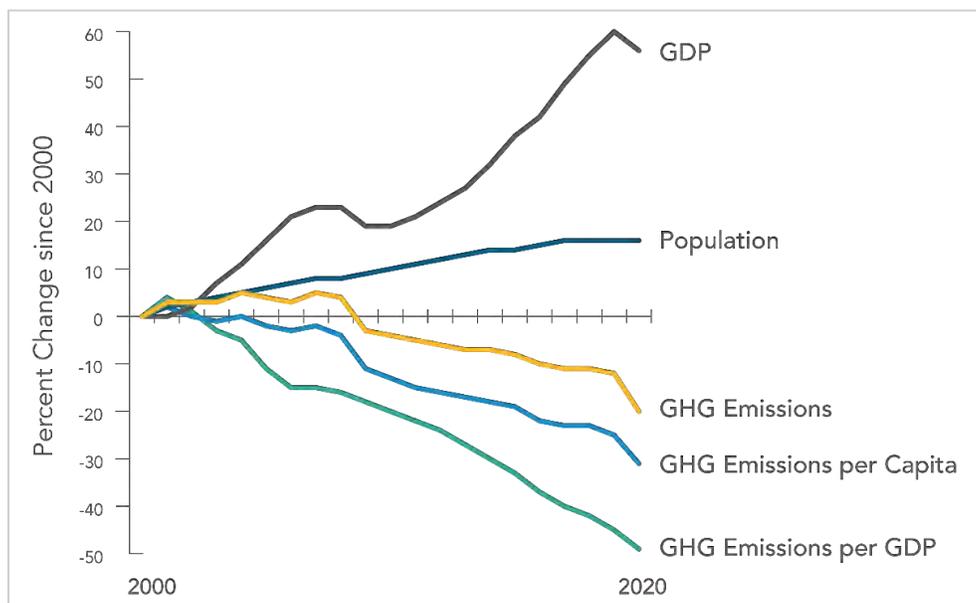


Figure 3.3-3: Change in California GDP, Population, and GHG Emissions since 2000

AB 32 required ARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every 5 years. ARB adopted the first scoping plan in 2008. The second updated plan, California’s 2017 Climate Change Scoping Plan, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32. The draft 2022 Scoping Plan Update additionally lays out a path to achieving carbon neutrality by 2045 (ARB 2022b).

### Regional Plans

ARB sets regional targets for California’s 18 MPOs to use in their Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) to plan future projects that will cumulatively achieve GHG reduction goals. Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. The proposed project is included in the RTP/SCS for San Francisco Bay Area. The regional reduction target for MTC is 10 percent for 2020 and 19 percent for 2035 (ARB 2022c).

Regional and local GHG reduction plans include MTC’s *Plan Bay Area 2050* and the City of San José’s *Climate Smart San José* Plan. Table 3.3-1 lists some of the key policies and strategies of these plans.

**Table 3.3-1: Regional and Local GHG Reduction Plans**

Title	GHG Reduction Policies or Strategies
Plan Bay Area 2050	Policy T8: Build a complete streets network Policy T10: Enhance local transit frequency, capacity and reliability Policy T11: Expand and modernize the regional rail network Policy EN1: Adapt to sea level rise. Policy EN7: Expand commute trip reduction programs at major employers Policy EN8: Expand clean vehicle initiatives. Policy EN9: Expand transportation demand management initiatives.
Climate Smart San José	Key Strategies: renewable energy, focused growth, electric vehicles, local jobs focus, goods movement efficiencies, energy-efficient buildings, transit system improvements. Goal: carbon neutrality by 2030.

### 3.3.3 Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation and use of the State Highway System (SHS) (operational emissions) and those produced during construction. The primary GHGs produced by the transportation sector are CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and HFCs. CO<sub>2</sub> emissions are a product of burning gasoline or diesel fuel in internal combustion engines, along with relatively small amounts of CH<sub>4</sub> and N<sub>2</sub>O. A small amount of HFC emissions related to refrigeration is also included in the transportation sector.

The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Pub. Resources Code, § 21083(b)(2)). As the California Supreme Court explained, “because of the global scale of climate change, any one project’s contribution is unlikely to be significant by itself.” (Cleveland National Forest Foundation v. San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512.) In assessing cumulative impacts, it must be determined if a project’s incremental effect is “cumulatively considerable” (CEQA Guidelines Sections 15064(h)(1) and 15130).

To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute to a significant cumulative impact on the environment.

### **3.3.3.1 Operational Emissions**

CO<sub>2</sub> from fossil fuel combustion is the largest component of U.S. GHG emissions, and transportation is the largest contributor of CO<sub>2</sub>. The largest emitters of transportation CO<sub>2</sub> emissions in 2020 were passenger cars (38.5 percent), freight trucks (26.3 percent), and light-duty trucks (18.9 percent). The remainder came from other modes of transportation, including aircraft, ships, boats, and trains, as well as pipelines and lubricants (U.S. EPA 2022b). Because CO<sub>2</sub> emissions represent the greatest percentage of GHG emissions, it has been selected as a proxy for the following analysis of potential climate change impacts.

The highest levels of CO<sub>2</sub> from mobile sources such as automobiles occur at stop-and-go speeds (0–25 miles per hour) and speeds over 55 miles per hour; the most severe emissions occur from 0–25 miles per hour (see Figure 3.3-4). To the extent that a project enhances operational efficiency and improves travel times in high-congestion travel corridors, GHG emissions, particularly CO<sub>2</sub>, may be reduced, provided that improved travel times do not induce additional VMT.

Four primary strategies can reduce GHG emissions from transportation sources: (1) improving the transportation system and operational efficiencies, (2) reducing travel activity (e.g. vehicle miles travelled), (3) transitioning to lower GHG emitting fuels, and (4) improving vehicle technologies and efficiency. To be most effective, all four strategies should be pursued concurrently.

CO<sub>2</sub>, as part of the carbon cycle, is an important compound for plant and animal life, but also accounted for 84% of California’s total GHG emissions in 2015. Transportation, primarily on-road travel, is the single largest source of CO<sub>2</sub> emissions in the state. The proposed Project, located in San José in Santa Clara County, is included in the current RTP/SCS, *Plan Bay Area 2050*. *Plan Bay Area 2050* uses a base year of 2015 for the existing conditions, except for GHG emissions, where a 2005 baseline is once again used

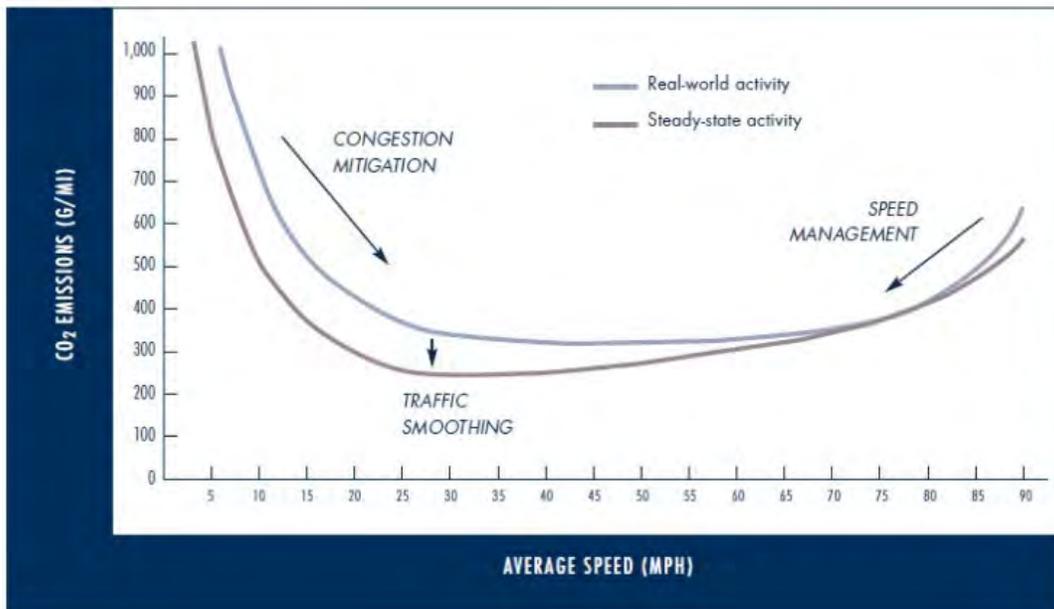


Figure 3.3-4: Possible Use of Traffic Operation Strategies in Reducing On-road CO<sub>2</sub> Emissions

for the analysis of SB 375 greenhouse gas reduction targets. The plan also uses a 1990 baseline for analyzing consistency with SB 32, which calls for a statewide reduction of GHG emissions to 40 percent from 1990 levels by 2030.

The proposed Project would increase the efficiency of traffic operations and, when compared to the No Build Alternative, would reduce VMT. The reduction in VMT is quantified in Table 3.3-2 based on the methodology described in the following paragraphs.

### Quantitative Analysis

#### Methodology

ARB developed the Emission FACTors (EMFAC) model to facilitate preparation of statewide and regional mobile source emissions inventories. The model generates emissions rates that can be multiplied by vehicle activity data from all motor vehicles, including passenger cars to heavy-duty trucks, operating on highways, freeways, and local roads in California. EMFAC has a rigorous scientific foundation, has been approved by U.S. EPA, and has been vetted through multiple stakeholder reviews. Caltrans developed CT-EMFAC to apply project-specific factors to ARB's model.

EMFAC's GHG emission rates are based on tailpipe emissions test data and the model does not account for factors such as the rate of acceleration and vehicle aerodynamics, which influence the amount of emissions generated by a vehicle. GHG emissions

quantified using CT-EMFAC are therefore estimates and may not reflect actual on-road emissions. Furthermore, the model does not account for induced travel. Modeling GHG estimates with EMFAC or CT-EMFAC nevertheless remains the most precise means of estimating future greenhouse gas emissions. While CT-EMFAC is currently the best available tool for calculating GHG emissions from mobile sources, it is important to note that the GHG results are only useful for a comparison of alternatives. Federal CAFE and GHG emissions standards continue to evolve, and models will be updated to account for regulatory changes.

## Results

Using the methodology described above, GHG emissions impacts for the Build Alternative were computed for the existing year and future years for both the No-Build and Build alternatives. The SAFE vehicle emissions adjustment factors developed by ARB for CO<sub>2</sub> were applied to the CT-EMFAC2017 emissions factors and the adjusted emissions factors were applied to the project area VMT estimates provided by the traffic consultant. Table 3.3-2 lists the GHG emissions for the existing year (2015) and design year (2045). For CEQA purposes, the difference in GHG emissions between the baseline year and the design year must be compared. Opening year (2025) and RTP horizon years (2040 and 2050) GHG emissions are included for additional comparisons.

**Table 3.3-2: Modeled Annual CO<sub>2</sub>e Emissions by Alternative**

Year	Scenario	GHG Emissions (MT/year)	Annual Vehicle-Miles-Traveled (VMT)
2015	Existing/Baseline	283,391	641,015,402
2025	No Build Alternative	258,534	763,226,207
	Build Alternative	258,175	762,196,577
2040	No Build Alternative	265,892	946,542,414
	Build Alternative	265,170	943,968,337
2045	No Build Alternative	278,959	1,007,647,817
	Build Alternative	278,141	1,004,558,924
2050	No Build Alternative	293,805	1,068,753,219
	Build Alternative	292,831	1,065,149,511

MT = metric tons (1 MT = 2,205 pounds)

Source: Air Quality Report for I-280/Winchester Boulevard Interchange Improvements, 2022.

GHG emissions for the baseline year were computed to be 283,391 metric tons (MT) of carbon dioxide equivalent (CO<sub>2</sub>e). The GHG emissions for the 2045 design No-Build and Build alternatives were calculated as 278,959 MT CO<sub>2</sub>e and 278,141 MT CO<sub>2</sub>e, respectively. The difference between the baseline emissions and the Build Alternative 2045 emissions is a decrease of 5,250 MT of CO<sub>2</sub>e. As shown in Table 3.3-2, with or without the Project, the mobile GHG emissions in the area would decrease between now

and 2045 due to the improvements in vehicle technology and reformulation of fuels. By 2050, improvements in vehicle technology are offset by the growth in VMT resulting in 3 percent higher GHG emissions for both the Build and No Build scenarios. However, modeling shows that the Build Alternative would have between 0.1 and 0.3 percent lower GHG emissions than the No-Build Alternative for all future years due to less congestion in the area.

### **3.3.3.2 Construction Emissions**

Construction GHG emissions would result from material processing and transportation, on-site construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

Use of long-life pavement, improved traffic management plans, and changes in materials can also help offset GHG emissions produced during construction by allowing longer intervals between maintenance and rehabilitation activities.

For informational purposes, GHG emissions during construction of the Project were modeled, and are estimated to be 6,040 MT of CO<sub>2</sub>e over the course of the entire Project construction period (see Table 2.15-6).

All construction contracts include Caltrans Standard Specifications related to air quality. Section 7-1.02A and 7 1.02C, Emissions Reduction, requires contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all ARB emission reduction regulations. Section 14-9.02, Air Pollution Control, requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions.

### **3.3.3.3 CEQA Conclusion**

Based on the analyses in this EIR/EA, it is concluded that the Project would not result in a significant impact with regard to GHG emissions and climate change. Facts in support of this determination are as follows:

- Per MM-AIR-1.1 in Section 2.15, construction equipment shall be zero emissions or have engines that meet or exceed either EPA or ARB Tier 4 off-road emission standards, and it shall have engines that are retrofitted with a ARB Level 3 Verified Diesel Emissions Control Strategy (VDECS), if one is available for the equipment being used.
- Short-term GHG emissions during the Project's construction phase would be offset by projected decreases in GHG emissions during the Project's operational phase. See the data in Table 3.3.2, which projects lower GHG emissions under the Build Alternative than under the No Build Alternative.

- The Project is included in the current RTP and TIP, both of which contain regional strategies for reducing GHG emissions from transportation sources. One of the main strategies to reduce GHG emissions is to make transportation systems more efficient by reducing congestion and by improving facilities for alternative modes (e.g., transit, bicycling, walking). The Project would reduce congestion and lower VMT in the project area by providing additional vehicular access and by constructing new bicycle and pedestrian facilities.

Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

### **3.3.4 Greenhouse Gas Reduction Strategies**

#### **3.3.4.1 *Statewide Efforts***

In response to AB 32, California is implementing measures to achieve emission reductions of GHGs that cause climate change. Climate change programs in California are effectively reducing GHG emissions from all sectors of the economy. These programs include regulations, market programs, and incentives that will transform transportation, industry, fuels, and other sectors, to take California into a sustainable, low-carbon and cleaner future, while maintaining a robust economy (ARB 2022d).

Major sectors of the California economy, including transportation, will need to reduce emissions to meet 2030 and 2050 GHG emissions targets. The Governor's Office of Planning and Research identified five sustainability pillars in a 2015 report: (1) increasing the share of renewable energy in the State's energy mix to at least 50 percent by 2030; (2) reducing petroleum use by up to 50 percent by 2030; (3) increasing the energy efficiency of existing buildings by 50 percent by 2030; (4) reducing emissions of short-lived climate pollutants; and (5) stewarding natural resources, including forests, working lands, and wetlands, to ensure that they store carbon, are resilient, and enhance other environmental benefits (OPR 2015). OPR later added strategies related to achieving statewide carbon neutrality by 2045 in accordance with EO B-55-18 and AB 1279 (OPR 2022).

The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of VMT. Reducing today's petroleum use in cars and trucks by 50% is a key state goal for reducing greenhouse gas emissions by 2030 (California Environmental Protection Agency 2015).

In addition, SB 1386 (Wolk 2016) established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms,

and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above- and below-ground matter.

Subsequently, Governor Gavin Newsom issued Executive Order N-82-20 to combat the crises in climate change and biodiversity. It instructs state agencies to use existing authorities and resources to identify and implement near- and long-term actions to accelerate natural removal of carbon and build climate resilience in our forests, wetlands, urban greenspaces, agricultural soils, and land conservation activities in ways that serve all communities and in particular low-income, disadvantaged, and vulnerable communities. To support this order, the California Natural Resources Agency (2022a) released *Natural and Working Lands Climate Smart Strategy*, with a focus on nature-based solutions.

### **3.3.4.2 Caltrans Activities**

Caltrans continues to be involved on the Governor's Climate Action Team as the ARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and SB 32 (2016), set an interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

#### **Climate Action Plan for Transportation Infrastructure**

*The California Action Plan for Transportation Infrastructure (CAPTI)* builds on executive orders signed by Governor Newsom in 2019 and 2020 targeted at reducing GHG emissions in transportation, which account for more than 40 percent of all polluting emissions, to reach the state's climate goals. Under CAPTI, where feasible and within existing funding program structures, the state will invest discretionary transportation funds in sustainable infrastructure projects that align with its climate, health, and social equity goals (California State Transportation Agency 2021).

#### **California Transportation Plan**

*The California Transportation Plan (CTP)* is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. It serves as an umbrella document for all the other statewide transportation planning documents. The CTP 2050 presents a vision of a safe, resilient, and universally accessible transportation system that supports vibrant communities, advances racial and economic justice, and improves public and environmental health. The plan's climate goal is to achieve statewide GHG emissions reduction targets and increase resilience to climate change. It demonstrates how GHG emissions from the transportation sector can be reduced through advancements in clean fuel technologies; continued shifts toward active travel, transit, and shared mobility; more efficient land use and development practices; and continued shifts to telework (Caltrans 2021a).

## Caltrans Strategic Plan

The *Caltrans 2020–2024 Strategic Plan* includes goals of stewardship, climate action, and equity. Climate action strategies include developing and implementing a Caltrans Climate Action Plan; a robust program of climate action education, training, and outreach; partnership and collaboration; a VMT monitoring and reduction program; and engaging with the most vulnerable communities in developing and implementing Caltrans climate action activities (Caltrans 2021b).

### Caltrans Policy Directives and Other Initiatives

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) established a Department policy to ensure coordinated efforts to incorporate climate change into Departmental decisions and activities. *Caltrans Greenhouse Gas Emissions and Mitigation Report* (Caltrans 2020) provides a comprehensive overview of Caltrans' emissions. The report documents and evaluates current Caltrans procedures and activities that track and reduce GHG emissions and identifies additional opportunities for further reducing GHG emissions from Department-controlled emission sources, in support of Departmental and State goals.

#### 3.3.4.3 *Project-Level GHG Reduction Strategies*

The following measures will also be implemented in the Project to reduce GHG emissions and potential climate change impacts from the Project.

- The highway improvements that would be constructed as part of the Project are designed to reduce congestion and improve access. Therefore, when compared to the No Build Alternative, the Project would result in improved traffic operations and a reduction in VMT, which would translate into reduced GHG emissions (see Table 3.3-1).
- The Project includes the improvements to bicycle and pedestrian facilities that are listed in Section 1.3.1.5. The improvements would facilitate bicycle and pedestrian travel in the area, reducing GHG emissions when compared to travel by cars.
- During the construction phase, the Project would implement the emissions reduction measures listed in Section 2.15.4.2. Those measures require the use of low-emission construction equipment, prohibit unnecessary idling of trucks and equipment, and prohibit use of diesel-powered generators, all of which would reduce GHG emissions.
- Electricity required during the construction phase and during the operational phase of the Project will be supplied by San José Clean Energy (SJCE), which is a local, not-for-profit electricity supplier run by the City of San José. SJCE focuses on purchasing electricity generated by clean sources and is an integral part of San José's goal of carbon neutrality by 2030 and *Climate Smart San José*, the City's climate action plan.

### **3.3.5      Adaptation**

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state’s transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges combined with a rising sea level can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

#### **3.3.5.1      *Federal Efforts***

Under NEPA Assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance.

The Fourth National Climate Assessment, published in 2018, presents the foundational science and the “human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways.”

The U.S. DOT Policy Statement on Climate Adaptation in June 2011 committed the federal Department of Transportation to “integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT in order to ensure that taxpayer resources are invested wisely, and that transportation infrastructure, services and operations remain effective in current and future climate conditions” (U.S. DOT 2011). The *U.S. DOT Climate Action Plan* of August 2021 followed up with a statement of policy to “accelerate reductions in greenhouse gas emissions from the transportation sector and make our transportation infrastructure more climate change resilient now and in the future,” following this set of guiding principles (U.S. DOT 2021):

- Use best-available science
- Prioritize the most vulnerable
- Preserve ecosystems
- Build community relationships
- Engage globally

U.S. DOT developed its climate action plan pursuant to the federal EO 14008, Tackling the Climate Crisis at Home and Abroad (January 27, 2021). EO 14008 recognized the threats of climate change to national security and ordered federal government agencies

to prioritize actions on climate adaptation and resilience in their programs and investments (White House 2021).

FHWA order 5520 (Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events, December 15, 2014) established FHWA policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. FHWA has developed guidance and tools for transportation planning that foster resilience to climate effects and sustainability at the federal, state, and local levels (FHWA 2019).

### **3.3.5.2 State Efforts**

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. A number of state policies and tools have been developed to guide adaptation efforts.

California's Fourth Climate Change Assessment (Fourth Assessment) (2018) is the state's effort to "translate the state of climate science into useful information for action." It provides information that will help decision makers across sectors and at state, regional, and local scales protect and build the resilience of the state's people, infrastructure, natural systems, working lands, and waters. The State's approach recognizes that the consequences of climate change occur at the intersections of people, nature, and infrastructure. The Fourth Assessment reports that if no measures are taken to reduce GHG emissions by 2021 or sooner, the state is projected to experience a 2.7 to 8.8 degrees Fahrenheit increase in average annual maximum daily temperatures, with impacts on agriculture, energy demand, natural systems, and public health; a two-thirds decline in water supply from snowpack and water shortages that will impact agricultural production; a 77% increase in average area burned by wildfire, with consequences for forest health and communities; and large-scale erosion of up to 67% of Southern California beaches and inundation of billions of dollars' worth of residential and commercial buildings due to sea level rise (State of California 2018).

Sea level rise is a particular concern for transportation infrastructure in the coastal zone. Major urban airports will be at risk of flooding from sea level rise combined with storm surge as early as 2040; San Francisco Airport is already at risk. Miles of coastal highways vulnerable to flooding in a 100-year storm event will triple to 370 by 2100, and 3,750 miles will be exposed to temporary flooding. The Fourth Assessment's findings highlight the need for proactive action to address these current and future impacts of climate change.

In 2008, then-governor Arnold Schwarzenegger recognized the need when he issued EO S-13-08, focused on sea level rise. Technical reports on the latest sea level rise science were first published in 2010 and updated in 2013 and 2017. The 2017 projections of sea level rise and new understanding of processes and potential impacts in California were incorporated into the State of California Sea-Level Rise Guidance Update in 2018. This EO also gave rise to the California Climate Adaptation Strategy (2009), updated in 2014

as Safeguarding California: Reducing Climate Risk (Safeguarding California Plan), which addressed the full range of climate change impacts and recommended adaptation strategies. The Safeguarding California Plan was updated in 2018 and again in 2021 as the California Climate Adaptation Strategy, incorporating key elements of the latest sector-specific plans such as the Natural and Working Lands Climate Smart Strategy, Wildfire and Forest Resilience Action Plan, Water Resilience Portfolio, and the CAPTI (described above). Priorities in the 2021 California Climate Adaptation Strategy include acting in partnership with California Native American Tribes, strengthening protections for climate-vulnerable communities that lack capacity and resources, nature-based climate solutions, use of best available climate science, and partnering and collaboration to best leverage resources (California Natural Resources Agency 2022b).

EO B-30-15, signed in April 2015, requires state agencies to factor climate change into all planning and investment decisions. This EO recognizes that effects of climate change in addition to sea level rise also threaten California's infrastructure. At the direction of EO B-30-15, the Office of Planning and Research published Planning and Investing for a Resilient California: A Guidebook for State Agencies in 2017, to encourage a uniform and systematic approach.

AB 2800 (Quirk 2016) created the multidisciplinary Climate-Safe Infrastructure Working Group to help actors throughout the state address the findings of California's Fourth Climate Change Assessment. It released its report, Paying it Forward: The Path Toward Climate-Safe Infrastructure in California, in 2018. The report provides guidance to agencies on how to address the challenges of assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how state agencies can use infrastructure planning, design, and implementation processes to address the observed and anticipated climate change impacts (Climate Change Infrastructure Working Group 2018).

### **3.3.5.3 Caltrans Adaptation Efforts**

#### **Caltrans Vulnerability Assessments**

Caltrans completed climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects of precipitation, temperature, wildfire, storm surge, and sea level rise.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments guide analysis of at-risk assets and development of Adaptation Priority Reports as a method to make capital programming decisions to address identified risks.

## Project Adaptation Analysis

### Sea Level Rise

The proposed Project is outside the coastal zone and not in an area subject to sea-level rise. As shown by the blue shading on Figure 3.3-5, the area subject to sea level rise is located around the perimeter of San Francisco Bay and is more than five miles from the Project. Accordingly, direct impacts to transportation facilities due to projected sea-level rise are not expected.

### Floodplains

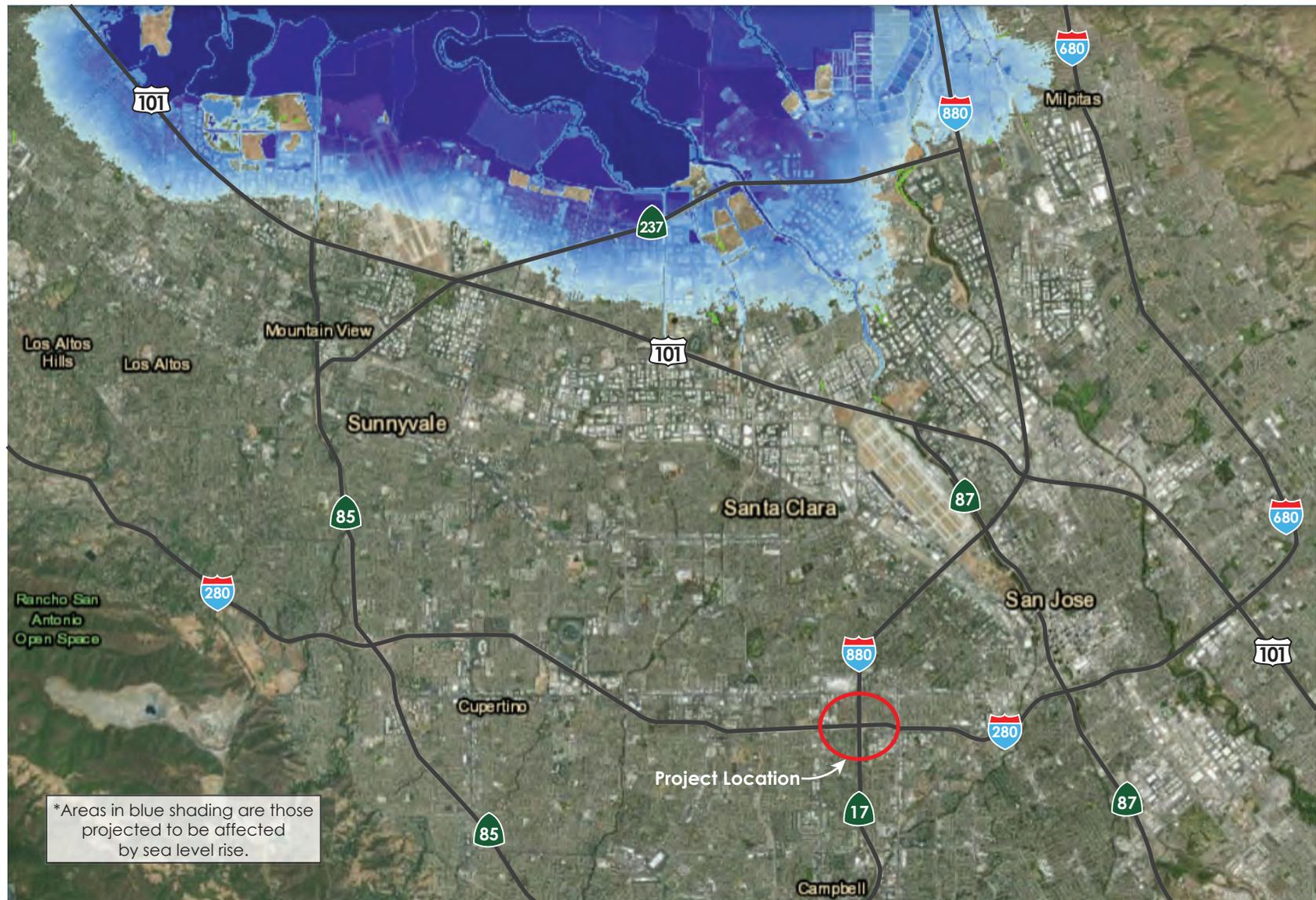
According to floodplain maps prepared by FEMA, the Project's impact area is not within or adjacent to any 100-year floodplain.

### Wildfire

According to mapping prepared by the Santa Clara County FireSafe Council, the project site is not located within or near a Moderate, High, or Very High Fire Hazard Severity Zone. The closest fire hazard zone to the project area is the East Foothills of the Diablo Range, more than eight miles to the east.<sup>41</sup>

---

<sup>41</sup> Source: <https://sccfiresafe.org/resources/do-you-reside-in-santa-clara-countys-wildland-urban-interface-wui/> (accessed 2/15/2022).



Source: NOAA Sea Level Rise Viewer

AREA PROJECTED TO BE AFFECTED BY SEA LEVEL RISE

FIGURE 3.3-5

## **SECTION 4.0 COMMENTS AND COORDINATION**

---

### **4.1 INTRODUCTION**

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process to determine the scope of environmental documentation, the level of analysis, potential impacts and mitigation measures and related environmental requirements. Agency consultation and public participation for this Project have been accomplished through a variety of formal and informal methods, including: Project Development Team meetings, interagency coordination meetings, a scoping meeting, presentations to neighborhood groups, and meetings with commercial and residential property owners.

This chapter summarizes the efforts to fully identify, address and resolve project-related issues through early and continuing coordination.

### **4.2 NOTICE OF PREPARATION AND SCOPING PROCESS**

Caltrans circulated a Notice of Preparation (NOP) of an EIR/EA to local, regional, state, and federal agencies on September 4, 2020. The 30-day scoping period started on September 8, 2020, and ended on October 8, 2020. A copy of the NOP is provided in Appendix E.

A virtual Environmental Scoping Meeting was held on September 24, 2020 at 6:00 PM. Approximately 19,000 notices for the Scoping Meeting were mailed to residences and businesses within a 0.25-mile radius of the Project. VTA posted the public meeting notice on the VTA website, VTA Headways Blog, and Social Media (Twitter, Facebook, NextDoor). Notices were published in English, Spanish, Chinese, Filipino, Korean, and Vietnamese newspapers. An email notification was sent to agencies, organizations, and individual stakeholders. Approximately 93 people attended the scoping meeting via Zoom. Copies of these notices are provided in Appendix E.

A total of 22 public comments were received during the scoping period. These included comments from members of the public and the following agencies: Santa Clara Valley Water District, U.S. Environmental Protection Agency (EPA), Native American Heritage Commission, Bay Area Air Quality Management District, and City of San José. The comments were related to the following subject areas:

- Aesthetics and visual impacts
- Air quality
- Biological resources
- Cultural resources

- Climate change and greenhouse gas emissions
- Environmental justice
- Project purpose and design
- Impacts to Santana Park
- Noise impacts
- Impacts to San José Fire Station #10 and emergency response times
- Design considerations associated with the Monroe POC and project alternatives
- Project cost and funding
- Traffic volumes, VMT analysis and methodology, and transportation impacts
- Pedestrian and bicycle access
- Construction impacts
- Public health and safety impacts
- Land use decisions and development in the project area

### **4.3 CONSULTATION AND COORDINATION WITH AGENCIES AND ORGANIZATIONS**

VTA and the City of San José conducted various meetings and presentations throughout the environmental process to address local issues and provide project updates. These efforts are described below in chronological order.

- The project team met with representatives of the Winchester Neighborhood Action Coalition (NAC) on April 20, 2016.
- A Community Meeting/Open House was held on October 26, 2016 to gather data and to allow the community to give input and feedback on specific improvements needed in the area.
- The Project was presented to Federal Realty, Inc., the owner/operator of Santana Row on September 27, 2017.
- The Project was presented to Barry Swenson Builders, a local firm with nearby properties on November 27, 2017.
- The project team met with representatives of the Winchester NAC on December 6, 2017.
- A Project information meeting at Westfield Valley Fair was held on January 17, 2018 and was attended by six members of the public, two developers (Westfield and Federal Realty), five representatives from elected official offices, and one representative from the City of San José.
- The project team met with representatives of the Cory Neighborhood Association on January 29, 2018.
- The project team met with members of the Winchester Orchard Neighborhood Association on March 19, 2018.

- The project team met with the San José Fire Department on November 3, 2020 to discuss local roadway network modifications and emergency vehicle preemption considerations.
- During the preparation of the Project's cultural resources studies in 2021, the Native American Heritage Commission and representatives of local Native American groups were contacted for input. No concerns or issues were identified during that consultation process.

VTA, Caltrans, and the City of San José meet on a regular basis to address any questions or issues related to Project design, construction, and planned operation. Extensive coordination with City of San José staff occurred during preliminary design of the replacement POC to discuss bicycle and pedestrian improvements and impacts to Santana Park. These coordination efforts included several focus meetings with the Department of Parks, Recreation, and Neighborhood Services, as well as the Department of Transportation.

## **SECTION 5.0 LIST OF PREPARERS**

---

The following individuals were principally responsible for preparing this EIR/EA and/or the technical studies upon which the EIR/EA is based:

### **California Department of Transportation, District 4 [Oversight]**

Brian Gassner, Office of Environmental Analysis  
Charles Winter, Office of Environmental Analysis  
Joon Kang, Office of Project Development  
Arick Bayford, Office of Design South  
Greg Pera, Office of Biological Resources  
Kimberly White, Office of Landscape Architecture  
Beck Lithander, Office of Landscape Architecture  
Whitney Lawrence, Office of Highway Operations  
Kathryn Rose, Office of Cultural Resource Studies  
Althea Asaro, Office of Cultural Resource Studies  
Charles Palmer, Office of Cultural Resource Studies  
Kevin Krewson, Office of Environmental Engineering  
Shilpa Mareddy, Office of Environmental Engineering  
Kenny Tsan, Office of Environmental Engineering

### **Santa Clara Valley Transportation Authority [Oversight]**

Gene Gonzalo, VTA Highway Program Manager  
Chris Lillie, Project Manager  
Ann Calnan, Manager, Environmental Programs & Resources Management  
Lani Ho, Senior Environmental Planner  
Samantha McCleary, Senior Environmental Planner  
Alex Nelson, Environmental Planner  
David Kobayashi, Senior Transportation Planner

### **David J. Powers & Associates, Inc. [EIR/EA Preparation]**

John Hesler, Senior Principal  
Demetri Loukas, Principal  
Amy Wang, Project Manager  
Ryan Osako, Graphic Artist

### **Mark Thomas & Company, Inc. [Project Design, Water Quality]**

Sasha Dansy, Principal  
Danielle Sanchez, Project Engineer

### **DKS Associates [Traffic Report]**

Terry R. Klim, Senior Transportation Engineer

**Far Western Anthropological Research Group, Inc. [Cultural Resources]**

Jack Meyer, Principal Investigator/Geoarchaeologist

Melinda Patrick, Principal Investigator

**JRP Historical Consulting [Historic Resources]**

Bryan Larson, Partner

Steven Melvin, Staff Historian

**Cogstone Resource Management [Paleontology]**

Kim Scott, Principal Paleontologist

**H.T. Harvey & Associates, Inc. [Natural Environment Study]**

Kelly Hardwicke, Principal

Mark Bibbo, Project Manager

Christian Knowlton, Wildlife Ecologist

Jill Pastick, Plant Ecologist

**HortScience/Bartlett Consulting [Tree Survey]**

Jillian Keller, Arborist/Urban Forester

**Illingworth & Rodkin, Inc. [Noise, Air Quality, & MSAT Studies]**

Michael S. Thill, Senior Consultant

James Reyff, Senior Consultant

Jay Witt, Consultant

Steve Deines, Consultant

**AECOM [Energy]**

Jeff Zimmerman, Senior Project Manager

**Parikh Consultants, Inc. [Geotechnical Report, Initial Site Assessment]**

Gary Parikh, Principal

Craig Langbein, Geologist

David Wang, Project Manager

Kandeep Saravanapavan, Project Engineer

**Earthview Sciences [Visual Impact Assessment]**

MariaElena Conserva, Principal

## SECTION 6.0 DISTRIBUTION LIST

---

This EIR/EA was distributed to the following legislators, public officials, agencies and organizations:

### **Legislators and Public Officials (via Email)**

- U.S. Senator Dianne Feinstein
- U.S. Senator Alex Padilla
- U.S. Representative Zoe Lofgren
- California Senator Dave Cortese
- California Assemblyman Evan Low
- Santa Clara County Supervisor Susan Ellenberg
- San José Councilmember Dev Davis

### **State Agencies (via State Clearinghouse)**

- California Highway Patrol
- California Department of Fish & Game (Region 3)
- California Department of Toxic Substances Control
- Regional Water Quality Control Board (San Francisco Bay Region)
- State Historic Preservation Office
- California Transportation Commission
- Air Resources Board
- Native American Heritage Commission
- State Water Resources Control Board

### **Regional Agencies (via Email)**

- Metropolitan Transportation Commission
- Association of Bay Area Governments
- Bay Area Air Quality Management District
- Santa Clara Valley Water District
- Santa Clara Valley Habitat Agency

### **Local Agencies (via Email)**

- City of San José (multiple departments including PRNS, DOT, PBCE, SJFD)
- City of Santa Clara
- Santa Clara County Roads & Airports Department

### **Organizations and Businesses (via Email)**

- Winchester Orchard Neighborhood Association
- Winchester Neighborhood Action Council
- Winchester Mystery House
- Westfield Valley Fair

- Silicon Valley Bicycle Coalition
- Silicon Valley Leadership Group
- Santa Clara Valley Medical Center
- Cory Neighborhood Association
- Eden Neighborhood Association
- Lynhaven Neighborhood Association
- Burbank Community Association

## SECTION 7.0 REFERENCES

---

Barth, Matthew and Kanok Boriboonsomsin. 2010. Real-World Carbon Dioxide Impacts of Traffic Congestion. Berkeley, CA: University of California Transportation Center. UCTC-FR-2010-11. <https://www.researchgate.net/publication/46438207> .

California Air Resources Board (ARB). 2008. Climate Change Scoping Plan Appendices. Volume II: Analysis and Documentation. Appendix I, p. I-19. December. [https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/document/appendices\\_volume2.pdf](https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/document/appendices_volume2.pdf) . Accessed: November 2, 2022.

California Air Resources Board (ARB). 2022a. Greenhouse Gas Emissions and Trends for 2000 to 2020. Available: <https://ww2.arb.ca.gov/our-work/programs/ghg-inventory-program> . Accessed: November 2, 2022.

California Air Resources Board (ARB). 2022b. AB 32 Climate Change Scoping Plan. Available: <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan> . Accessed: November 2, 2022.

California Air Resources Board (ARB). 2022c. SB 375 Regional Plan Climate Targets. <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets> . Accessed: November 2, 2022.

California Air Resources Board (ARB). 2022d. Climate Change. <https://ww2.arb.ca.gov/our-work/topics/climate-change> . Accessed: November 2, 2022.

Climate Change Infrastructure Working Group. 2018. Paying it Forward: The Path Toward Climate-Safe Infrastructure in California. September. <https://files.resources.ca.gov/climate/climate-safe-infrastructure-working-group/> . Accessed: December 13, 2021.

California Department of Transportation (Caltrans). 2020. Caltrans Greenhouse Gas Emissions and Mitigation Report. Final. August. Prepared by ICF, Sacramento, CA. <https://dot.ca.gov/programs/public-affairs/mile-marker/summer-2021/ghg> . Accessed: December 13, 2021.

California Department of Transportation (Caltrans). 2021a. California Transportation Plan 2050. February. <https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/ctp-2050-v3-a11y.pdf> . Accessed: November 2, 2022.

California Department of Transportation (Caltrans). 2021b. Caltrans 2020-2024 Strategic Plan. <https://dot.ca.gov/-/media/dot-media/programs/risk-strategic-management/documents/sp-2020-16p-web-a11y.pdf> . Accessed: November 2, 2022.

California Environmental Protection Agency. 2015. California Climate Strategy. <https://calepa.ca.gov/wp-content/uploads/sites/6/2016/10/Climate-Documents-2015yr-CAStrategy.pdf> . Accessed: November 2, 2022.

California Governor's Office of Planning and Research (OPR). 2015. A Strategy for California @ 50 Million. November. [https://opr.ca.gov/docs/EGPR\\_Nov\\_2015.pdf](https://opr.ca.gov/docs/EGPR_Nov_2015.pdf) . Accessed: November 2, 2022.

California Governor's Office of Planning and Research (OPR). 2022. Carbon Neutrality by 2045. <https://opr.ca.gov/climate/carbon-neutrality.html>. Accessed: November 2, 2022.  
California Natural Resources Agency. 2022a. Natural and Working Lands Climate Smart Strategy. <https://resources.ca.gov/Initiatives/Expanding-Nature-Based-Solutions> . Accessed: November 2, 2022.

California Natural Resources Agency. 2022b. California Climate Adaptation Strategy. <https://climateresilience.ca.gov/> . Accessed: November 2, 2022.

California State Transportation Agency. 2021. Climate Action Plan for Transportation Infrastructure (CAPTI). Adopted July 2021. <https://calsta.ca.gov/subject-areas/climate-action-plan> . Accessed: November 2, 2022.

Federal Emergency Management Agency, Federal Insurance Rate Map for City of San José, California.

Federal Highway Administration (FHWA). 2022. Sustainability. <https://www.fhwa.dot.gov/environment/sustainability/resilience/> . Last updated July 29, 2022. Accessed: November 2, 2022.

Federal Highway Administration (FHWA). No date. Sustainable Highways Initiative. <https://www.sustainablehighways.dot.gov/overview.aspx>. Accessed: November 2, 2022.

Metropolitan Transportation Commission, Plan Bay Area 2050, 2021.

National Highway Traffic Safety Administration (NHTSA). 2022. USDOT Announces New Vehicle Fuel Economy Standards for Model Year 2024–2026. Press release. April 21. <https://www.nhtsa.gov/press-releases/usdot-announces-new-vehicle-fuel-economy-standards-model-year-2024-2026>. Accessed: November 2, 2022.

San José, City of, Envision San José 2040 General Plan, as amended through 2021.

San José, City of, I-280/Winchester Transportation Development Policy, 2016.

Santa Clara County Airport Land Use Commission, Comprehensive Land Use Plan for Norman Y. Mineta San José International Airport, 2012.

Santa Clara County FireSafe Council, Wildland/Urban Interface Map, <https://sccfiresafe.org/resources/do-you-reside-in-santa-clara-countys-wildland-urban-interface-wui/> , Accessed: 2/15/2022.

Santa Clara Valley Transportation Authority, Valley Transportation Plan 2040, 2014.

Santa Clara Valley Transportation Authority, I-280 Winchester Boulevard Improvements Project, Final Project Variations Screening Memo, October 2019

State of California. 2018. California's Fourth Climate Change Assessment. <https://climateassessment.ca.gov/>. Accessed: November 2, 2022.

U.S. Department of Transportation (U.S. DOT). 2011. Policy Statement on Climate Change Adaptation. [https://www.transportation.gov/sites/dot.dev/files/docs/Policy\\_on\\_Aaptation2011.pdf](https://www.transportation.gov/sites/dot.dev/files/docs/Policy_on_Aaptation2011.pdf). Accessed: November 2, 2022.

U.S. Department of Transportation (U.S. DOT). 2014. Corporate Average Fuel Economy (CAFE) Standards. <https://www.transportation.gov/mission/sustainability/corporate-average-fuel-economy-cafe-standards>. Accessed: November 2, 2022.

U.S. Department of Transportation (U.S. DOT). 2021. Climate Action Plan: Ensuring Transportation Infrastructure and System Resilience. <https://www.transportation.gov/sites/dot.gov/files/docs/DOT%20Adaptation%20Plan.pdf>. Accessed: November 2, 2022.

U.S. Environmental Protection Agency (U.S. EPA). 2022a. Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026. December. <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions>. Accessed: November 2, 2022.

U.S. Environmental Protection Agency (U.S. EPA). 2022b. Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2020. <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks>. Accessed: November 2, 2022.

The White House. 2021. Executive Order on Tackling the Climate Crisis at Home and Abroad. January 27. <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>. Accessed: November 14, 2022.

# **APPENDIX**

## **A**

---

### **Section 4(f) *De Minimis* Determination**

# Section 4(f) *De Minimis* Determination

## A. INTRODUCTION

This section of the document discusses *de minimis* impact determinations under Section 4(f). Section 6009(a) of SAFETEA-LU amended Section 4(f) legislation at 23 United States Code (USC) 138 and 49 USC 303 to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). This amendment provides that once the U.S. Department of Transportation (USDOT) determines that a transportation use of Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a *de minimis* impact on that property, an analysis of avoidance alternatives is not required, and the Section 4(f) evaluation process is complete. FHWA's final rule on Section 4(f) *de minimis* findings is codified in 23 Code of Federal Regulations (CFR) 774.3 and CFR 774.17.

Responsibility for compliance with Section 4(f) has been assigned to Caltrans pursuant to 23 USC 326 and 327, including *de minimis* impact determinations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

## B. DESCRIPTION OF SECTION 4(f) PROPERTY IMPACTED BY THE PROJECT

Frank M. Santana Park (the "Park") is an approximately 5.6-acre neighborhood park located in the Project area. The Park is owned and operated by the City of San José. The Park meets the regulatory definition of a Section (f) property because (1) it is publicly owned, (2) it is open to the public, (3) its major purpose is for park and recreation activities, and (4) the City considers it to be significant as a park and recreation area.

Santana Park is located at the intersection of Tisch Way and Monroe Street (see Figure A-1). The Park is generally bounded by residences on the north, Monroe Street and San José Fire Department Station 10 on the east, Tisch Way on the south, and Hatton Street on the west. It includes a softball field, a children's play area, a walking/jogging path, restrooms, and several picnic tables.



FRANK SANTANA PARK

FIGURE A-1

Based on data provided by San José’s Parks, Recreation, and Neighborhood Services (PRNS) Department, organizations reserved the Park’s softball field on 244 occasions in 2019, primarily for softball, baseball, soccer, and cricket (see Table A-1).<sup>1</sup> In addition, the Park’s walking/jogging path, children’s play area, and picnic facilities are utilized daily on an informal basis by community members.

**Table A-1: Reserved Use of Santana Park in Calendar Year 2019**

	Softball Field								Other Location			TOTAL RESERVATIONS
	Ixtapa Soccer League	Sluggers Baseball Travel Club	SJ American Little League	SJ Baseball Training Bulldogs	Lady Wolfpack Fastpitch Softball	Chinese-American Softball	Cricbay Tennisball Cricket	Tennisball Cricket Association	St. Leo Jr. High Flag Football Practice <sup>a</sup>	West Valley Christian Alliance <sup>b</sup>	PlanetXone Events <sup>c</sup>	
Jan	8	2										10
Feb	8				4							12
Mar	4		21				5					30
Apr	4		22			4						30
May	4		23			1	2					30
Jun	5		20			5				1		31
Jul	4						3					7
Aug	5			8			5					18
Sep	5			12		4			8			29
Oct	4			13		1	2		9		1	30
Nov	4			1			2	2				9
Dec	5						1	2				8
<b>Totals</b>	<b>60</b>	<b>2</b>	<b>86</b>	<b>34</b>	<b>4</b>	<b>15</b>	<b>20</b>	<b>4</b>	<b>17</b>	<b>1</b>	<b>1</b>	<b>244</b>

**Notes:**

- <sup>a</sup> Team uses open area of the Park for practice.
- <sup>b</sup> Unknown event
- <sup>c</sup> Party and corporate events featuring Bubble Soccer and Nerf Dart games

**Source:** City of San José Parks Recreation & Neighborhood Services Department

<sup>1</sup> Due to the COVID-19 pandemic, post-2019 data are not representative of typical park usage.

## C. USE OF SECTION 4(f) PROPERTY BY THE PROJECT

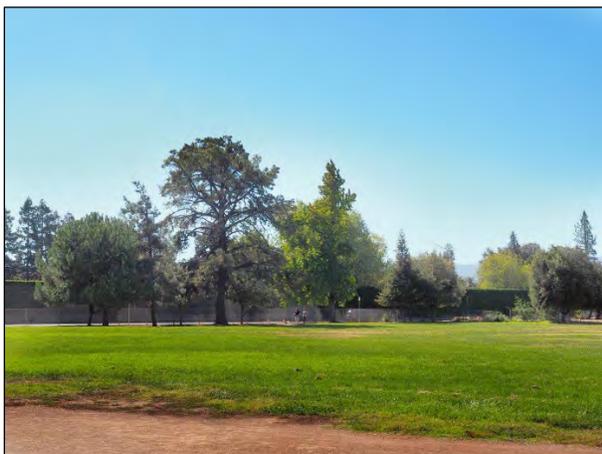
As described below, two types of use of Santana Park by the Project would occur: permanent use and temporary use.

### 1. Permanent Use

The footprint of the proposed off-ramp from northbound I-280 to Winchester Boulevard, including modifications to Tisch Way and the reconstruction of the Monroe Pedestrian Overcrossing (POC), would require approximately 0.45 acre of right-of-way from Santana Park (see Figure A-2). This area is currently occupied by the southerly segment of the park's walking/jogging path and the southerly portion of the outfield of the softball field, both of which would be directly impacted.

The loss of a portion of the outfield of the softball field would result in a substandard facility. The encroachment onto the walking/jogging path would remove a substantial part of the path and would eliminate the ability of its users to circle the Park. However, as described below in Section D., *Avoidance, Minimization, and Mitigation Measures*, the Project would reconstruct the softball field and replace the walking/jogging path.

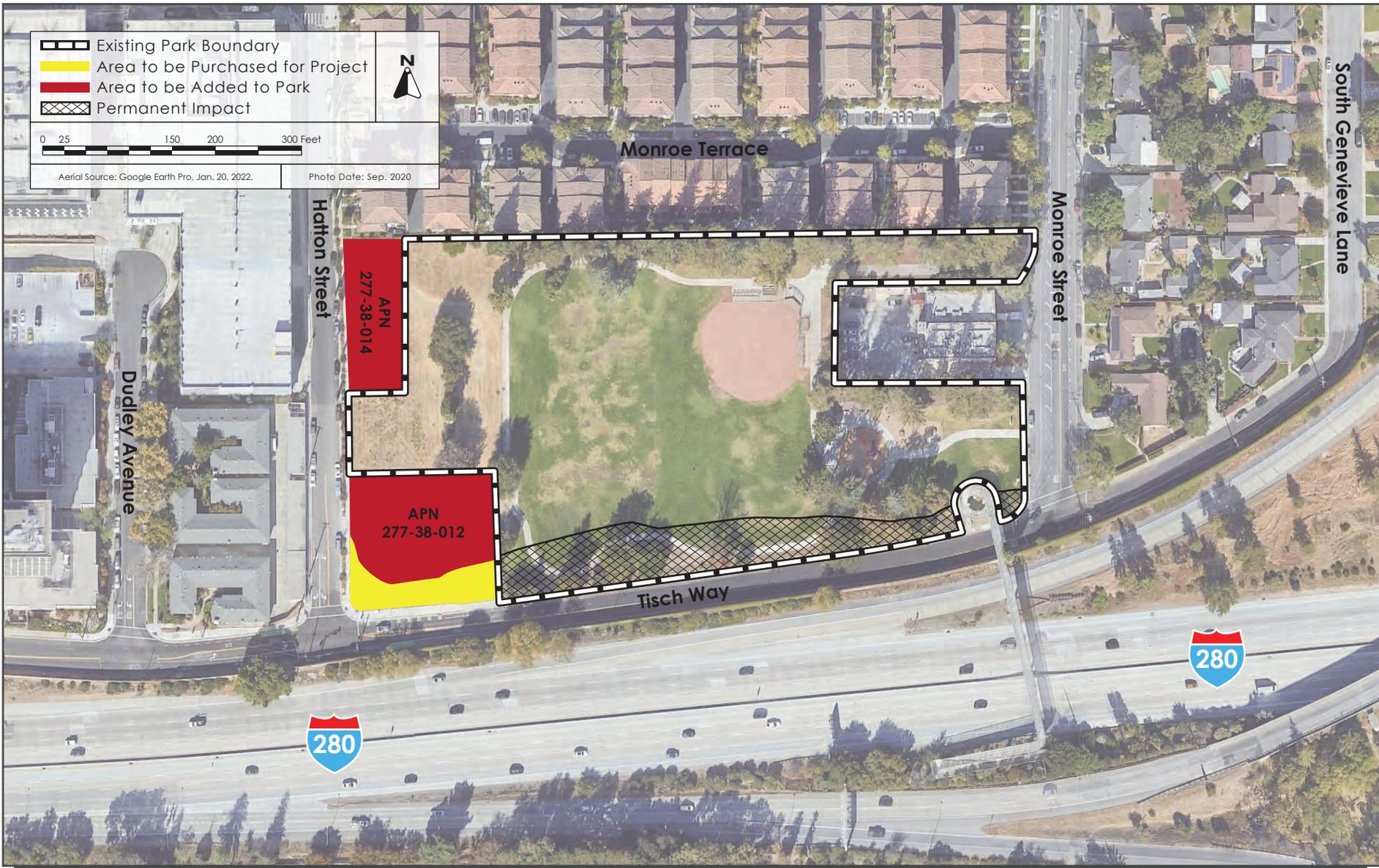
A row of approximately 24 trees along the southern boundary of the Park would be removed to accommodate the proposed off-ramp, modifications to Tisch Way, and reconstructed POC. The trees provide partial screening from Tisch Way and the I-280 soundwall. Removing the trees creates visual and aesthetic impacts for Park users. The images below show how the new Monroe POC would dominate the view looking across the Park from the north.



**Existing Conditions**



**Simulated View with Project**



IMPACTS TO FRANK SANTANA PARK

FIGURE A-2

## **2. Temporary Use**

The portion of the walking/jogging path that would be realigned to accommodate the Project, would be temporarily relocated north of its permanent location to allow for construction of the new Monroe POC. Temporary closure of the path is not, however, anticipated to be required. In addition, the existing children's play area, picnic area, and restrooms would remain open during construction.

During the construction phase, the Project would result in the following temporary impacts to Santana Park:

- Unavailability to use the softball field for approximately six months while the field, dugouts, bleachers, and fencing would be reconfigured and constructed.
- Temporary increases in noise that would be audible in the Park.
- Temporary increases in emissions of pollutants and generation of dust that could potentially adversely affect users of the Park.

## **D. AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES**

Measures that are included in the Project for the purpose of avoiding, minimizing, and mitigating impacts to Santana Park under Section 4(f) fall into the following three categories, each of which is described below:

- Mitigation for Permanent Loss of Park Acreage,
- Mitigation for Permanent Impacts to Park Facilities and Amenities,
- Mitigation for Temporary Impacts to Park Facilities and Amenities.

These measures were prepared in close coordination with the City of San José's PRNS Department, who are the officials having jurisdiction over Santana Park. Please refer to Section F for a list of coordination meetings held with VTA and PRNS to date.

### **1. Measures to Mitigate for Loss of Park Acreage**

As shown on Figure A-2, the Project would fully offset the loss of 0.45 acre of land from Santana Park by purchasing the following two parcels:

- An adjacent vacant parcel on the northeast corner of Tisch Way and Hatton Street. The subject parcel, Assessor's Parcel Number (APN) 277-38-012, is 22,981 square feet (0.53 acre) in size. Of this total, and based on the conceptual design, approximately 0.16 acre would be used for the Project and the remainder of 0.37 acre would be dedicated to the City of San José for incorporation into the Park.
- An adjacent vacant parcel on the east side of Hatton Street approximately 225 feet north of Tisch Way. The subject parcel, APN 277-38-014, is 11,391 square feet (0.26 acre) in size. The entire parcel would be dedicated to the City of San José for incorporation into the Park.

Thus, consistent with the objectives of Section 4(f), there would be no net loss of Santana Park acreage as a result of the Project. Instead, there would be a net gain of 0.18 acre.

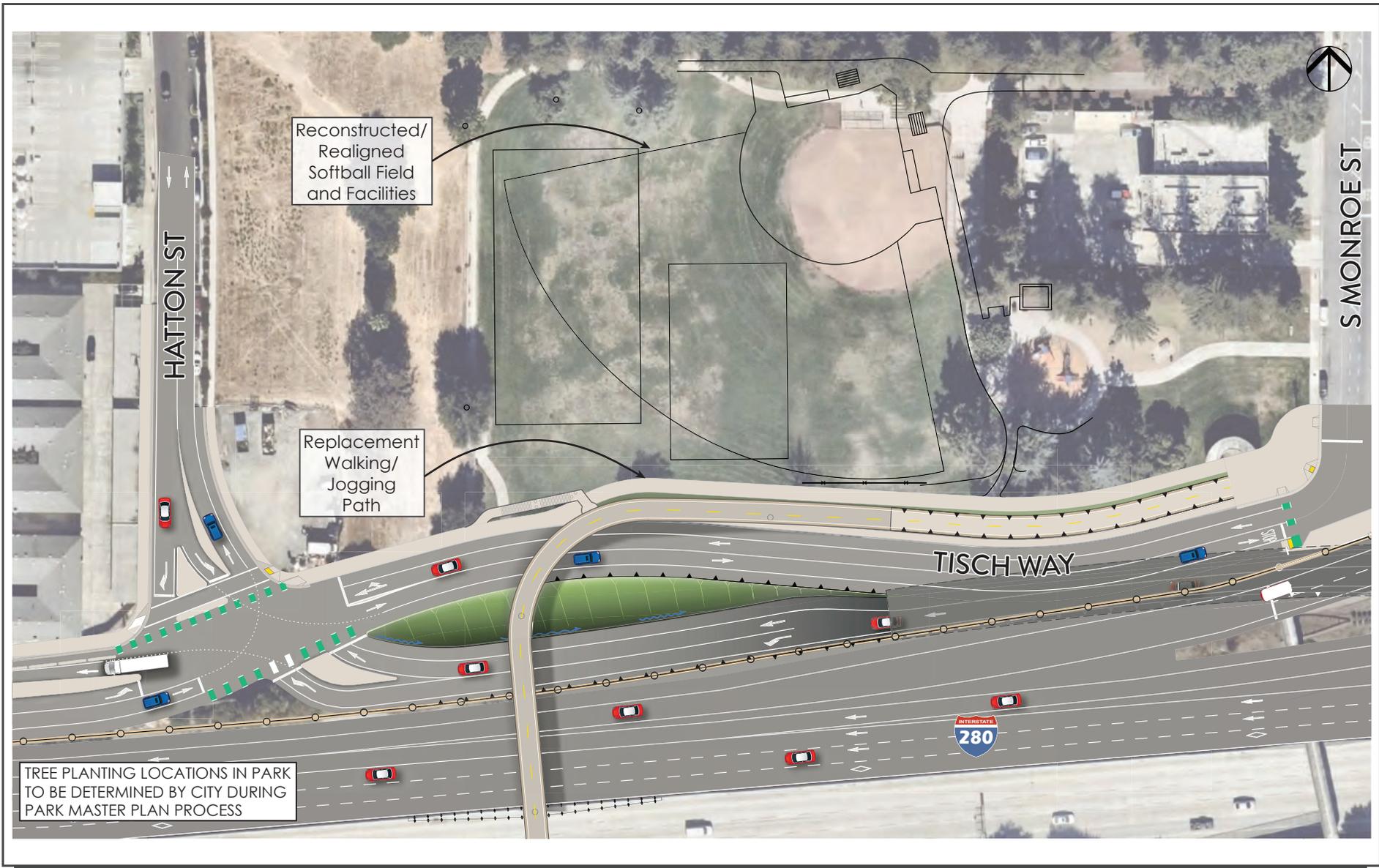
## 2. Measures to Mitigate for Permanent Impacts to Park Facilities and Amenities

As shown on Figure A-3, the segment of the existing walking/jogging path that would be impacted by the Project would be replaced with a new path, directly north of, and parallel to, the existing path.

The Project would reconstruct the existing softball field by shifting and realigning it northward. In the pre-project and post-project condition, the minimum left-field foul line dimensions would be approximately 260 feet. The right-field foul line dimensions would meet or exceed the current field dimensions. Reconstruction of the existing softball field would include the reconstruction of fencing, dugouts, and bleachers. The conceptual design for this measure is depicted on Figure A-3.

The Project would incorporate features into the design of the new Monroe POC to improve aesthetics and reduce the opportunity for graffiti. The features which may include aesthetic fence treatments, public art, unique lighting, texture, landscaping, and/or color treatments. Input from the local community and San José's PRNS Department would be an important component of the process to determine the final design of the POC.

The Project would work with San José's PRNS Department on the planting of replacement trees within Santana Park. There are multiple locations within the Park that are suitable for tree planting. However, the specific numbers, species, and locations will not be chosen until the City's Santana Park Master Plan process takes place. This will ensure that tree locations are compatible with the layout of future park facilities that may be constructed as part of the Master Plan. The minimum number and sizes of replacement trees will be as shown in Table A-2.



SANTANA PARK IMPROVEMENTS

FIGURE A-3

**Table A-2: Tree Replacement Requirements for Santana Park**

Diameter of Tree to Be Removed	Type of Tree to be Removed		
	Native	Non-Native	Orchard
18 inches or greater	5:1	4:1	3:1
12-18 inches	3:1	2:1	none
Less than 12 inches	1:1	1:1	none

x:x = replacement to tree loss ratio.

**Note:** Ratios shown are minimums. Replacement trees will vary and include a mixture of sizes ranging from 15- to 48-inch boxes at the following approximate percentages: 48-inch box at 10%; 36-inch box at 10%; 24-inch box at 40%, and 15-gallon at up to 40%, depending on the tree species and location of replanting, as determined during final design. If there is insufficient area within Santana Park to accommodate the required replacement trees, the project shall pay Off-Site Tree Replacement Fee(s) to the City, prior to the completion of the project, in accordance with the City Council approved Fee Resolution in effect at the time of payment. The City will use the off-site tree replacement fee(s) to plant trees at alternative sites.

**3. Measures to Mitigate for Temporary Impacts to Park Facilities and Amenities**

Prior to the start of construction, temporary fencing would be erected to separate the construction zone from Park facilities.

To avoid short-term closures, the temporary relocation of the walking/jogging path outside of the fenced construction zone would occur prior to the start of construction.

The timing of the temporary closure of the softball facility to allow for its reconstruction would be coordinated in advance with San José’s PRNS Department. This coordination would include providing advanced notice of the temporary closure to groups that typically reserve the facility in order to facilitate their booking of an alternate field.

During the construction phase, the Project would implement a series of measures that would avoid or minimize temporary impacts associated with noise and emissions of air pollutants including dust. These measures are listed in Sections 2.16 and 2.15 of the EIR/EA respectively.

## **E. *DE MINIMIS* DETERMINATION**

Based on the above facts and analysis, Caltrans determined that the Project would result in a *de minimis* impact on Santana Park.

## **F. PUBLIC REVIEW**

The public is being offered the opportunity to comment on this Section 4(f) *De Minimis* Determination in conjunction with the comment period for this Draft EIR/EA.

VTA and the City of San José held multiple meetings throughout the environmental process. The purpose of these meetings was to minimize impacts to Santana Park and ensure ongoing communication and coordination about the Project. These meetings were attended by staff from the City's Departments of Transportation and PRNS, and occurred on the following dates:

- November 5, 2020
- December 17, 2020
- February 17, 2021
- March 8, 2021
- September 9, 2021
- April 14, 2022
- April 28, 2022
- May 25, 2022
- November 9, 2022

This coordination resulted in design revisions, including redesign of the Project along the southern frontage of Santana Park to reduce impacts, and the development of the avoidance, minimization, and mitigation measures listed in Section D above.

Formal concurrence that the Project will result in *de minimis* impacts to Santana Park will be provided to Caltrans by PRNS and referenced in the final version of this document.

# **APPENDIX**

## **B**

---

### **Title VI**

### **Policy Statement**

## California Department of Transportation

OFFICE OF THE DIRECTOR  
P.O. BOX 942873, MS-49 | SACRAMENTO, CA 94273-0001  
(916) 654-6130 | FAX (916) 653-5776 TTY 711  
[www.dot.ca.gov](http://www.dot.ca.gov)



September 2022

### NON-DISCRIMINATION POLICY STATEMENT

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

Caltrans will make every effort to ensure nondiscrimination in all of its services, programs and activities, whether they are federally funded or not, and that services and benefits are fairly distributed to all people, regardless of race, color, or national origin. In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a non-discriminatory manner.

Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 639-6392 or visit the following web page: <https://dot.ca.gov/programs/civil-rights/title-vi>.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Civil Rights, at PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 879-6768 (TTY 711); or at [Title.VI@dot.ca.gov](mailto:Title.VI@dot.ca.gov).

A handwritten signature in black ink, appearing to read 'Tony Tavares'.

TONY TAVARES  
Director

# **APPENDIX**

## **C**

---

# **Avoidance, Minimization, and/or Mitigation Summary**

**I-280/Winchester Boulevard Interchange Improvements  
Santa Clara County, California  
04-1K980**

**ENVIRONMENTAL COMMITMENT RECORD**

In order to be sure that all of the environmental measures identified in this document are executed at the appropriate times, the following mitigation program (as articulated on the proposed Environmental Commitments Record [ECR] which follows) would be implemented. During project design, avoidance, minimization, and /or mitigation measures will be incorporated into the Project's final plans, specifications, and cost estimates, as appropriate. All permits will be obtained prior to implementation of the Project. During construction, environmental and construction/engineering staff will ensure that the commitments contained in this ECR are fulfilled. Following construction and appropriate phases of project delivery, long-term mitigation maintenance and monitoring will take place, as applicable. As the following ECR is a draft, some fields have not been completed, and will be filled out as each of the measures is implemented. Note: Some measures may apply to more than one resource area. Duplicative or redundant measures have not been included in this ECR.

ID Number	Task and Brief Description	Source	Project Timing	Responsible Staff	CEQA Mitigation Measure	Avoidance/Minimization Measure
<b>PARKS AND RECREATIONAL FACILITIES / SECTION 4(F)</b>						
MM-PARK-1.1	In compliance with the Park Preservation Act, the Project would fully offset the loss of 0.45 acre of land from Santana Park by purchasing parcels APN 277-38-012 and APN 277-38-014.	Draft EIR/EA Section 2.4	Design	Caltrans, VTA	■	
MM-PARK-2.1	The segment of the existing walking/jogging path impacted by the Project would be replaced with a new path, directly north of, and parallel to, the existing path.	Draft EIR/EA Section 2.4	Design through Construction	Caltrans, VTA, Contractor	■	
MM-PARK-2.2	The Project would reconstruct the existing softball field by shifting and realigning it northward. In the pre-project and post-project condition, the minimum left-field foul line dimensions would be approximately 260 feet. The right-field foul line dimensions would meet or exceed the current field dimensions. Reconstruction of the existing softball field would include the reconstruction of fencing, dugouts, and bleachers.	Draft EIR/EA Section 2.4	Design through Construction	Caltrans, VTA, CSJ PRNS Staff, Contractor	■	
MM-PARK-2.3	The Project would work with the City's PRNS Department and an arborist on the replacement of trees within the park to ensure that future tree locations are compatible with the layout of park facilities that may be constructed as part of the Santana Park Master Plan. The minimum number and sizes of replacement trees will be as shown in Table 2.4-1.	Draft EIR/EA Section 2.4	Design through Construction	Caltrans, VTA, CSJ PRNS Staff, Contractor	■	
n/a	The Project would incorporate features into the design of the new Monroe POC to improve aesthetics and reduce the opportunity for graffiti. The features which may include aesthetic fence treatments, public art, unique lighting, texture, landscaping, and/or color treatments. Input from the local community and San José's PRNS Department	Appendix A of Draft EIR/EA	Design through Construction	Caltrans, VTA, CSJ PRNS Staff, Contractor	■	

ID Number	Task and Brief Description	Source	Project Timing	Responsible Staff	CEQA Mitigation Measure	Avoidance/Minimization Measure
	would be an important component of the process to determine the final design of the POC.					
n/a	Prior to the start of construction, temporary fencing would be erected to separate the construction zone from Park facilities.	Appendix A of Draft EIR/EA	Construction	Contractor	■	
n/a	To avoid short-term closures, the temporary relocation of the walking/jogging path outside of the fenced construction zone would occur prior to the start of construction.	Appendix A of Draft EIR/EA	Construction	Contractor	■	
n/a	The timing of the temporary closure of the softball facility to allow for its reconstruction would be coordinated in advance with San José's PRNS Department. This coordination would include providing advanced notice of the temporary closure to groups that typically reserve the facility in order to facilitate their booking of an alternate field.	Appendix A of Draft EIR/EA	Construction	Contractor	■	
<b>VISUAL/AESTHETICS</b>						
MM-VIS-1.1	The existing landscaping that was planted along the westside of Parkmoor Avenue as part of the I-880/Stevens Creek Interchange Project will be enhanced. The enhanced landscaping will consist of one or more rows of rapidly growing (i.e., at least 2 feet per year), tall tree species such as canary island pine or coast redwood that are spaced as closely as recommended by an arborist such that the trees will eventually form a dense visual barrier to freeway infrastructure from Parkmoor Avenue. Design and construction of this landscaping will be implemented in conjunction with roadway construction.	Draft EIR/EA Section 2.9	Design through Construction	Caltrans, VTA, Contractor	■	

ID Number	Task and Brief Description	Source	Project Timing	Responsible Staff	CEQA Mitigation Measure	Avoidance/Minimization Measure
MM-VIS-1.2	Replacement landscaping will be provided for Santana Park. The number of trees to be planted and their location within the park will be determined based on coordination with, and to the satisfaction of, the City's PRNS Department and an arborist. The tree replacement ratios and sizes listed in Table 2.4-1 will be utilized.	Draft EIR/EA Section 2.9	Design through Construction	Caltrans, VTA, CSJ PRNS Staff, Contractor	■	
MM-VIS-1.3	The Project will incorporate treatments to improve aesthetics and reduce the opportunity for graffiti, which may include aesthetic fence treatments, public art, unique lighting, texture, landscaping, and/or color on project features, including the new Monroe POC, northbound SR-17 to northbound I-280 flyover, Winchester Boulevard bridge, retaining walls of the tunnel off-ramp, and the replacement soundwall constructed for the Project.	Draft EIR/EA Section 2.9	Design through Construction	Caltrans, VTA, CSJ PRNS Staff, Contractor	■	
MM-VIS-1.4	Highway replacement planting will be provided in areas of damaged and/or removed vegetation in accordance with Caltrans policy and guidance where feasible. Design and construction of replacement planting will be implemented such that it closely follows the completion of roadway construction. A plant establishment period will be provided to ensure replacement plantings reach maturity.	Draft EIR/EA Section 2.9	Design through Construction	Caltrans, VTA, Contractor	■	
MM-VIS-1.5	All lighting on new ramps, roads, and structures will be designed to limit light pollution and have minimum impact on the surrounding environment. All light fixtures will have LEDs configured with the minimum necessary number of bulbs, optimal mounting height, mast-arm length, and angle to restrict light to the roadways. Where applicable, shields on the fixtures to prevent light trespass to adjacent properties will be evaluated and incorporated where necessary during the detailed design phase.	Draft EIR/EA Section 2.9	Design through Construction	Caltrans, VTA, Contractor	■	

ID Number	Task and Brief Description	Source	Project Timing	Responsible Staff	CEQA Mitigation Measure	Avoidance/Minimization Measure
MM-VIS-1.6	Construction lighting during nighttime work will be limited to the work area by using directional lighting and shielding of light fixtures.	Draft EIR/EA Section 2.9	Construction	Contractor	■	
<b>CULTURAL RESOURCES</b>						
n/a	If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.	Draft EIR/EA Section 2.10	Construction	Contractor		■
n/a	Discovery of Human Remains: If remains are discovered during excavation, all work within 60 feet of the discovery will halt and Caltrans' Office of Cultural Resource Studies (OCRS) will be called. OCRS staff will assess the remains and, if determined to be human, will contact the County Coroner in accordance with Public Resources Code (PRC) Sections 5097.98, 5097.99, and Section 7050.5 of the California Health and Safety Code. If the Coroner determines the remains to be Native American, the Coroner will contact the Native American Heritage Commission, which will assign a Most Likely Descendant. Caltrans will consult with the Most Likely Descendent on treatment and reburial of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.	Draft EIR/EA Section 2.10	Construction	Contractor, Caltrans, VTA		■
<b>WATER QUALITY</b>						
MM-WQ-1.1	The Project includes Best Management Practices (BMPs) and will comply with the Caltrans Stormwater Management Plan to reduce the pollutant component of stormwater runoff. The potential permanent BMPs considered for the Project include Biofiltration Strips and Gross Solids Removal Devices (GSRDs). Permanent	Draft EIR/EA Section 2.11	Design through Construction	Caltrans, VTA, Contractor		■

ID Number	Task and Brief Description	Source	Project Timing	Responsible Staff	CEQA Mitigation Measure	Avoidance/Minimization Measure
	BMPs would meet hydromodification requirements and other Caltrans' requirements.					
MM-WQ-1.2	The Project will implement permanent design pollution control BMPs to improve stormwater quality by reducing erosion, stabilizing disturbed soil areas, and maximizing vegetated surfaces. These measures could include a combination of source and sediment control measures to prevent and minimize erosion from disturbed soil areas. Source controls would utilize erosion control netting in combination with hydroseeding. Outlet protection and velocity dissipation devices will also be considered.	Draft EIR/EA Section 2.11	Design through Construction	Caltrans, VTA, Contractor		■
MM-WQ-1.3	Active paved construction areas will be swept and washed as needed.	Draft EIR/EA Section 2.11	Construction	Contractor		■
MM-WQ-1.4	Silt fencing or straw wattles will be used to retain sediment on the project site.	Draft EIR/EA Section 2.11	Construction	Contractor		■
MM-WQ-1.5	Temporary cover of disturbed surfaces or temporary slope protection measures will be provided per regulatory requirements and Caltrans' guidelines to help control erosion. Permanent cover/revegetation will be provided to stabilize the disturbed surfaces after construction has been completed.	Draft EIR/EA Section 2.11	Construction	Contractor		■
MM-WQ-1.6	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 any waterways.	Draft EIR/EA Section 2.11	Construction	Contractor		■

<b>ID Number</b>	<b>Task and Brief Description</b>	<b>Source</b>	<b>Project Timing</b>	<b>Responsible Staff</b>	<b>CEQA Mitigation Measure</b>	<b>Avoidance/Minimization Measure</b>
MM-WQ-1.7	BMPs will be utilized by the contractor(s) during construction. The BMPs will be incorporated into a Stormwater Pollution Prevention Plan for the project, as required by the Caltrans NPDES permit.	Draft EIR/EA Section 2.11	Construction	Contractor		■
<b>GEOLOGY/SOILS/SEISMIC/TOPOGRAPHY</b>						
n/a	The Project would be designed to comply with both the Uniform Building Code and Caltrans' Design Standards.	Draft EIR/EA Section 2.12	Design through Construction	Caltrans, VTA, Contractor		■
<b>PALEONTOLOGICAL RESOURCES</b>						
MM-PALEO-1.1	Prior to the start of excavations, preparation of a Paleontological Mitigation Plan (PMP) will be prepared by a qualified Principal Paleontologist (M.S. or PhD in paleontology or geology familiar with paleontological procedures and techniques). The PMP will include monitoring of cuts more than eight feet below the historic grade (i.e., below an elevation of about 132 feet msl) by a qualified Paleontological Monitor. The PMP, at a minimum, also would include the components listed in Section 2.14.3 of the Draft EIR/EA.:	Draft EIR/EA Section 2.13	Design through Construction	Caltrans or VTA Paleontologist		■
MM-PALEO-1.2	If unanticipated discoveries of paleontological resources occur during project construction, all work within 25 feet of the discovery must cease and the find must be protected in place until it can be evaluated by a qualified paleontologist. Work may resume immediately outside of the 25-foot radius.	Draft EIR/EA Section 2.13	Construction	Contractor, Caltrans, VTA		■
<b>HAZARDOUS WASTE/MATERIALS</b>						
MM-HAZMAT-1.1	As part of project development, a soil investigation will be conducted to determine whether ADL has affected soils that will be excavated as part of the proposed Project. The investigation for ADL will be performed in accordance	Draft EIR/EA Section 2.14	Design through Construction	Caltrans, VTA, Contractor		■

ID Number	Task and Brief Description	Source	Project Timing	Responsible Staff	CEQA Mitigation Measure	Avoidance/Minimization Measure
	with Caltrans' Lead Testing Guidance Procedure. The analytical results will be compared against applicable hazardous waste criteria. Based on analytical results, the investigation will provide recommendations regarding management and disposal of affected soils in the project area including the reuse potential of ADL-affected soil during project development. The provisions of a variance granted to Caltrans by the California Department of Toxic Substances Control on September 22, 2000 (or any subsequent variance in effect when the Project is constructed) regarding aeri ally-deposited lead will be followed.					
MM-HAZMAT-1.2	Testing for the presence of lead-based paint on existing structures that will be modified or demolished by the Project will occur. If this substance is found to be present, applicable regulations pertaining to its removal and disposal will be followed.	Draft EIR/EA Section 2.14	Design through Construction	Caltrans, VTA, Contractor		■
MM-HAZMAT-1.3	Testing for the presence of asbestos-containing materials on existing structures that will be modified or demolished by the Project will occur. If these materials are found to be present, applicable regulations pertaining to their removal and disposal will be followed.	Draft EIR/EA Section 2.14	Design through Construction	Caltrans, VTA, Contractor		■
MM-HAZMAT-1.4	If work in the vicinity of Winchester Boulevard will involve drilling to groundwater and extraction of groundwater, the groundwater will be tested to determine if contamination is present in levels that exceed regulatory thresholds. If elevated levels of contamination are determined to be present and dewatering or extraction is anticipated, the investigation report will provide recommendations regarding proper treatment, if necessary, and disposal or reuse of affected groundwater.	Draft EIR/EA Section 2.14	Design through Construction	Caltrans, VTA, Contractor		■

ID Number	Task and Brief Description	Source	Project Timing	Responsible Staff	CEQA Mitigation Measure	Avoidance/Minimization Measure
<b>AIR QUALITY</b>						
MM-AIR-1.1	<p>The contractor for the Project shall submit a list of all off-road equipment greater than 25 horsepower (hp) that would be operated for more than 20 hours over the entire duration of Project construction, including equipment from subcontractors to BAAQMD for review and certification. The list shall include all information necessary to ensure the equipment meets the following requirement:</p> <ul style="list-style-type: none"> <li>Equipment shall be zero emissions or have engines that meet or exceed either EPA or ARB Tier 4 off-road emission standards, and it shall have engines that are retrofitted with a ARB Level 3 Verified Diesel Emissions Control Strategy (VDECS), if one is available for the equipment being used. Equipment with engines that meet Tier 4 Interim or Tier 4 Final emission standards automatically meet this requirement; therefore, a VDECS would not be required.</li> </ul>	Draft EIR/EA Section 2.15	Construction	Contractor		■
MM-AIR-1.2	Idling time of diesel-powered construction equipment and trucks shall be limited to no more than two minutes. Clear signage of this idling restriction shall be provided for construction workers at all access points.	Draft EIR/EA Section 2.15	Construction	Contractor		■
MM-AIR-1.3	All construction equipment shall be maintained and properly tuned in accordance with the manufacturers' specifications.	Draft EIR/EA Section 2.15	Construction	Contractor		■
MM-AIR-1.4	Portable diesel generators shall be prohibited. Grid power electricity should be used to provide power at construction sites; or propane and natural gas generators may be used when grid power electricity is not feasible	Draft EIR/EA Section 2.15	Construction	Contractor		■

<b>ID Number</b>	<b>Task and Brief Description</b>	<b>Source</b>	<b>Project Timing</b>	<b>Responsible Staff</b>	<b>CEQA Mitigation Measure</b>	<b>Avoidance/Minimization Measure</b>
MM-AIR-2.1	All haul trucks transporting soil, sand, or other loose material off-site shall be covered.	Draft EIR/EA Section 2.15	Construction	Contractor		■
MM-AIR-2.2	On-site dirt piles or other stockpiled PM shall be covered, wind breaks installed, and water and/or soil stabilizers employed to reduce wind-blown dust emissions. The use of approved nontoxic soil stabilizers shall be incorporated according to manufacturers' specifications to all inactive construction areas.	Draft EIR/EA Section 2.15	Construction	Contractor		■
MM-AIR-2.3	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. Dry power sweeping should only be performed in conjunction with thorough watering of the subject roads.	Draft EIR/EA Section 2.15	Construction	Contractor		■
MM-AIR-2.4	All vehicle speeds on unpaved roads and surfaces shall be limited to 15 mph when hauling material and operating non-earth moving equipment, and 10 mph when operating earth-moving equipment.	Draft EIR/EA Section 2.15	Construction	Contractor		■
MM-AIR-2.5	All roadway, driveway, and sidewalk paving shall be completed as soon as possible	Draft EIR/EA Section 2.15	Construction	Contractor		■
MM-AIR-2.6	All construction sites shall provide a posted sign visible to the public with the telephone number and person to contact at the lead agency regarding dust complaints. The recommended response time for corrective action shall be within 48 hours. BAAQMD's Complaint Line (1-800-334-6367) shall also be included on posted signs to ensure compliance with applicable regulations.	Draft EIR/EA Section 2.15	Construction	Contractor		■

<b>ID Number</b>	<b>Task and Brief Description</b>	<b>Source</b>	<b>Project Timing</b>	<b>Responsible Staff</b>	<b>CEQA Mitigation Measure</b>	<b>Avoidance/Minimization Measure</b>
MM-AIR-2.7	All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.	Draft EIR/EA Section 2.15	Construction	Contractor		■
MM-AIR-2.8	Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.	Draft EIR/EA Section 2.15	Construction	Contractor		■
MM-AIR-2.9	Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.	Draft EIR/EA Section 2.15	Construction	Contractor		■
MM-AIR-2.10	The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.	Draft EIR/EA Section 2.15	Construction	Contractor		■
MM-AIR-2.11	All transfer processes involving a free fall of soil or other PM shall be operated in such a manner as to minimize the free fall distance and fugitive dust emissions.	Draft EIR/EA Section 2.15	Construction	Contractor		■
MM-AIR-2.12	Site accesses to a distance of 100 feet from the paved road shall be treated with a 6-to 12-inch compacted layer of wood chips, mulch, or gravel.	Draft EIR/EA Section 2.15	Construction	Contractor		■
MM-AIR-2.13	Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.	Draft EIR/EA Section 2.15	Construction	Contractor		■
MM-AIR-2.14	Open burning shall be prohibited at the project site. No open burning of vegetative waste (natural plant growth	Draft EIR/EA	Construction	Contractor		■

ID Number	Task and Brief Description	Source	Project Timing	Responsible Staff	CEQA Mitigation Measure	Avoidance/Minimization Measure
	wastes) or other legal or illegal burn materials (e.g., trash, demolition debris) may be conducted at the project site. Vegetative wastes shall be chipped or delivered to waste-to-energy facilities (permitted biomass facilities), mulched, composted, or used for firewood. It is unlawful to haul waste materials off-site for disposal by open burning.	Section 2.15				
<b>NOISE AND VIBRATION</b>						
MM-NOI-1.1	All construction equipment shall conform to Section 14-8.02, Noise Control, of the latest Caltrans Standard Specifications.	Draft EIR/EA Section 2.16	Construction	Contractor		■
MM-NOI-1.2	When feasible, noise-generating construction activities shall be restricted to between 7:00 a.m. and 7:00 p.m. on weekdays, with no construction occurring on weekends or holidays. If work is necessary outside of these hours, Caltrans shall require the contractor to implement a construction noise monitoring program and provide additional noise controls where practical and feasible.	Draft EIR/EA Section 2.16	Construction	Contractor		■
MM-NOI-1.3	Pile driving activities shall be limited to daytime hours only.	Draft EIR/EA Section 2.16	Construction	Contractor		■
MM-NOI-1.4	All internal combustion engine driven equipment shall be equipped with manufacturer recommended intake and exhaust mufflers that are in good condition and appropriate for the equipment.	Draft EIR/EA Section 2.16	Construction	Contractor		■
MM-NOI-1.5	Unnecessary idling of internal combustion engines within 100 feet of residences shall be strictly prohibited.	Draft EIR/EA Section 2.16	Construction	Contractor		■

<b>ID Number</b>	<b>Task and Brief Description</b>	<b>Source</b>	<b>Project Timing</b>	<b>Responsible Staff</b>	<b>CEQA Mitigation Measure</b>	<b>Avoidance/Minimization Measure</b>
MM-NOI-1.6	Noise generating equipment shall be located as far as practical from sensitive receptors when sensitive receptors adjoin or are near the construction project area.	Draft EIR/EA Section 2.16	Construction	Contractor		■
MM-NOI-1.7	"Quiet" air compressors and other "quiet" equipment shall be utilized where such technology exists.	Draft EIR/EA Section 2.16	Construction	Contractor		■
MM-NOI-1.8	The existing soundwall along Tisch Way that is planned to be removed and replaced, shall be replaced as soon as feasible after the removal of the existing barrier.	Draft EIR/EA Section 2.16	Construction	Contractor		■
MM-NOI-2.1	Impact or vibratory pile driving methods will be prohibited when within the exceedance distances from vibration-sensitive structures as listed in Table 2.16-6. In such cases, drilled piles will be utilized if geological conditions permit their use as it produces lower vibration levels.	Draft EIR/EA Section 2.16	Design through Construction	Caltrans, VTA, Contractor		■
MM-NOI-2.2	A photo and crack monitoring survey will be undertaken for older residential structures and new residential, commercial, or industrial buildings exposed to vibration from impact pile driving located within the exceedance distances given in Table 2.16-6, based on the determination made as to the sensitivity of the structure to damage due to construction vibration. Preliminary review indicates that buildings including 3097 Moorpark Avenue, 2875 Moorpark Avenue, 2845 Moorpark Avenue, 2801 Moorpark Avenue, 2787 Moorpark Avenue, and 544 Dudley Avenue would have the potential to be impacted by heavy construction or impact pile driving.	Draft EIR/EA Section 2.16	Pre-Construction	Contractor		■
MM-NOI-2.3	A post-construction survey of structures where complaints of damage have occurred will be undertaken. Where	Draft EIR/EA	Post-Construction	Contractor		■

ID Number	Task and Brief Description	Source	Project Timing	Responsible Staff	CEQA Mitigation Measure	Avoidance/Minimization Measure
	damage has occurred as a result of project-related construction activities, appropriate repairs will be made.	Section 2.16				
MM-NOI-2.4	A person responsible for registering and investigating claims of excessive vibration by project-related activities will be designated. The contact information of such person shall be clearly posted on the construction site.	Draft EIR/EA Section 2.16	Construction	Contractor		■
<b>BIOLOGICAL RESOURCES</b>						
MM-BIO-1.1	Initial Survey. A survey for roosting bats in the soffit vents of the Monroe POC will be undertaken by a qualified bat biologist prior to the breeding season (i.e., April 1) in the year in which disturbance within 100 feet of the POC is scheduled to occur. If a visual survey (e.g., a dusk emergence survey) is not adequate to determine presence or absence of bats in soffit vents of the POC, acoustic equipment will be used to determine occupancy.	Draft EIR/EA Section 2.18	Pre-Construction	Caltrans or VTA Biologist		■
MM-BIO-1.2	Eviction/Exclusion. If any bats are found roosting in the Monroe POC, the bats will be safely evicted under the direction of a qualified bat biologist. Eviction of bats will occur at night to decrease the likelihood of predation (compared to eviction during the day). Eviction will occur between September 1 and March 31, outside the maternity season, but will not occur during long periods of inclement or cold weather (as determined by the bat biologist) when prey are not available or bats are in torpor. Eviction activities will be performed under the supervision of a qualified bat biologist. Following eviction (or following the initial survey, if no bats are detected), bat exclusion devices will be installed to prevent bats from taking up occupancy of the POC prior to its demolition.	Draft EIR/EA Section 2.18	Pre-Construction through Construction	Caltrans or VTA Biologist		■

ID Number	Task and Brief Description	Source	Project Timing	Responsible Staff	CEQA Mitigation Measure	Avoidance/Minimization Measure
MM-BIO-1.3	Pre-construction/Pre-disturbance Survey. Because the initial survey as described in MM-BIO-1.1 above will be conducted prior to the breeding season, several months could pass between the initial survey and the initiation of project activities that could potentially result in disturbance of roosting bats. Therefore, a pre-construction survey for roosting bats, following the methods described above, will be undertaken at the Monroe POC within 15 days prior to the commencement of demolition of the POC or demolition/construction within 100 feet of the POC to ensure that exclusion measures have been successful and that bats have not occupied a roost in that structure. If no active roosts are found, then no further action is warranted prior to demolition. In the unlikely event that bats have occupied a roost in the POC (e.g., if the exclusion measures were not successful), MM-BIO-1.4 will be implemented.	Draft EIR/EA Section 2.18	Pre-Construction through Construction	Caltrans or VTA Biologist		■
MM-BIO-1.4	Buffer. If bats have established a maternity roost in the Monroe POC despite the installation of exclusion measures, the bat biologist will determine the extent of a construction-free buffer around the active roost that will be maintained during the breeding season (i.e., from April 1 until the young are flying, typically after August 31). After the breeding season, the bats can be evicted as described in MM-BIO-1.2 above prior to demolition of the POC or demolition/construction within the buffer established by the bat biologist.	Draft EIR/EA Section 2.18	Pre-Construction through Construction	Caltrans or VTA Biologist		■
MM-BIO-2.1	Avoidance of Nesting Bird Season. To the extent feasible, project activities should be scheduled outside the avian nesting season to avoid impacts on nesting birds (including raptors) protected under the MBTA and	Draft EIR/EA Section 2.18	Final Design	Caltrans, VTA		■

ID Number	Task and Brief Description	Source	Project Timing	Responsible Staff	CEQA Mitigation Measure	Avoidance/Minimization Measure
	California Fish and Game Code. The nesting season for most birds in Santa Clara County typically extends from February 1 through August 31, although some birds may nest as early as January 1.					
MM-BIO-2.2	Preconstruction Survey. If it is not possible to schedule project activities between September 1 and December 31, then preconstruction surveys will be undertaken by a qualified biologist to identify any nests within the project area so that protection measures can be implemented to avoid disturbance to these nests. These surveys will be undertaken no more than 48 hours prior to the initiation of project activities. During these surveys, a qualified biologist will inspect all potential nesting habitats (e.g., trees, shrubs, and structures) within 300 feet of impact areas for raptor nests and within 100 feet of impact areas for nests of non-raptors. 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, will 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 project implementation.	Draft EIR/EA Section 2.18	Pre-Construction through Construction	Caltrans or VTA Biologist		■
MM-BIO-2.3	Nest Deterrence. If project activities will not be initiated until after the start of the nesting season, potential nesting substrate (e.g., bushes, trees, and other vegetation, and structures) scheduled to be removed by the Project may be removed prior to the start of the nesting season (e.g., prior to January 1) to reduce the potential for initiation of	Draft EIR/EA Section 2.18	Pre-Construction through Construction	Caltrans or VTA Biologist		■

ID Number	Task and Brief Description	Source	Project Timing	Responsible Staff	CEQA Mitigation Measure	Avoidance/Minimization Measure
	<p>nests within the work area. Nest deterrence may also include the use of netting or screening to block birds' access to nest sites and blocking soffit vents so birds such as white-throated swifts and northern rough-winged swallows cannot enter them to nest. Deterrence may be particularly important on bridges that will be physically altered by project activities, to avoid constraints on the project's schedule if nesting birds are present. If netting is used, it must be inspected daily and well maintained to prevent birds from being trapped in or behind the netting. At the Monroe POC, any nesting bird deterrence measures will be coordinated with the bat measures described above to ensure that both birds and bats can be effectively excluded without injury or mortality of individuals of either group.</p>					
MM-BIO-3.1	<p>The project will avoid and minimize impacts by clearly indicating on all construction plan sets the trees to be removed. Trees to be retained will be protected by tree exclusion fencing placed at the dripline of the preserved trees.</p>	Draft EIR/EA Section 2.18	Design through Construction	Caltrans, VTA, Contractor		■
MM-BIO-3.2	<p>Except for within Santana Park, trees impacted by the project will be replaced at ratios that are commensurate with the size of the tree to be removed. Native trees with a diameter at breast height (DBH) of less than 12 inches will be replaced at a 2:1 ratio. Native trees with a DBH of 12 inches or more will be replaced at a 3:1 ratio. If urban trees (nonnatives and ornamentals) are replaced with native trees, a reduced mitigation ratio of 1:1 for all trees smaller than 12 inches DBH, and 2:1 for all trees with a DBH of 12 inches or more, will be implemented. Replacement 24-inch box trees will be considered where</p>	Draft EIR/EA Section 2.18	Design through Construction	Caltrans, VTA, CSJ PRNS Staff (for trees in Santana Park), Contractor	■	

ID Number	Task and Brief Description	Source	Project Timing	Responsible Staff	CEQA Mitigation Measure	Avoidance/Minimization Measure
	<p>feasible. The replacement trees will be irrigated and maintained for a period of not less than three years. If trees cannot be replaced at the stated ratios within the project footprint, in-lieu fees will be paid to an appropriate fund so that trees can be planted elsewhere within the City of San José limits.</p> <p>For tree removal impacts within Santana Park, the minimum tree replacement ratios and sizes listed in Table 2.4-1 will be utilized.</p>					
<b>INVASIVE SPECIES</b>						
MM-INV-1.1	<p>Prior to vegetation clearing and grubbing, vehicles (including wheels, undercarriages, and bumpers) and all other equipment, will be washed before and after entering the project's construction site. Vehicles will be cleaned at legally operating car washes before entering the construction site and at existing construction yards after they have encountered vegetation. All washing will follow appropriate stormwater BMPs. Only clean water in washing (no soap or detergent) will be used and appropriate runoff containment BMPs will be implemented. Wash water will be discharged in a way that it does not enter a storm drain (i.e., let it soak into a pervious area on site). Vegetation will be disposed of off-site. After clearing and grubbing of the vegetation has been completed, construction vehicles will use designated entrance/exits and no washing will be required.</p>	Draft EIR/EA Section 2.19	Construction	Contractor		■
<p>Notes:</p> <p>VTA = Santa Clara Valley Transportation Authority</p>						

ID Number	Task and Brief Description	Source	Project Timing	Responsible Staff	CEQA Mitigation Measure	Avoidance/Minimization Measure
CSJ PRNS Staff = Staff of the City of San Jose's Parks, Recreation, and Neighborhood Services Department						

# **APPENDIX**

## **D**

---

### **List of Acronyms and Abbreviations**

# List of Acronyms and Abbreviations

ADA	Americans with Disabilities Act
ADL	aerially-deposited lead
APE	Area of Potential Effects
BAAQMD	Bay Area Air Quality Management District
BRT	bus rapid transit
BSA	biological study area
BTU	British Thermal Unit
CalEPA	California Environmental Protection Agency
CARB	California Air Resources Board
CDFW	California Department of Fish & Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CRHR	California Register of Historic Resources
CWA	Clean Water Act
dBA	a-weighted decibel
DBH	diameter at breast height
DTSC	(California) Department of Toxic Substances Control
EB	eastbound
EIR/EA	Environmental Impact Report/Environmental Assessment
EPA	(United States) Environmental Protection Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GHG	greenhouse gas
GSRD	gross solids removal device
HOV	high occupancy vehicle
ISA	Initial Site Assessment
Leq[h]	hourly noise equivalent level
L <sub>max</sub>	maximum noise level
LOS	level of service

LUST	leaking underground storage tank
MBTA	Migratory Bird Treaty Act
MCE	maximum credible earthquake
MOU	memorandum of understanding
MSAT	mobile source air toxic
MTC	Metropolitan Transportation Commission
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NB	northbound
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
NO <sub>2</sub>	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
O <sub>3</sub>	ozone
Pb	lead
PM <sub>2.5</sub>	particulate matter – 2.5 microns in size
PM <sub>10</sub>	particulate matter – 10 microns in size
PMP	Paleontological Mitigation Plan
POC	pedestrian overcrossing
PPV	peak particle velocity
PRC	(California) Public Resources Code
PRNS	San Jose Parks Recreation & Neighborhood Services Department
RAP	Relocation Assistance Program
RCRA	Resource Conservation and Recovery Act
RSA	Resource Study Area
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	southbound
SCVWD	Santa Clara Valley Water District
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SJC	Norman Y. Mineta San Jose International Airport
SO <sub>2</sub>	sulfur dioxide
SR	State Route
SWMP	Stormwater Management Plan

SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCE	temporary construction easement
TDM	transportation demand management
TIP	Transportation Improvement Program
TMP	Traffic Management Plan
TSCA	Toxic Substances Control Act
TSM	transportation systems management
WB	westbound
USDOT	United States Department of Transportation
USFWS	United States Fish & Wildlife Service
VHP	Santa Clara Valley Habitat Plan
VHT	vehicle hours traveled
VMT	vehicle miles traveled
VTA	Santa Clara Valley Transportation Authority
VTP 2040	Valley Transportation Plan 2040

# **APPENDIX**

## **E**

---

### **Notice of Preparation**

# Notice of Preparation

---

## Notice of Preparation

To: \_\_\_\_\_  
\_\_\_\_\_  
(Address)

From: Caltrans, District 4  
111 Grand Avenue, MS 8B  
Oakland, CA 94612  
(Address)

**Subject: Notice of Preparation of a Draft Environmental Impact Report**

Caltrans will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study (  is  is not ) attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to Charlie Winter, Associate Environmental Planner at the address shown above. We will need the name for a contact person in your agency.

**Project Title:** I-280/Winchester Boulevard Interchange Improvements Project

**Project Applicant, if any:** Santa Clara Valley Transportation Authority

Date 09/01/2020

Signature *Charles Winter*

Title Associate Environmental Planner

Telephone 510-286-6025

**Reference:** California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15082(a), 15103, 15375.

# Notice of Preparation of a Draft Environmental Impact Report/Environmental Assessment

## SUPPLEMENTAL PROJECT INFORMATION:

### Introduction

The California Department of Transportation (Caltrans), in cooperation with the Santa Clara Valley Transportation Authority (VTA) and the City of San José, proposes to modify the existing Interstate 280 (I-280)/ Winchester Boulevard interchange by constructing a new off-ramp from northbound I-280 to the intersection of Tisch Way and Hatton Street and a new direct connector ramp from northbound State Route (SR) 17 to northbound I-280. The project features are shown in Figure 1.

### Purpose and Need

#### Purpose

The purpose of the Project is to improve traffic operations on freeways and local streets in the project area. Specifically, the objectives of the Project are to:

- Improve traffic operations and reduce congestion on the local roadways in the project area.
- Improve bicycle and pedestrian access and transit connectivity in the project area.
- Improve access from I-280 to the project area.

#### Need

There are several factors that, both individually and cumulatively, have resulted in significant congestion and delay on the freeways and local streets in the project area:

- Substantial local congestion has occurred along the Winchester Boulevard and Stevens Creek corridors. Traffic volumes on Winchester Boulevard and Stevens Creek Boulevard have increased by 15% over the past five years as a result of local growth. Traffic demands at the I-880/Stevens Creek interchange are expected to grow by another 20% by 2040 and will likely exceed capacity before that time.
- Substantial residential and commercial growth has occurred in the project area along the Winchester Boulevard corridor. Included in this growth are several expansions of Santana Row (large mixed-use development) and Westfield Valley Fair Mall (large regional shopping center); the planned Urban Villages including the Santana Row/Valley Fair Urban Village,

Winchester Boulevard Urban Village, and the Stevens Creek Urban Village; additional planned residential and commercial developments in the area; and regional economic growth. Increased travel demand has resulted from this growth and additional travel demand is expected from the planned developments.

- There is no direct access from northbound I-280 to the project area. Traffic that would otherwise exit northbound I-280 to the project area is forced to use the I-880/Stevens Creek Boulevard interchange.
- Insufficient multi-modal access and connectivity exist within the project area. The Winchester Boulevard corridor within the project area is heavily traveled by pedestrians and bicyclists. The Winchester Boulevard corridor is classified as “high caution” on the Santa Clara Valley Bikeways Map, identifying a need to better accommodate bicyclists. There are several existing local bus routes that serve the project area, including the 23, 25, and 60 lines, with added plans for a future Bus Rapid Transit line along Stevens Creek Boulevard. Safe and efficient multimodal connectivity within the project area is needed to integrate a multimodal transportation system in the project area.

## Project Description

The Project would modify the existing I-280/Winchester Boulevard interchange by constructing a new off-ramp from northbound I-280 to the intersection of Tisch Way and Hatton Street and a new direct connector ramp from northbound SR17 to northbound I-280. These and other project features are described below.

### Tunnel Off-ramp to Tisch Way

The new off-ramp to Tisch Way would diverge from the current northbound I-280 off-ramp to Stevens Creek Boulevard; run parallel to northbound I-280 separated by a concrete barrier; cross under the I-880 separation structure, which would be widened with tie-back walls; cross under the existing southbound I-280 to northbound I-880 connector ramp structure; tunnel for a total distance of approximately 500 feet under a new northbound SR17 to northbound I-280 connector ramp, the existing southbound I-880 to northbound I-280 connector ramp, and Tisch Way; and rise to terminate at the existing Tisch Way and Hatton Street intersection. Tisch Way would be realigned to accommodate the northbound I-280 off-ramp. Retaining walls would be constructed between Tisch Way and northbound I-280 to support the realigned portion. A new traffic signal would be installed at the intersection of Tisch Way and Hatton Street.

### Flyover Connector Ramp

A new direct connector ramp would be constructed to provide access from northbound SR17 to northbound I-280. The connector ramp would diverge from the existing northbound SR17 to southbound I-280 connector ramp and would “flyover” the I-280/I-880/SR17 interchange as a fourth level ramp structure and would merge with I-280 northbound west of the I-280/I-880/SR17 interchange. The new connector ramp would reach a maximum height of approximately 70 feet above I-280. The

connector ramp would widen to two (2) lanes along its length before merging to one lane and entering onto northbound I-280 as an auxiliary lane to Saratoga Avenue.

The existing northbound SR17 to northbound I-280 loop ramp would be removed. The existing northbound lane drop on I-280 west of the I-880 separation structure would be eliminated and I-280 would carry three (3) mixed flow and one (1) high occupancy vehicle (HOV) lanes under the I-880 separation structure.

The existing Monroe Pedestrian Overcrossing (POC) conflicts with the proposed northbound I-280 off-ramp and would be replaced with a new POC. The new Monroe POC would be constructed at the corner of Monroe Street and Tisch Way within Santana Park and be approximately 16-feet wide. The POC would rise to the west for approximately 450 feet. The POC would then turn south for approximately 400 feet, crossing Tisch Way, the proposed northbound I-280 off-ramp, I-280, and the southbound I-280 to northbound I-880/southbound SR17 connector ramp. The POC would then turn to the east and descend for approximately 550 feet to conform with the existing Monroe pedestrian path north of Moorpark Avenue.

In addition, the Project would include the following roadway improvements:

- The existing Winchester Boulevard bridge over I-280 would be widened by approximately 35 feet to provide enhanced bicycle and pedestrian facilities in both directions. As part of this, the lane configuration on Winchester Boulevard across the bridge would be modified to improve operations at both the Winchester Boulevard/Moorpark Avenue and the Winchester Boulevard/Tisch Way intersections.
- A portion of the existing soundwalls along the north side of I-280 and east of Winchester Boulevard would be removed and replaced.
- Buffered bike lanes and approximately 10-foot wide sidewalks would be added on both northbound and southbound Winchester Boulevard within the project limits.
- Dedicated bike lanes would be constructed on Tisch Way from Hatton Street to Winchester Boulevard.

## Probable Environmental Effects

Based on preliminary surveys and information, Caltrans has identified the following main subject areas for analysis in the EIR/EA. The scope of environmental analysis will be modified based on public input during the project scoping period.

### Air Quality

An air quality analysis will be completed to quantify the effects of the Project on the ambient air quality of the project study area, and the region. An air quality study will be completed to document if the Project will expose residences or other sensitive receptors to substantial air quality pollutants. The

environmental document will summarize this study and identify Best Management Practices (BMPs) and, if necessary, mitigation measures to reduce impacts to air quality during Project construction and operation.

### Biological Resources

A biological study will be completed to determine if sensitive wildlife, plants, or habitat is present within the project study area. In addition, a tree survey will be completed to identify the trees anticipated to be removed by the project. The environmental document will summarize the biological study and tree survey and, if necessary, identify mitigation measures to reduce or avoid impacts to biological resources.

### Community Impacts

Potential social, economic, public services, land use, and growth impacts will be discussed and addressed in the environmental document, including potential impacts to Frank Santana Park and potential community concerns during construction of the Project. If necessary, mitigation measures to reduce or avoid community impacts will be identified.

### Cultural Resources

Archaeology and historic reports, and Native American consultation, will be completed to determine if cultural resources would be impacted by the Project. The environmental document will summarize the reports and consultation process and, if necessary, identify mitigation measures to reduce or avoid impacts to cultural resources.

### Geology and Soils

Geology and paleontology reports will be completed to identify geologic hazards, such as active faults, landslides, and liquefiable soils, and the potential for fossils to be present in the project area. The reports will be summarized in the environmental document. If necessary, mitigation measures to reduce or avoid geology and soils impacts will be identified.

### Greenhouse Gas Emissions

A greenhouse gas (GHG) study will be completed for the Project to determine if the project would substantially increase GHG emissions. The environmental document will summarize the study and, if necessary, identify mitigation measures to reduce or avoid GHG emission impacts.

### Hazardous Materials

A hazardous materials report will be completed to determine the potential for the project to disturb contaminated soil. The report will be summarized in the environmental document. If necessary, mitigation measures will be identified to reduce or avoid hazardous materials impacts.

### Hydrology and Water Quality

Short and long-term effects of the Project on water quality will be analyzed and summarized in the environmental document, including temporary water quality impacts resulting from Project construction activities. Construction BMPs and, if necessary, mitigation measures to reduce or avoid water quality impacts will be identified.

### Noise and Vibration

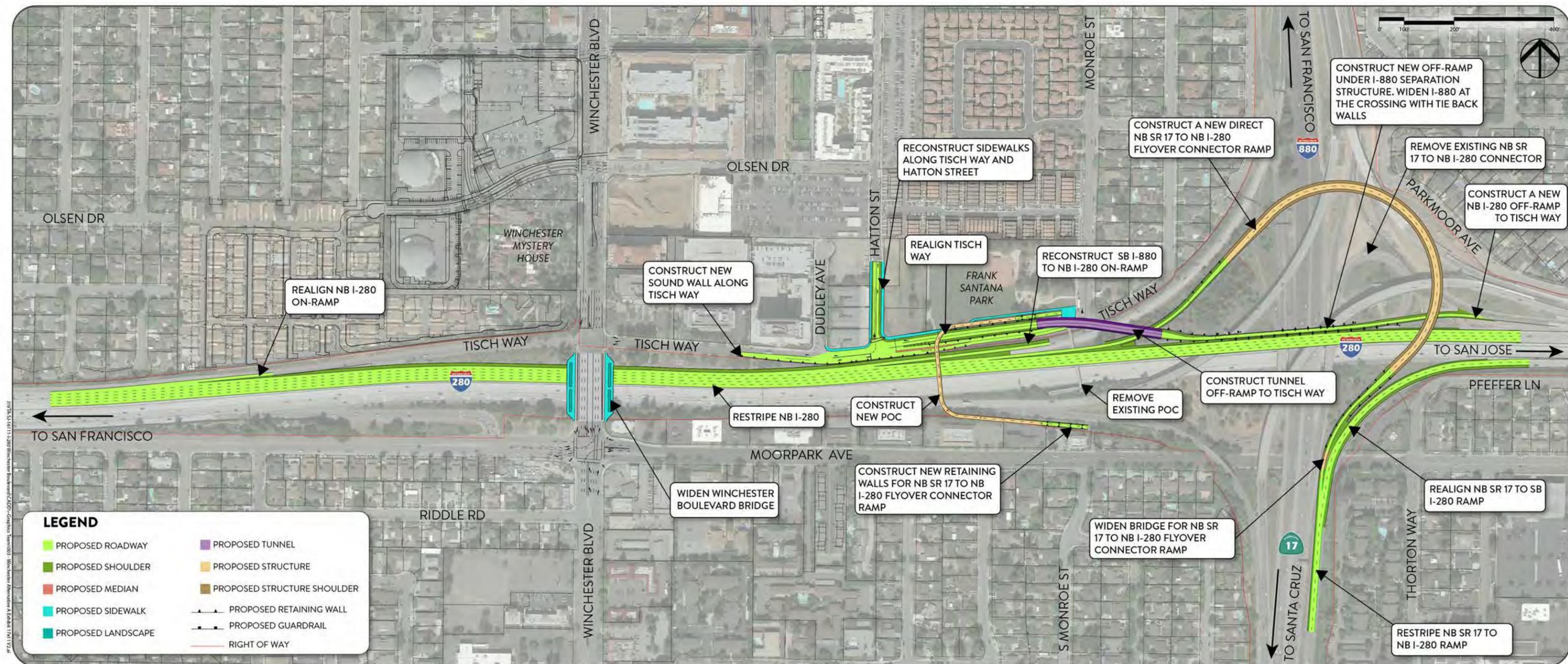
A noise study report will be prepared to determine if Project construction and/or operational noise or vibration impacts would occur on nearby land uses. Current noise levels will be measured, and future noise levels will be modeled based on Project traffic operations. The environmental document will summarize the noise study and, if necessary, identify mitigation measures to reduce or avoid noise impacts.

### Visual

An assessment of Project visual and aesthetic effects, such as, proposed structures, lighting, and tree and vegetation removal, will be completed and summarized in the environmental document. If necessary, mitigation measures will be identified to reduce or avoid visual and aesthetic impacts.

### Traffic and Transportation

A traffic analysis would be completed for the Project. The traffic analysis will focus on Project improvements to freeway and roadway operations in the project area and calculate vehicle miles travelled (VMT) with and without the Project. Potential impacts to bicycle and pedestrian circulation will also be analyzed and summarized in the environmental document. If necessary, mitigation measures will be identified to reduce or avoid transportation impacts.



I-280 WINCHESTER BOULEVARD IMPROVEMENTS  
BUILD ALTERNATIVE

# **APPENDIX**

## **F**

---

### **List of Technical Studies**

# List of Technical Studies

The following technical studies were prepared for the I-280/Winchester Boulevard Interchange Improvements Project:

Name of Study	Study Author	Study Date
Air Quality Report	Illingworth & Rodkin	April 2022
Community Impact Memorandum	David J. Powers & Associates	November 2021
Noise Study Report	Illingworth & Rodkin	March 2022
Construction Vibration Report	Illingworth & Rodkin	March 2022
Natural Environment Study with Tree Survey	H. T. Harvey & Associates/HortScience	November 2021
Initial Site Assessment	Parikh Consultants	February 2021
Preliminary Geotechnical Design Report	Parikh Consultants	April 2022
Historic Properties Survey Report	Far Western Anthropological Research Group	October 2021
Archaeological Survey Report/XP1 Report	Far Western Anthropological Research Group	January 2021
Supplemental Archaeological Survey Report	Far Western Anthropological Research Group	September 2021
Historic Resources Evaluation Report	JRP Historical Consulting	September 2021
Paleontological Investigation Report/Paleontological Evaluation Report	Cogstone Resource Management	November 2020
Traffic Operations Analysis Report	DKS Associates	November 2021
Visual Impact Assessment	Earthview Science	June 2022
Water Quality Assessment Report	Mark Thomas	April 2022

# **APPENDIX**

## **G**

---

**USFWS**

**Species List**



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Sacramento Fish And Wildlife Office  
Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846  
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To:  
Project Code: 2023-0036025  
Project Name: I-280/Winchester Blvd NES-MI

January 20, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

## To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2))

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

**Migratory Birds:** In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

---

Attachment(s):

- Official Species List

## **Official Species List**

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

### **Sacramento Fish And Wildlife Office**

Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846  
(916) 414-6600

---

## Project Summary

Project Code: 2023-0036025

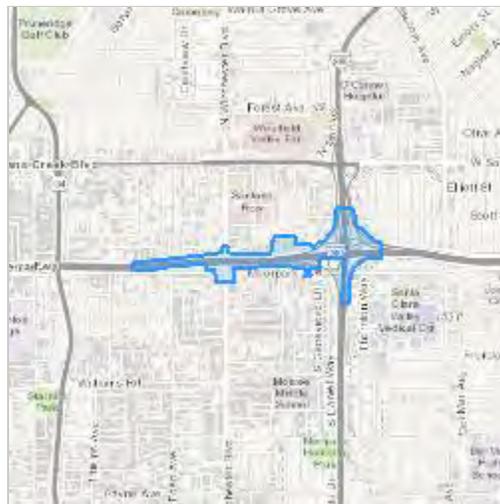
Project Name: I-280/Winchester Blvd NES-MI

Project Type: Road/Hwy - Maintenance/Modification

Project Description: The California Department of Transportation (Caltrans), in cooperation with the Santa Clara Valley Transportation Authority (VTA) and the City of San Jose, proposes to modify construct improvements in the vicinity of the existing Interstate 280 (I-280)/ Winchester Boulevard interchange in San Jose by constructing a new off-ramp from northbound I-280 to the intersection of Tisch Way and Hatton Street, and a new direct connector ramp from northbound State Route (SR) 17 to northbound I-280, and widening the existing northbound SR17 to southbound I-280 ramp overcrossing at Moorpark Avenue.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@37.317185699999996,-121.94486937468184,14z>



Counties: Santa Clara County, California

## Endangered Species Act Species

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### Birds

NAME	STATUS
California Clapper Rail <i>Rallus longirostris obsoletus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/4240">https://ecos.fws.gov/ecp/species/4240</a>	Endangered
California Condor <i>Gymnogyps californianus</i> Population: U.S.A. only, except where listed as an experimental population There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8193">https://ecos.fws.gov/ecp/species/8193</a>	Endangered
California Least Tern <i>Sterna antillarum browni</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8104">https://ecos.fws.gov/ecp/species/8104</a>	Endangered

### Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a>	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (Central CA DPS) There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2076">https://ecos.fws.gov/ecp/species/2076</a>	Threatened

## Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/321">https://ecos.fws.gov/ecp/species/321</a>	Threatened

## Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

## Flowering Plants

NAME	STATUS
Robust Spineflower <i>Chorizanthe robusta var. robusta</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/9287">https://ecos.fws.gov/ecp/species/9287</a>	Endangered

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

## **IPaC User Contact Information**

Agency: H. T. Harvey & Associate  
Name: Jeffery Wilkinson  
Address: 983 University Avenue  
Address Line 2: Building D  
City: Los Gatos  
State: CA  
Zip: 95032  
Email: [jwilkinson@harveyecology.com](mailto:jwilkinson@harveyecology.com)  
Phone: 4084589200

---