

# El Camino Real Specific Plan Draft Environmental Impact Report

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SCH No. 2017102082

Prepared for:  
**City of Sunnyvale**



Prepared by:  
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INTERNATIONAL

March 2022



# CITY OF SUNNYVALE

## EL CAMINO REAL SPECIFIC PLAN

### DRAFT ENVIRONMENTAL IMPACT REPORT

*SCH No. 2017102082*



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**March 2022**



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## ES Executive Summary

### ES-1.1 Project Location

Sunnyvale is located in northwest Santa Clara County in an area commonly referred to as the South Bay or Silicon Valley. Sunnyvale is surrounded by Mountain View and Los Altos to the west, Cupertino to the south, Santa Clara to the east, and the San Francisco Bay Area to the north. Regional access to the Specific Plan Area is provided by US Highway 101 to the north, Interstate-280 to the south, and State Route 85 and State Route 237 to the west. The project area is composed of approximately 350 acres of properties that are located immediately adjacent to El Camino Real, running diagonally across the City from east to west (Mountain View to Santa Clara). The regional context of the Project Area is shown in **Figure 2.1, Regional Map**, and the Plan Area is shown in greater detail in **Figure 2.2, Local Vicinity Map/Project Area**.

### ES-1.2 Proposed Summary

The Specific Plan has been drafted with the goal of enabling the transition of the corridor to a vibrant, mixed-use area with improved streetscapes and safer environments for walking, bicycling, and other modes of transportation. The Specific Plan builds upon the City's 2007 *Precise Plan for El Camino Real* and the corridor's assets and includes a comprehensive strategy to address land use, economic vitality, urban design, and multimodal connectivity.

Additionally, the *Grand Boulevard Initiative*, the regional land use and transportation strategy for the El Camino Real corridor along its entire length through 19 cities from Daly City to San Jose, envisions increased transit service and enhanced opportunities for residential development along the length of the corridor. This is in alignment with the City's Land Use and Transportation Element (LUTE) of the General Plan, which plans for the transformation of the El Camino Real corridor through significant changes to building form and development character.

#### ES-1.2.1 Project Background

The original *Precise Plan for El Camino Real* was adopted by the City Council in 1993, and last updated in 2007. Since that time, market conditions have continued to evolve and development interest in the El Camino Real corridor has greatly increased. Today, the 4-mile stretch of El Camino Real in Sunnyvale remains an important regional connector as well as a valuable economic asset to the City. The corridor is the most traveled multimodal corridor in the City and serves the needs of local neighborhoods as well as regional communities. Although the 2007 *Precise Plan* enhanced the vision for El Camino Real, it lacks sufficient detail to effectively guide development and address the perceived challenges raised by community stakeholders. Therefore, in January 2014, the Sunnyvale City Council initiated the process to update the *Precise Plan for El Camino Real*.

After kicking off the update of the Precise Plan in 2015, the City Council created the El Camino Real Plan Advisory Committee, a citizen's advisory committee, to work with staff and consultants to develop the development concepts, vision statement, policies, and land use alternatives for the corridor. In September 2016, the City began a series of ongoing public workshops to report on recent project activities and support an open discussion on the City's Vision Statement, Vision Priorities, and Land Use Alternatives that would guide the project moving forward. In August 2017, the City Council identified a Preferred Land Use Alternative, and the analysis began to assess and refine the details of the proposed land use mix.

### *ES-1.2.2 Project Characteristics*

The purpose of the Project is to provide an overall vision and guidance to transform the Plan Area into a mixed-use corridor with a substantial amount of additional housing opportunities. The plan envisions improved streetscapes, and safer, more enjoyable environments for walking, bicycling, and other modes of transportation, while preserving the quality of life for adjacent neighborhoods and existing assets to the community. The Project includes development policies, land use regulations, design guidelines, infrastructure improvement plans, and an implementation and financing program to help guide development within the Plan Area. The Project is expected to guide development through 2035 and includes recommendations for conceptual modifications to the roadway and streetscape enhancements to enable safer and a greater number of multi-modal transportation options along Sunnyvale's stretch of El Camino Real. The project will also include land use amendments to the Sunnyvale General Plan and the Sunnyvale Municipal Code.

### *ES-1.2.3 Project Vision*

The Vision Statement adopted to guide the development of the Project is as follows:

*Sunnyvale's El Camino Real corridor will offer vibrant destinations and a people-friendly environment while continuing to be the community-serving arterial residents of Sunnyvale and surrounding cities will use for their daily needs. It will build on its strengths and opportunities and evolve into a dynamic place where people live, work, shop and gather.*

*Residents and visitors will walk along wide sidewalks lined with mature, large-canopied trees. They will meet friends and family at public plazas surrounded by a variety of shopping and dining options. Throughout the corridor, they will enjoy public art that exhibit local talents and cultural diversity, celebrate Sunnyvale's agricultural origins or display the City's role in high tech evolution.*

*Streetscape and road improvements will provide safety and help promote every day walking, biking and transit use in and around the corridor. Connecting paths from surrounding neighborhoods and parallel streets created through developments fronting El Camino Real will give residents the option to walk or bike to shops and*

*restaurants. Gateways, signs and clear pedestrian paths will lead to the lively Downtown or the Community Center.*

*The corridor will feature four main nodes of greater activity at key intersections where public transportation, housing, amenities and services will be strongly integrated. A variety of new residences will be built for a range of incomes and generations. New and long-established businesses and auto dealerships will coexist and continue to thrive in updated and prominent storefronts. Developments will display the City's commitment to sustainability. Buildings will be designed in timeless architecture with forms that seamlessly transition to and respect the surrounding residential neighborhoods, especially those with one- or two-story residences.*

*El Camino Real will continue to change over time, but will continue to play a vital role for Sunnyvale. It will retain existing viable uses while accommodating new uses through reinvestment that promotes economic vitality. Change will be managed in a manner that continues to create positive community benefits for generations to come.*

More specifically, the Project is focusing on creating an environment that emphasizes circulation and accessibility and prioritizes the following:

- 1) Efficient circulation patterns.
- 2) Safe and convenient multi-modal access.
- 3) Appropriately scaled buildings that preserve the quality of life of adjacent neighborhoods and existing community assets.
- 4) Supportive environment for small and local businesses.
- 5) Housing opportunities that help meet the needs of the community.
- 6) Supporting a sustainable community.

#### *ES-1.2.4 Project Objectives*

Using the Vision Statement as a guide, the Project is intended to accomplish the following objectives:

- Increase opportunities for new mixed-use developments and encourage the development of unique, smaller-scale housing types such as studios and micro-units.
- Provide opportunities for a variety of housing options to serve residents at all income levels and various stages of life.



- Facilitate the efficient flow of traffic for all modes of travel and prioritize environmentally-efficient modes of transportation.
- Improve pedestrian amenities, bicycle facilities, transit, and landscaping to enhance multi-modal environments and promote safe, convenient access to all locations along the corridor and beyond.
- Promote high-quality and appropriately-scaled buildings that preserve quality of life for adjacent neighborhoods and contribute to an attractive, comfortable, and safe streetscape along the corridor.
- Support local and regional-serving commercial uses that highlight the corridor's history and support economic vitality.
- Support coexistence of auto-dealerships and other businesses with a regional draw with nearby small businesses and residences.
- Provide a diverse range of shopping and dining options within walking distance of surrounding residences.
- Encourage a focus on sustainable options in building design, transportation, construction, site planning, energy, stormwater management, and greenhouse gas emissions reduction.

#### ES-1.2.5 *Land Uses and Design*

A key strategy in the Specific Plan updates the defining concept of “nodes,” which was originally introduced and detailed in the *2007 Precise Plan for El Camino Real*. The Specific Plan envisions the nodes as unique neighborhoods that draw on the differing characteristics that define them, in combination with the land use amenities and transportation opportunities that exist for each.

With a focus on development in the nodes, the Preferred Land Use Alternative (proposed project) that was selected by the City Council to be studied (and analyzed herein) includes a net increase of 6,900 residential units and up to 730,000 square feet of commercial development (over existing conditions) within the Specific Plan Area. **Figure 2-4, Proposed Zoning Map** and **Figure 2-5, Proposed Land Use Map** identify the land use and zoning for the four nodes and three segments along the corridor.

The nodes also contain transit stops and bicycle lanes to provide circulation access by a variety of means. Nodes (and the corridor segments that connect them) are intended to be distinct areas of development form and design. Each node would be guided by specific development standards and design guidelines that are established to promote high-quality design, a vibrant mix of uses, and environments supportive of access to all modes of transportation. By understanding specific qualities that are present in each of the nodes, including their physical histories as well as their future opportunities, the Specific Plan directs future growth of each node as a natural evolution

of the characteristics that have shaped them. A description of the four nodes included within the Specific Plan Area is provided in Section 2.0, Project Description.

### Segments

There are three segments along El Camino Real: the West Segment, the Center Segment, and the East Segment. The segments within the Specific Plan serve as important linkages between the four nodes. The segments have historically been developed with automobile-oriented businesses providing primarily retail and service opportunities along the corridor. There are several physical constraints (such as limited lot width and depth) or development issues associated with many of the parcels in the segments, which make them less suited for redevelopment. Due to these constraints, residential mixed-use redevelopment in the corridor segments is only allowed on key parcels within the Center and East Segments.

### Specific Plan Area Build-Out

The Specific Plan contains goals, policies, development standards, and design guidelines to regulate development within each of the Specific Plan Area's nodes and segments. The Specific Plan establishes new land use designations that promote additional housing within the corridor while maintaining existing commercial uses and providing opportunities for additional commercial development. In addition to maintaining the existing commercial uses, the project also identifies opportunities for new residential development.

Due to changes in state law, the Specific Plan will no longer impose a maximum housing cap for the Plan Area. Instead, the Specific Plan will establish base maximum residential densities. By using local incentives and the state Density Bonus Law, the proposed plan has the potential to result in a total buildout within the Plan Area of approximately 8,500 residential units and 3,980,000 square feet of commercial floor area. This represents a net increase (above existing conditions) of approximately 6,900 residential units and 730,000 square feet of commercial floor area (made up of approximately 426,000 square feet of retail commercial, 80,000 square feet of office commercial, and 224,000 square feet of hotel uses). When compared to development totals currently allowed with the future buildout of the General Plan, the 8,500 residential units included in the Specific Plan has the potential to represent an increase of 2,700 dwelling units and a decrease of approximately 220,000 square feet of commercial floor area under the General Plan.

Under the Specific Plan, new base maximum densities are established for the residentially-zoned sites, which range from 24 to 42 dwelling units per acre on specific sites in the nodes and 24 to 33 dwelling units per acre on specific sites in the Center and East Segments. However, applicants may still achieve densities above these base maximum densities on some of the residentially zoned sites through the local community benefits program (known as the ECR Incentive Program), through the State Density Bonus Law on all residentially zoned sites, or through both on sites eligible to use the ECR Incentive Program. Depending on the total number of incentive points a project is eligible to achieve through provision of community benefits, when allowed by the zoning, an applicant may achieve densities ranging from 30 to 80 du/ac on specific sites in the

Nodes and 30 to 45 dwelling units per acre on specific sites in the Center and East Segments. Additionally, if a project proposes to include affordable units under State Density Bonus Law, the bonus percentage that must be provided under state law is added to the maximum density obtained with incentive points, if applicable, for the particular project. If a project does not propose or is not eligible for incentive points through the ECR Incentive Program, the bonus percentage that must be provided under state law is added to the base maximum density.

Refer to **Table 2-1** in Section 2.0, Project Description, for the base maximum densities in each residential zoning district, the total available incentive points allowed for eligible residential zoning districts, and the minimum commercial floor area ratio (FAR) requirement for the mixed-use and non-residential zoning districts. The additional densities achieved through State Density Bonus Law are not listed due to the voluntary nature of the program and varying percentages by participating projects.

### ES-1.2.6 *Circulation*

El Camino Real is a vital part of the local and regional circulation network. The corridor also serves as an important route for the transit network. El Camino Real is an uninterrupted route for east-west travel, which can serve bicyclists seeking more direct routes to travel across the City. The corridor was identified by the City of Sunnyvale as a high-priority bicycle corridor. In terms of walkability and regional importance, much of the Specific Plan Area has been identified as a regional Priority Development Area (PDA) with potential for higher density and walkable infill development.

Current infrastructure along El Camino Real favors the movement of automobiles through the corridor and does not contain many features that are safe or attractive to pedestrians and bicyclists. A complete streets approach that accommodates transit, bicycle, and pedestrian travel would require modifications to the infrastructure within the existing circulation framework and the existing street right of way. Future modifications in conjunction with implementation of the Specific Plan and the City's Active Transportation Plan would create an environment that is safe, comfortable, and appealing to users of different modes. Refer to Section 2.0, Project Description, for a description of the Project's proposed complete streets network including vehicular travel, transit, pedestrian access, and bicycling facilities.

### ES-1.3 Project Alternatives Summary

CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to the project which could feasibly attain the basic objectives of the project and avoid and/or lessen the environmental effects of the project. Further, CEQA Guidelines Section 15126.6(e) requires that a "no project" alternative be evaluated in an EIR. The EIR evaluates the following alternatives:

- **Alternative 1- No Project Alternative.** Under this alternative, the Specific Plan would not be adopted. In the absence of the Specific Plan, the project area would continue to be governed by existing zoning and General Plan designations, including the 2007 *Precise Plan for El Camino Real*. Development in the project area would be expected to occur, consistent with the Land Use and Transportation Element (LUTE) that was adopted in 2017.
- **Alternative C- Commercial Focus Alternative.** Under this alternative, the Specific Plan would be adopted and the overall intensity of development would be similar to the proposed project, but the mix of uses would be modified to allow for more commercial uses and fewer residential uses than permitted under the proposed project.
- **Alternative M- Mixed-Use Focus.** Under this alternative, the Specific Plan would be adopted and the mix of uses would be modified so that there would be fewer commercial uses and more residential uses than Alternative C. When compared to the proposed project, Alternative M would have more commercial uses and fewer residential uses.
- **Alternative R- Residential Focus Alternative.** Under this alternative, the Specific Plan would be adopted and commercial use would remain the same as the proposed project, but there would be fewer residential uses.

As discussed in Section 5.0, Alternatives, the No Project Alternative is the environmentally superior alternative, as it would reduce the project's significant and unavoidable air quality impacts. According to CEQA Guidelines Section 15126.6(e), "if the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." Based on review of **Table 5-2, Alternative Impacts Comparison to Proposed Project**, Alternative C (Commercial Focus Alternative), Alternative M (Mixed-Use Alternative), and Alternative R (Residential Alternative) would involve similar environmental impacts. Alternative C and Alternative M would equally meet the project objectives, while Alternative R would only partially meet the project's objective to support local and regional-serving commercial uses that highlight the corridor's history and support economic vitality; refer to **Table 5-3, Summary of Ability to Meet Project Objectives**. Accordingly, the Commercial Focus Alternative and Mixed-Use Alternative are considered environmentally superior to the proposed project. It should be noted that the Commercial Focus Alternative and Mixed-Use Alternative would be environmentally inferior to the proposed project for five environmental topical areas; refer to **Table 5-2**. In addition, these alternatives would not avoid the proposed project's significant and unavoidable air quality impacts.

## ES-1.4 Summary of Environmental Impacts

**Table ES-1** displays a summary of project impacts and proposed mitigation measures that would avoid or minimize potential impacts. In the table, the level of significance is indicated both before and after the implementation of each mitigation measure.

For detailed discussions of these environmental impacts, refer to the appropriate environmental topic section (i.e., Sections 3.1 through 3.16 and Section 4.0).

As noted in **Table ES-1**, Project implementation has the potential to generate a significant and unavoidable impact associated with air quality (Individual and Cumulative Construction-Related Air Quality Emissions) and utilities and service systems (Cumulative Demand for Utility Services and Associated Infrastructure). All other impacts would be reduced to less than significant levels.

**Table ES-1  
Project Impacts and Proposed Mitigation Measures**

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
<b>Aesthetics</b>			
<b>EFFECTS FOUND NOT TO BE SIGNIFICANT Impact 1) (Standard of Significance 1)</b> The project would not have a substantial effect on a scenic vista, and the project would have <b>no impact</b> .	N	None required.	N
<b>EFFECTS FOUND NOT TO BE SIGNIFICANT Impact 2) (Standard of Significance 2)</b> The project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway, and the project would have <b>no impact</b> .	N	None required.	N
<b>Impact 3.1.1 (Standard of Significance 3)</b> The project would not potentially conflict with applicable zoning and other regulations governing scenic quality. This impact would be <b>less than significant</b> .	LS	None required	LS
<b>Impact 3.1.2 (Standard of Significance 4)</b> The project would not potentially create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. This impact would be <b>less than significant</b> .	LS	None required	LS
<b>Impact 3.1.3 (Cumulative Impacts)</b> The project would not potentially create a cumulative impact to aesthetic and visual resources. This impact would be <b>less than cumulatively considerable</b> .	LCC	None required	LCC

N – No Impact  
LS – Less Than Significant

SU – Significant and Unavoidable  
S – Significant

LCC – Less than Cumulatively Considerable  
CC – Cumulatively Considerable

Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
<b>Agriculture and Forestry Resources</b>			
<p><b>EFFECTS FOUND NOT TO BE SIGNIFICANT Impact 1) (Standard of Significance 1)</b> The project would not 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 nonagricultural use. <b>No impact</b> would occur.</p>	N	None required.	N
<p><b>EFFECTS FOUND NOT TO BE SIGNIFICANT Impact 2) (Standard of Significance 2)</b> The project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. <b>No impact</b> would occur.</p>	N	None required.	N
<p><b>EFFECTS FOUND NOT TO BE SIGNIFICANT Impact 3) (Standard of Significance 3)</b> The project would not conflict with existing zoning for, or cause rezoning of, forestland (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)). <b>No impact</b> would occur.</p>	N	None required.	N
<p><b>EFFECTS FOUND NOT TO BE SIGNIFICANT Impact 4) (Standard of Significance 4)</b> The project would not result in the loss of forestland or conversion of forestland to non-forest use. <b>No impact</b> would occur.</p>	N	None required.	N

N – No Impact  
 LS – Less Than Significant

SU – Significant and Unavoidable  
 S – Significant

LCC – Less than Cumulatively Considerable  
 CC – Cumulatively Considerable

Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
<p><b>EFFECTS FOUND NOT TO BE SIGNIFICANT Impact 5) (Standard of Significance 5)</b> The project would not involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forestland to non-forest use. <b>No impact</b> would occur.</p>	N	None required.	N
<b>Air Quality</b>			
<p><b>Impact 3.2.1 (Standard of Significance 1)</b> The project would not conflict with implementation of the Bay Area 2017 Clean Air Plan. This impact would be <b>less than significant</b>.</p>	LS	None required.	LS
<p><b>Impact 3.2.2 (Standard of Significance 2)</b> The project would 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 during construction. This impact would be <b>significant and unavoidable</b>.</p>	CC	<p><b>AQ-1</b> Prior to the issuance of grading or building permits, the City of Sunnyvale shall ensure that the Bay Area Air Quality Management District’s (BAAQMD) basic construction mitigation measures from Table 8-2 of the BAAQMD 2017 CEQA Air Quality Guidelines (or subsequent updates) are noted on the construction documents. These basic construction mitigation measures include the following:</p> <ol style="list-style-type: none"> <li>1) All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.</li> <li>2) All haul trucks transporting soil, sand, or other loose material off-site shall be covered.</li> <li>3) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet</li> </ol>	SU

N – No Impact  
 LS – Less Than Significant

SU – Significant and Unavoidable  
 S – Significant

LCC – Less than Cumulatively Considerable  
 CC – Cumulatively Considerable

Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		<p>power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.</p> <p>4) All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.</p> <p>5) All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.</p> <p>6) Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points</p> <p>7) All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.</p> <p>8) A publicly visible sign shall be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone</p>	

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		number shall also be visible to ensure compliance with applicable regulations.  <b>AQ-2</b> In the cases where construction projects are projected to exceed the Bay Area Air Quality Management District’s air pollutant significance thresholds for NO <sub>x</sub> , PM <sub>10</sub> , and/or PM <sub>2.5</sub> , all off-road diesel-fueled equipment (e.g., rubber-tired dozers, graders, scrapers, excavators, asphalt paving equipment, cranes, and tractors) shall be at least California Air Resources Board (CARB) Tier 3 Certified or better.	
<b>Impact 3.2.3 (Standard of Significance 2)</b> The project would not 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 during operations. This would be a <b>less than significant</b> impact.	LS	None Required	LS
<b>Impact 3.2.4 (Standard of Significance 3)</b> The project would not contribute to localized concentrations of mobile-source CO that would exceed applicable ambient air quality standards. This would be a <b>less than significant</b> impact.	LS	None Required	LS
<b>Impact 3.2.5 (Standard of Significance 3)</b> The project would expose sensitive receptors to substantial toxic air contaminant concentrations during construction. This impact would be <b>less</b>	S	<b>AQ-3</b> In the case when a subsequent project’s construction is greater than five acres and is scheduled to last more than two years, the subsequent project shall be required to prepare a site-specific construction pollutant mitigation plan in	LS

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
<p>than significant with mitigation incorporated.</p>		<p>consultation with the Bay Area Air Quality Management District (BAAQMD) staff prior to the issuance of grading permits. A project-specific construction-related dispersion modeling acceptable to BAAQMD shall be used to identify potential toxic air contaminant impacts, including diesel particulate matter. If BAAQMD risk thresholds (i.e., probability of contracting cancer is greater than 10 in 1 million) would be exceeded, mitigation measures shall be identified in the construction pollutant mitigation plan to address potential impacts and shall be based on site-specific information such as the distance to the nearest sensitive receptors, project site plan details, and construction schedule. The City shall ensure construction contracts include all identified measures and that the measures reduce the health risk below BAAQMD risk thresholds. Construction pollutant mitigation plan measures shall include, but not be limited to:</p> <ol style="list-style-type: none"> <li>1) Limiting the amount of acreage to be graded in a single day,</li> <li>2) Notification of affected sensitive receptors one week prior to commencing on-site construction so that any necessary precautions (such as rescheduling or relocation of outdoor activities) can be implemented. The written notification shall include the name and telephone number of the individual empowered to manage</li> </ol>	

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		<p>construction of the project. In the event that complaints are received, the individual empowered to manage construction shall respond to the complaint within 24 hours. The response shall include identification of measures being taken by the project construction contractor to reduce construction-related air pollutants. Such a measure may include the relocation of equipment.</p> <p><b>AQ-4</b> The following measures shall be utilized in site planning and building designs to reduce TAC and PM2.5 exposure where new receptors are located within 1,000 feet of emissions sources:</p> <ul style="list-style-type: none"> <li>• Future development that includes sensitive receptors (such as residences, schools, hospitals, daycare centers, or retirement homes) located within 1,000 feet of Caltrain, Central Expressway, El Camino Real, Lawrence Expressway, Mathilda Avenue, Sunnyvale-Saratoga Road, US 101, State Route 237, State Route 85, and/or stationary sources shall require site-specific analysis to determine the level of health risk. This analysis shall be conducted following procedures outlined by the BAAQMD. If the site-specific analysis reveals significant exposures from all sources (i.e., health risk in terms of</li> </ul>	

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		<p>excess cancer risk greater than 100 in one million, acute or chronic hazards with a hazard Index greater than 10, or annual PM2.5 exposures greater than 0.8 µg/m<sup>3</sup> ) measures shall be employed to reduce the risk to below the threshold (e.g., electrostatic filtering systems or equivalent systems and location of vents away from TAC sources). If this is not possible, the sensitive receptors shall be relocated.</p> <ul style="list-style-type: none"> <li>• Future nonresidential developments identified as a permitted stationary TAC source or projected to generate more than 100 heavy-duty truck trips daily will be evaluated through the CEQA process or BAAQMD permit process to ensure they do not cause a significant health risk in terms of excess cancer risk greater than 10 in one million, acute or chronic hazards with a hazard Index greater than 1.0, or annual PM2.5 exposures greater than 0.3 µg/m<sup>3</sup> through source control measures.</li> <li>• For significant cancer risk exposure, as defined by the BAAQMD, indoor air filtration systems shall be installed to effectively reduce particulate levels to avoid adverse public health impacts. Projects shall submit performance specifications and design details to</li> </ul>	

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		demonstrate that lifetime residential exposures would not result in adverse public health impacts (less than 10 in one million chances).	
<p><b>Impact 3.2.6 (Standard of Significance 3)</b> The project would not expose sensitive receptors to substantial toxic air contaminant concentrations during operations. This impact would be <b>less than significant</b>.</p>	LS	None Required	LS
<p><b>Impact 3.2.7 (Standard of Significance 4)</b> The project would not include sources that could create objectionable odors affecting a substantial number of people or expose new residents to existing sources of odor. Thus, this impact would be <b>less than significant</b></p>	LS	None Required	LS
<p><b>Impact 3.2.8 (Cumulative Impacts)</b> The proposed project, in combination with cumulative development in the SFBAAB, would result in a cumulatively considerable net increase of criteria air pollutants for which the air basin is designated nonattainment. This impact would be <b>significant and unavoidable</b>.</p>	CC	<b>AQ-1 and AQ-2</b>	SU
<b>Biological Resources</b>			
<p><b>Impact 3.3.1 (Standard of Significance 1)</b> The project would have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or</p>	S	<b>BIO-1</b> Pursuant to the Migratory Bird Treaty Act and the California Fish and Game Code, removal of any trees, shrubs, or any other potential nesting habitat shall be conducted outside the avian nesting season. The nesting season generally extends from	LS

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
<p>special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. This impact would be <b>less than significant with mitigation incorporated.</b></p>		<p>early February through August, but it can vary slightly from year to year based on seasonal weather conditions. If ground disturbance and vegetation removal cannot occur outside of the nesting season, a preconstruction clearance survey for nesting birds shall be conducted within 30 days of the start of any vegetation removal or ground-disturbing activities to ensure no nesting birds will be disturbed during construction. The biologist conducting the clearance survey shall document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur.</p> <p>If an active avian nest is discovered during the preconstruction clearance survey, construction activities shall stay outside of a 300-foot buffer around the active nest. For raptor species, this buffer is expanded to 500 feet. A biological monitor shall be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, normal construction activities can occur.</p> <p>As part of the nesting bird clearance survey, a preconstruction burrowing owl clearance survey shall be conducted within 30 days of the start of ground-disturbing activities to ensure undeveloped vacant lots within the Specific Plan Area do not support burrowing owl. If no burrowing owl are</p>	

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		detected, construction may proceed. If construction is delayed or suspended for more than 30 days, the project site or work area shall be resurveyed. If burrowing owls are detected on the project site, a 300-foot “no work” buffer shall be established around the active burrow and all work within the buffer shall be halted until the qualified biologist has determined through non-intrusive methods that the nesting effort is complete (i.e., all young have fledged). Once the nesting effort is complete or if a burrowing owl burrow is detected on-site during the non-breeding season (September 1 to February 28), passive and/or active relocation of burrowing owls may be implemented by a qualified biologist following consultation and approval from the City of Sunnyvale and the California Department of Fish and Wildlife.	
<b>EFFECTS FOUND NOT TO BE SIGNIFICANT Impact 1) (Standard of Significance 2)</b> The project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS. <b>No impact</b> would occur.	N	None required	N
<b>EFFECTS FOUND NOT TO BE SIGNIFICANT Impact 2) (Standard of Significance 3)</b> The project would not have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal,	N	None required.	N

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
etc.) through direct removal, filling, hydrological interruption, or other means. <b>No impact</b> would occur.			
<b>EFFECTS FOUND NOT TO BE SIGNIFICANT Impact 3) (Standard of Significance 4)</b> The project would not 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. <b>No impact</b> would occur.	N	None required.	N
<b>Impact 3.3.2 (Standard of Significance 5)</b> The project would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. This impact would be <b>less than significant with mitigation incorporated.</b>	S	<b>BIO-1</b>	LS
<b>EFFECTS FOUND NOT TO BE SIGNIFICANT Impact 4) (Standard of Significance 6)</b> The project would not conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. There would be no impact.	N	None required.	N
<b>Impact 3.3.3 (Cumulative Impacts)</b> The project, in combination with other reasonably foreseeable projects, could	CC	<b>BIO-1</b>	LCC

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
<p>result in cumulative impacts to biological resources. This impact would be <b>less than cumulatively considerable with mitigation incorporated.</b></p>			
<p><b>Cultural and Tribal Cultural Resources</b></p>			
<p><b>Impact 3.4.1 (Standard of Significance 1)</b>                      The project would cause a substantial adverse change in the significance of a historical resource as defined in Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5, respectively. This impact would be <b>less than significant with mitigation incorporated.</b></p>	<p>S</p>	<p><b>CUL-1</b> Prior to demolition, grading, or building permit approval, any site subject to California Environmental Quality Act (CEQA) review with potentially historic buildings over 50 years in age and not subject to previous identification, recordation on Department of Park and Recreation (DPR) 523 Forms, and National Register of Historic Places, California Register of Historic Resources, and/or City eligibility evaluation (as appropriate) within the last five years, shall be evaluated by a Secretary of the Interior Qualified Cultural Resource Professional specializing in Architectural History. Results of the evaluation shall specify site-specific mitigation requirements.</p> <p><b>CUL-2</b> To avoid impacts to previously recorded historic resources associated with the Taaffe-Frances Heritage Neighborhood, prior to demolition, grading, or building permit approval, a site-specific Construction Protection Plan (CPP) shall be prepared by a qualified Historic Building Architect for projects which propose pile driving activities within 50 feet of designated historic resources. The CPP shall specify mitigation to avoid or reduce impacts to less than significant.</p>	<p>LS</p>

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
<p><b>Impact 3.4.2 (Standard of Significance 2)</b>                      The project would not cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5. This impact would be <b>less than significant with mitigation incorporated.</b></p>	<p>S</p>	<p><b>CUL-3</b> All subsequent projects within the project area shall be required to include information on the improvement plans that if, during the course of grading or construction, cultural resources (i.e., prehistoric or historic sites) are discovered, work will stop in that area and within 100 feet of the find until a qualified archaeologist can [assess] the significance of the find and, if necessary, develop appropriate treatment measures as part of a treatment plan in consultation with the City and all other appropriate agencies. The treatment plan shall include measures to document and protect the discovered resource. Consistent with CEQA Guidelines Section 15126.4(b)(3), preservation in place will be the preferred method of mitigating impacts to the discovered resource. Pursuant to Government Code Section 6254.10, information on the discovered resource shall be confidential.</p>	<p>LS</p>
<p><b>Impact 3.4.3 (Standard of Significance 3)</b>                      The project would not disturb any human remains, including those interred outside of formal cemeteries.</p>	<p>LS</p>	<p>None required.</p>	<p>LS</p>
<p><b>Impact 3.4.4 (Standards of Significance 4 and 5)</b> The project would not 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</p>	<p>LS</p>	<p>None required.</p>	<p>LS</p>

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
<p>with cultural value to a California Native American tribe, and that is:</p> <ul style="list-style-type: none"> <li>i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or</li> <li>ii) Resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</li> </ul> <p>This impact would be <b>less than significant</b>.</p>			
<p><b>Impact 3.4.4 (Cumulative Impacts)</b> The project, in combination with other reasonably foreseeable projects, could result in cumulative impacts to cultural and tribal cultural resources. This impact would be <b>less than cumulatively considerable with mitigation incorporated</b>.</p>	CC	CUL-1 through CUL-3	LCC

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
<b>Energy</b>			
<b>Impact 3.5.1 (Standard of Significance 1)</b> The project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. This impact would be <b>less than significant</b> .	LS	None required.	LS
<b>Impact 3.5.2 (Standard of Significance 2)</b> The project would not Conflict with or obstruct a State or local plan for renewable energy or energy efficiency. This impact would be <b>less than significant</b> .	LS	None required.	LS
<b>Impact 3.5.3 (Cumulative Impacts)</b> The project would contribute to the cumulative disturbance of energy consumption. This impact would be <b>less than cumulatively considerable</b> .	LCC	None required.	LCC
<b>Geology and Soils</b>			
<b>Impact 3.6.1 (Standard of Significance 1)</b> The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. This would be a <b>less than significant impact</b> .	LS	None required.	LS
<b>EFFECTS FOUND NOT TO BE SIGNIFICANT Impact 1) (Standard of Significance 1)</b> The project would not directly or indirectly cause potential substantial adverse	N	None required.	N

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
<p>effects, including the risk of loss, injury, or death involving:</p> <ul style="list-style-type: none"> <li>• Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence or other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42.</li> <li>• Seismic-related ground failure, including liquefaction.</li> <li>• Landslides</li> </ul> <p>There would be <b>no impact</b>.</p>			
<p><b>Impact 3.6.2 (Standard of Significance 2)</b> The project would not result in substantial soil erosion or the loss of topsoil. This impact would be <b>less than significant</b>.</p>	LS	None required.	LS

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
<p><b>Impact 3.6.3 (Standards of Significance 3 and 4)</b> The project would not 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.</p> <p>The project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.</p> <p>This impact would be <b>less than significant</b>.</p>	LS	None required.	LS
<p><b>EFFECTS FOUND NOT TO BE SIGNIFICANT Impact 2) (Standard of Significance 5)</b> The project would not 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. There would be <b>no impact</b>.</p>	N	None required.	N
<p><b>Impact 3.6.4 (Standard of Significance 6)</b> The project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. This impact would be <b>less than significant with mitigation incorporated</b>.</p>	S	<p><b>GEO-1</b> All subsequent projects within the project area shall be required to include information on the improvement plans that if, during the course of grading or construction fossils are discovered, work shall be halted immediately within 50 feet of the discovery, the Sunnyvale Community Development Department shall be notified, and the significance of the find and recommended actions must be</p>	LS

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		determined by a qualified paleontologist. In addition, prior to the commencement of project site preparation, all construction personnel shall be informed of the potential to discover fossils and the procedures to follow.	
<b>Impact 3.6.5 (Cumulative Impacts)</b> The project would not result in cumulative geology and soils impacts. This impact would be <b>less than cumulatively considerable</b> .	LCC	None required.	LCC
<b>Greenhouse Gas Emissions</b>			
<b>Impact 3.7.1 (Standard of Significance 1)</b> The project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. This impact would be <b>less than significant</b> .	LS	None required.	LS
<b>Impact 3.7.2 (Standard of Significance 2)</b> The project would not conflict with an applicable plan adopted for the purpose of reducing GHG emissions. There would be <b>no impact</b> .	LS	None required.	LS
<b>Impact 3.7.3 (Cumulative Impacts)</b> GHGs generated by the project and other related cumulative projects would not have a significant impact on global climate change. This impact would be <b>less than cumulatively considerable</b> .	LCC	None required.	LCC

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
<b>Hazards and Hazardous Materials</b>			
<b>Impact 3.8.1 (Standard of Significance 1)</b> The project would involve the transport, use, and disposal of hazardous materials during construction. This impact would be <b>less than significant</b> .	LS	None required.	LS
<b>Impact 3.8.2 (Standard of Significance 2)</b> The project would not 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. This impact would be <b>less than significant</b> .	LS	None required.	LS
<b>Impact 3.8.3 (Standard of Significance 3)</b> The project would not involve the use, transport, disposal, and/or release of hazardous materials in the vicinity of an existing school site. This impact would be <b>less than significant</b> .	LS	None required.	LS
<b>Impact 3.8.4 (Standard of Significance 4)</b> The proposed project would not be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, it would not create a significant hazard to the public or the environment and would have a <b>less than significant impact with mitigation incorporated</b> .	S	<b>HAZ-1</b> The City shall require that a Phase I ESA is prepared and submitted with any application for new development or redevelopment within the adopted project boundary. The Phase I ESA shall be prepared by a qualified professional registered in California and in accordance with ASTM E1527-13 (or the most current version at the time a development application is submitted for the project).	LS

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		<p>If determined necessary by the Phase I ESA, a Phase II ESA shall be conducted to determine the lateral and vertical extent of soil, groundwater, and/or soil vapor contamination, as recommended by the Phase I ESA.</p> <p>The City shall not issue a building permit for a site where contamination has been identified until remediation or effective site management controls appropriate for the use of the site have been completed, consistent with applicable regulations and to the satisfaction of the City of Sunnyvale, DTSC, or San Francisco Bay RWQCB (as appropriate) before initiation of construction activities. Deed restrictions, if appropriate, shall be recorded. If temporary dewatering is required during construction or if permanent dewatering is required for subterranean features, the City shall not issue an improvement permit or building permit until documentation has been provided to the City that the San Francisco Bay RWQCB has approved the discharge to the sewer. Discharge of any groundwater removed from a construction site within the adopted project and to the El Camino Storm Drain Channel, Calabazas Creek, or storm drain shall be subject to Water Pollution Control Permit requirements.</p> <p>If the Phase I ESA determines there are no RECs, no further action is required. However, the City shall ensure any grading or improvement plan or building</p>	

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		permit includes a statement if hazardous materials contamination is discovered or suspected during construction activity, all work shall stop immediately until a qualified professional has determined an appropriate course of action.	
<p><b>Impact 3.8.5 (Standard of Significance 5)</b>                      The project is a Specific Plan located within the boundaries of an airport land use plan. Specifically, a short segment of the western portion of El Camino Real is included in the Moffett Federal Airfield Airport Influence Area. As such, the project may result in a safety hazard or excessive noise for people residing or working in the Specific Plan Area. This impact would be <b>less than significant with mitigation incorporated.</b></p>	S	<p><b>HAZ-2</b> Prior to the issuance of a building permit for above ground construction of future projects in the Specific Plan Area, if proposed structures exceed the FAA Part 77 Surface, the project applicant shall submit an FAA Form 7460-1 for the permanent structure prior to submittal for the temporary construction equipment (outlined in Mitigation Measure HAZ-2 below). A “Determination of No Hazard” or “Determination of No Hazard with Conditions” shall be obtained prior to permit issuance for any above ground improvements. If a “Determination of No Hazard with Conditions” is issued, the conditions shall be included on the approved plan set and implemented.</p> <p><b>HAZ-3</b> Prior to the issuance of a building permit, if construction equipment has the potential to exceed the FAA Part 77 Surface, the project applicant shall submit an FAA Form 7460-1, “Notice of Proposed Construction or Alteration” to the FAA at least 45 days (60 to 90 days recommended) prior to construction of the project, which shall specify the equipment type (e.g., crane) and duration to be used. An Aeronautical Study Number for the permanent structure shall be included in the submittal form. A “Determination of No Hazard” or</p>	LS

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		"Determination of No Hazard with Conditions" shall be obtained prior to permit issuance for above ground activities. If a "Determination of No Hazard with Conditions" is issued, all conditions shall be included on the approved plan set and implemented.	
<b>Impact 3.8.6 (Standard of Significance 6)</b> The project would not interfere with adopted emergency response and evacuation plans that apply to the project area. This impact would be <b>less than significant</b> .	LS	None required.	LS
<b>Impact 3.8.7 (Standard of Significance 7)</b> The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. Therefore, the project would have a <b>less than significant impact</b> .	LS	None required.	LS
<b>Impact 3.8.8 (Cumulative Impacts)</b> The project would not result in cumulative hazards impacts. This impact would be <b>less than cumulatively considerable</b> .	LCC	<b>HAZ-1</b> through <b>HAZ-3</b> .	LCC
<b>Hydrology and Water Quality</b>			
<b>Impact 3.9.1 (Standard of Significance 1)</b> The project would not violate water quality standards or otherwise substantially degrade surface or groundwater quality. This impact is <b>less than significant</b> .	LS	None required.	LS
<b>Impact 3.9.2 (Standard of Significance 2)</b> The project would not substantially deplete	LS	None required.	LS

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 CC – Cumulatively Considerable

Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
groundwater supplies or interfere substantially with groundwater recharge impact. This impact would be <b>less than significant</b> .			
<b>Impact 3.9.3 (Standard of Significance 3)</b> The project would result in an increase in impermeable surfaces and would modify drainage patterns in the project area. With implementation of applicable city and state regulations, this impact would be <b>less than significant</b> .	LS	None required.	LS
<b>Impact 3.9.4 (Standard of Significance 4)</b> The project would not risk release of pollutants due to project inundation as the project is not located in flood hazard, tsunami, or seiche zones. This impact would be <b>less than significant</b> .	LS	None required.	LS
<b>Impact 3.9.5 (Standard of Significance 5)</b> The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. This impact would be <b>less than significant</b> .	LS	None required.	LS
<b>Impact 3.9.6 (Cumulative Impacts)</b> The project would not result in cumulative impacts to hydrology and water quality. This impact would be <b>less than cumulatively considerable</b> .	LCC	None required.	LCC
<b>Land Use and Planning</b>			
<b>EFFECTS FOUND NOT TO BE SIGNIFICANT Impact 1) (Standard of Significance 1)</b> The	N	None required.	N

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
project would not physically divide an established community, given that the Specific Plan Area is largely built out in terms of available land development. There would be <b>no impact</b> .			
<b>Impact 3.10.1 (Standard of Significance 2)</b> The project would be consistent with all applicable land use plans, policies, and regulations. This impact would be <b>less than significant</b> .	LS	None required.	LS
<b>Impact 3.10.2 (Cumulative Impacts)</b> The project would not contribute to cumulative land use impacts associated with the division of an established community, nor would it conflict with land use plans and regulations that provide environmental protection. This would be a <b>less than cumulatively considerable</b> impact.	LCC	None required.	LCC
<b>Mineral Resources</b>			
<b>EFFECTS FOUND NOT TO BE SIGNIFICANT Impact 1) (Standard of Significance 1)</b> The project would not 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. There would be <b>no impact</b> .	N	None required	N
<b>EFFECTS FOUND NOT TO BE SIGNIFICANT Impact 2) (Standard of Significance 2)</b> The project would not result in the loss of availability of a locally important mineral	N	None required	N

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
resource recovery site delineated on a local general plan, specific plan, or other land use plan. There would be <b>no impact</b> .			
<b>Noise</b>			
<p><b>Impact 3.11.1 (Standard of Significance 1)</b>                      The project would not 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 This would be a <b>less than significant impact</b>.</p>	S	<p><b>NOI-1</b> For projects that are subject to California Environmental Quality Act (CEQA) review (i.e., non-exempt projects), project applicants shall ensure through contract specifications that construction best management practices (BMPs) will be implemented by all project contractors to reduce construction noise levels. Contract specifications shall be included in construction documents, which shall be reviewed and approved by the City Community Development Department prior to issuance of a grading or building permit (whichever is issued first). BMPs to reduce construction noise levels may include, but are not limited to, the following:</p> <ol style="list-style-type: none"> <li>1. Ensure that construction equipment is properly muffled according to industry standards and is in good working condition.</li> <li>2. Place noise-generating construction equipment and construction staging areas away from sensitive uses.</li> <li>3. Construction activities shall occur between the hours of between the hours of 7:00 a.m. and 6:00 p.m. Monday through Friday, and between 8:00 a.m. and 5:00 p.m. on Saturdays, pursuant to</li> </ol>	LS

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		<p>Sunnyvale Municipal Code Chapter 16.08.</p> <ol style="list-style-type: none"> <li>4. Implement noise attenuation measures, as needed, which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources.</li> <li>5. Use electric air compressors and similar power tools rather than diesel equipment, where feasible.</li> <li>6. Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than five minutes.</li> <li>7. The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment (between the hours of 7:00 a.m. and 6:00 p.m. Monday through Friday, and between 8:00 a.m. and 5:00 p.m. on Saturdays). The haul route exhibit shall design delivery routes to minimize the exposure of sensitive land uses or residential dwellings to delivery truck-related noise.</li> <li>8. Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow surrounding owners and residents to</li> </ol>	

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		<p>contact the job superintendent. If the City or the job superintendent receives a complaint, the superintendent shall investigate, take appropriate corrective action, and report the action taken to the reporting party and the Community Development Department.</p>	
<p><b>Impact 3.11.2 (Standard of Significance 2)</b>                      The project would result in generation of excessive groundborne vibration or groundborne noise levels. This impact would be <b>less than significant with mitigation incorporated.</b></p>	<p>S</p>	<p><b>NOI-2</b> Projects that are subject to California Environmental Quality Act (CEQA) review (meaning, non-exempt projects) with construction activities requiring operation of groundborne vibration generating equipment (i.e., vibratory compactor/roller, large bulldozer, caisson drilling, loaded trucks, and jackhammer) within 25 feet of a structure shall be required to prepare a project-specific vibration impact analysis to evaluate potential construction vibration impacts associated with the project, and to determine any specific vibration control mechanisms that shall be incorporated into the project’s construction bid documents to reduce such impacts. Contract specifications shall be included in construction documents, which shall be reviewed and approved by the City Engineer prior to issuance of a grading permit.</p> <p><b>NOI-3</b> Projects that are subject to California Environmental Quality Act (CEQA) review (meaning, non-exempt projects) which require impact pile driving activities within 100 feet of buildings and/or sonic pile driving activities within 60 feet of buildings</p>	<p>LS</p>

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		<p>shall implement the below measures to reduce the potential for architectural/structural damage resulting from elevated groundborne vibration levels. Contractors shall demonstrate, to the satisfaction of the City Engineer and prior to issuance of a grading permit, that pile driving activities would not exceed the California Department of Transportation (Caltrans) vibration threshold (i.e., 0.2 inch/second PPV) prior to initiation of construction.</p> <ul style="list-style-type: none"> <li>Impact pile driving within 100 feet of any building shall utilize alternative installation methods, such as pile cushioning, jetting, predrilling, cast-in-place systems, and resonance-free (i.e., sonic) vibratory pile drivers.</li> <li>Sonic pile driving activities within 60 feet of any building shall utilize alternative installation methods, such as pile cushioning, jetting, predrilling, and cast-in-place systems.</li> </ul>	
<p><b>Impact 3.11.3 (Cumulative Impacts)</b> Project operation would result in a substantial contribution to cumulative noise levels. This impact would be considered <b>less than cumulatively considerable</b>.</p>	LCC	None required.	LCC
<b>Population and Housing</b>			
<p><b>Impact 3.12.1 (Standard of Significance 1)</b> The project would not induce substantial</p>	LS	None required.	LS

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
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. This would be a <b>less than significant impact</b> .			
<b>Impact 3.12.2 (Standard of Significance 2)</b> The project would result not Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. This impact would be <b>less than significant</b> .	LS	None required.	LS
<b>Impact 3.12.3 (Cumulative Impacts)</b> The project would not result in a cumulative increase in population and housing growth in Sunnyvale as well as in the surrounding region, along with associated environmental impacts. This impact is <b>less than cumulatively considerable</b> .	LCC	None required.	LCC
<b>Public Services</b>			
<b>Impact 3.13.1 (Standard of Significance 1)</b> The project may 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	LS	None required.	LS

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
objectives for fire protection services. This impact would be <b>less than significant</b> .			
<b>Impact 3.13.2 (Standard of Significance 2)</b> The project may 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 police protection services. This impact would be <b>less than significant</b> .	LS	None required.	LS
<b>Impact 3.13.3 (Standard of Significance 3)</b> The project may substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for public schools. This impact would be <b>less than significant</b> .	LS	None required.	LS
<b>Impact 3.13.4 (Standard of Significance 4)</b> The project may substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or	LS	None required.	LS

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
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 other public services, such as public schools. This impact would be <b>less than significant</b> .			
<b>Impact 3.13.5 (Cumulative Impacts)</b> The project, along with other potential development in Santa Clara County, would increase the use of existing public services and require additional public facilities. However, all new cumulative development would be required to pay applicable development impact fees. Any significant expansion of public services facilities or development of new public services facilities would be subject to appropriate CEQA environmental review, which would identify and address any site-specific impacts. The project's contribution to this impact would be <b>less than cumulatively considerable</b> .	LCC	None required.	LCC
<b>Recreation</b>			
<b>Impact 3.14.1 (Standard of Significance 1)</b> The project may increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the	LS	None required.	LS

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
facility would occur or be accelerated. This would be a <b>less than significant</b> impact.			
<b>Impact 3.14.2 (Standard of Significance 2)</b> The project may include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. The project would have a <b>less than significant</b> impact.	LS	None required.	LS
<b>Impact 3.14.3 (Cumulative Impacts)</b> The project would not result in a significant contribution to the cumulative degradation of recreational resources. This impact would be <b>less than cumulatively considerable</b> .	LCC	None required	LCC
<b>Transportation and Traffic</b>			
<b>Impact 3.15.1 (Standard of Significance 1)</b> The project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) The project would have a <b>less than significant</b> impact.	S	<b>TRA-1</b> Prior to Planning Permit Completeness, the City of Sunnyvale shall review site-specific development within the El Camino Real Specific Plan area for consistency with the floor area ratio and/or dwelling units per acre requirements specified in the City’s Transportation Analysis Policy (referred to as “Council Policy 1.2.8”). In the event that a proposed development does not meet the floor area ratio and/or dwelling units per acre requirements or the required threshold specified in Council Policy 1.2.8, a project-specific vehicle miles travelled (VMT) analysis shall be conducted to evaluate and disclose transportation-related environmental impacts and identify measures to avoid and minimize VMT impacts. If the VMT analysis	LS

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		determines the potential for an increase in VMT that cannot be mitigated, a subsequent environmental analysis shall be prepared.	
<p><b>Impact 3.15.2 (Standard of Significance 2)</b>                      The project would not disrupt existing or planned transit facilities; generate increased transit demand unable to be accommodated by existing or planned and programmed transit services; or conflict with a program, plan, ordinance, or policy addressing transit facilities. This impact would be <b>less than significant</b>.</p>	LS	None required.	LS
<p><b>Impact 3.15.3 (Standard of Significance 3)</b>                      The project would not disrupt existing or planned bicycle facilities; generate increased bicycle facility demand unable to be accommodated by existing or planned and programmed bicycle facility services; or conflict with a program, plan, ordinance, or policy addressing bicycle facilities. This would be a <b>less than significant</b> impact.</p>	LS	None required.	LS
<p><b>Impact 3.15.4 (Standard of Significance 4)</b>                      The project would not disrupt existing or planned pedestrian facilities; generate increased pedestrian facility demand unable to be accommodated by existing or planned and programmed pedestrian facility services; or conflict with a program, plan, ordinance, or policy addressing</p>	LS	None required.	LS

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
pedestrian facilities. This impact would be <b>less than significant</b> .			
<b>Impact 3.15.5 (Standard of Significance 5)</b> The project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). This impact is <b>less than significant</b> .	LS	None required.	LS
<b>Impact 3.15.6 (Standard of Significance 6)</b> The project would not result in inadequate emergency access. Consistent with the Specific Plan, emergency access for any future developments under the Specific Plan would be subject to review by the City of Sunnyvale and responsible emergency service agencies. This impact is <b>less than significant</b> .	LS	None required.	LS
<b>Impact 3.15.7 (Standard of Significance 7)</b> The project would result in a temporary but prolonged impact related to lane closures, the need for temporary signals, emergency vehicles access, or traffic hazards to vehicles, bicyclists, and pedestrians during construction of future development that would occur under the Specific Plan. This impact would be <b>less than significant with mitigation incorporated</b> .	S	<b>TRA-2</b> Before construction or issuance of building permits, the developer or the construction contractor for the project shall prepare a temporary traffic control plan (TTC) to the satisfaction of the City of Sunnyvale Division of Transportation and Traffic and subject to review by all affected agencies. The TTC shall include all information required on the City of Sunnyvale TTC Checklist and conform to the TTC Guidelines of the City of Sunnyvale. At a minimum, the plan shall include the following elements:	LS

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		<ul style="list-style-type: none"> <li>• provide vicinity map including all streets within the work zone properly labeled with names, posted speed limits and north arrow;</li> <li>• provide existing roadway lane and bike lane configuration and sidewalks where applicable including dimensions;</li> <li>• description of proposed work zone;</li> <li>• description of detours and/or lane closures (pedestrians, bicyclists, vehicular);</li> <li>• description of no parking zone or parking restrictions;</li> <li>• provide appropriate tapers and lengths, signs, and spacing;</li> <li>• provide appropriate channelization devices and spacing;</li> <li>• description of buffers;</li> <li>• provide work hours/work days;</li> <li>• dimensions of above elements and requirements per latest CA—MUTCD Part 6 and City’s SOP for bike lane closures;</li> <li>• provide proposed speed limit changes if applicable;</li> <li>• description of bus stops, signalized and non-signalized intersection impacted by the work;</li> <li>• show plan to address pedestrians, bicycle and ADA requirement throughout the work zone per CA-MUTCD Part 6 and City’s SOP for Bike lane closures;</li> <li>• indicate if phasing or staging is requested and duration of each;</li> </ul>	

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		<ul style="list-style-type: none"> <li>description of trucks including: number and size of trucks per day, expected arrival/departure times, truck circulation patterns;</li> <li>provide all staging areas on the project site; and</li> <li>ensure that the contractor has obtained and read the City's TTC Guidelines and City's SOP for bike lane closures; and</li> <li>ensure traffic impacts are localized and temporary.</li> </ul>	
<p><b>Impact 3.15.8 (Cumulative Impacts)</b> The project would have a cumulative impact to transportation and traffic relative to construction-related impacts. However, future development projects would be required to prepare a temporary traffic control plan to reduce construction-related transportation of traffic impacts to a less than significant level. Therefore, this impact would be <b>less than cumulatively considerable impact with mitigation incorporated.</b></p>	CC	TRA-1 and TRA-2	LCC
<b>Utilities and Service Systems</b>			
<p><b>Impact 3.16.1 (Standard of Significance 1)</b> The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications</p>	LS	None required.	LS

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
facilities the construction or relocation of which could cause significant environmental effects. This would be a <b>less than significant impact</b> .			
<b>Impact 3.16.2 (Standard of Significance 2)</b> The project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. This impact would be <b>less than significant</b> .	LS	None required.	LS
<b>Impact 3.16.3 (Standard of Significance 3)</b> The project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. This impact would be <b>less than significant</b> .	LS	None required.	LS
<b>Impact 3.16.4 (Standard of Significance 4)</b> The project would not 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. This impact would be <b>less than significant</b> .	LS	None required.	LS
<b>Impact 3.16.5 (Standard of Significance 5)</b> The project would comply with federal, state, and local management and reduction statutes and regulations related	LS	None required.	LS

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
to solid waste. This impact would be <b>less than significant</b> .			
<b>Impact 3.16.6 (Cumulative Impacts)</b> The project, along with other existing, planned, proposed, approved, and reasonably foreseeable development in the region, would contribute to the cumulative demand for utility services and associated infrastructure. However, the environmental effects of future development projects and utilities needed to accommodate future growth in the region would be evaluated in greater detail for each future development project. This impact would be <b>cumulatively considerable and significant and unavoidable</b> .	LCC	None required.	LCC
<b>Wildfire</b>			
<b>EFFECTS FOUND NOT TO BE SIGNIFICANT Impact 1) (Standard of Significance 1)</b> The project would not substantially impair an adopted emergency response plan or emergency evacuation plan. This would be <b>no impact</b> .	N	None required.	N
<b>EFFECTS FOUND NOT TO BE SIGNIFICANT Impact 2) (Standard of Significance 2)</b> The project would not, 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. This would be <b>no impact</b> .	N	None required.	N

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Table ES-1, continued

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
<p><b>EFFECTS FOUND NOT TO BE SIGNIFICANT Impact 3) (Standard of Significance 3)</b> The project would not 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. This would be <b>no impact</b>.</p>	N	None required.	N
<p><b>EFFECTS FOUND NOT TO BE SIGNIFICANT Impact 4) (Standard of Significance 4)</b> The project would not 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. This would be <b>no impact</b>.</p>	N	None required.	N

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## 1.0 Introduction

This Draft Environmental Impact Report (Draft EIR) was prepared in accordance with and in fulfillment of the California Environmental Quality Act (CEQA) and the CEQA Guidelines. As described in CEQA Guidelines Section 15121(a), an EIR is a public informational document that assesses the potentially significant environmental impacts of a project. CEQA requires that an EIR be prepared by the agency with primary responsibility over the approval of a project (the lead agency). The City of Sunnyvale (City) is the lead agency for the proposed El Camino Real Specific Plan ("Specific Plan" or "project"). Public agencies are charged with the duty to consider and minimize environmental impacts of proposed development where feasible and have the obligation to balance economic, environmental, and social factors.

### 1.1 Purpose of the EIR

CEQA requires the preparation of an EIR prior to approving any project that may have a significant effect on the environment. The City has determined that the Specific Plan is a project under CEQA.

This EIR addresses the project's environmental effects, in accordance with CEQA Guidelines Section 15168 (Program EIR). As referenced in CEQA Guidelines Section 15121(a), the primary purposes of an EIR are to:

- Inform decision-makers and the public of the significant environmental effects of a project;
- Identify possible ways to minimize the significant effects of a project; and
- Describe reasonable alternatives to a project.

This document analyzes the project's environmental effects to the degree of specificity appropriate to the current proposed actions, as required by CEQA Guidelines Section 15146. The analysis considers the activities associated with the project to determine the short- and long-term effects associated with their implementation. This EIR also considers the project's direct and indirect impacts, and the cumulative impacts associated with other past, present, and reasonably foreseeable future projects.

Where potentially significant impacts are identified, the EIR specifies mitigation measures that are required to be adopted as conditions of approval or may be incorporated into the project to avoid or minimize the significance of impacts resulting from the project. In addition, this EIR is the primary reference document in the formulation and implementation of the project's Mitigation Monitoring and Reporting Program.

The City of Sunnyvale Planning Commission will consider the project and its EIR and will make recommendations to the City Council for the proposed legislative approvals. Prior to rendering its decision on the proposed project, the City Council is required to consider the Final EIR and certify that the document has been completed in compliance with CEQA, that it has reviewed and



considered the information in the Final EIR, and that the document reflects the lead agency's independent judgment and analysis (CEQA Guidelines Section 15090.) After certifying the Final EIR, the project will be considered by the City Council. A decision to approve the project must be accompanied by specific written findings in accordance with CEQA Guidelines Section 15091 identifying how each significant impact identified in the Final EIR was addressed, and if there are significant impacts that cannot be mitigated to less than significant. If there are significant impacts that cannot be mitigated to less than significant, a specific, written statement of overriding considerations must be prepared, explaining the specific reasons in support of its decision in accordance with CEQA Guidelines Section 15093.

## 1.2 EIR Scope, Issues, and Concerns

### 1.2.1 *Notice of Preparation of Environmental Impact Report*

In accordance with CEQA Guidelines Section 15082, the Notice of Preparation (NOP) was distributed to initiate the City's CEQA review process for the project, identify and seek public input for the project's potential environmental effects, and identify a date for the project's public scoping meeting. The NOP is included in Appendix A to this Draft EIR. The NOP was distributed on October 30, 2017, for a 30-day public review period that concluded on December 1, 2017.

The NOP identified the following environmental issues as having a "potentially significant impact" to be addressed in the Draft EIR. The list of potentially significant impacts includes those outlined in the NOP, as listed below:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural and Tribal Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Utilities and Service Systems

It is noted that since preparation of the 2017 NOP, CEQA Guidelines Appendix G has been amended to include environmental issues related to energy and wildfire.

### 1.2.2 *Scoping Results*

The City received 17 comment letters on the Notice of Preparation for the project's Draft EIR. A copy of each letter is included in Appendix A. These comments were considered during the preparation of the Draft EIR. Comments not pertaining to the CEQA process were provided to the



City for consideration and were not incorporated in the Draft EIR analysis. In addition to the written comments included in Appendix A, the comments outlined in the following sub-sections were received as part of the project's Public Scoping Meeting held on November 9, 2017.

### Land Use and Planning

Commenters expressed concern about how changes to land use designations and zoning classifications in the plan area would affect population growth, establishment of new businesses in commercial areas, loss or displacement of established businesses, and affordable housing. Some commenters stated they may no longer shop on the El Camino Real corridor if the new development leads to increased congestion and higher density. Questions also arose as to how the project would accommodate the proposed increase in residential densities. Some commenters did note support for the concept of the project and the potential to change the existing land use patterns in the project area to allow for increased and more unified development.

### Public Services

Commenters stated concerns that the project would either increase or decrease student populations in neighboring school districts, which may require building new school facilities. Some commenters felt that students would have to travel farther to attend school.

### Transportation

Comments in this category reflected concerns regarding bicycle, pedestrian and transit facilities along the El Camino Real corridor, including increasing safety features such as dedicated bike lanes, safer and more visible crosswalks, and availability of bicycle parking. Commenters indicated they wanted the project to take a proactive stance regarding traffic modeling and trip generation estimates, which would include accurate vehicle miles traveled (VMT) for private passenger automobiles, regional transit services, bicycles, and pedestrians. Commenters also asked if the project would incorporate a transportation demand management (TDM) program to discourage traveling in single-occupant vehicles. Some suggested incentives for taking public transit such as transit vouchers and rebates for ridesharing programs.

Additional comments related to this topic included concerns about increased traffic congestion from lane reductions, signalized intersection delays, fluctuations in traffic patterns due to time of day and weather conditions, and vehicle speed limits. Some commenters suggested incorporating new technology and design to manage traffic conditions, including limiting private passenger autos on El Camino Real, use of electric cars, elevated roadways, automated vehicles, increasing the number of transit stops, and shortening the length of buses traveling along the El Camino Real corridor. Additional comments received pertaining to transportation-related issues are summarized below.

### Additional Comments

Participants who attended the scoping meetings also commented on aesthetics, greenhouse gas emissions, noise, utilities and service systems, transportation, and economic impacts. These topics



of concern are identified and addressed in the appropriate EIR section and are also summarized below.

- Project Description: The California Department of Transportation (Caltrans) requested completion of an encroachment application for all project-level work for any planned activities conducted within or adjacent to the state right-of-way. The encroachment permit process includes historical and archaeological documentation in compliance with CEQA law and applicable federal, state, and local regulations. For more information on this topic, see Section 2.0, Project Description.
- Aesthetics: Impacts on aesthetic resources should be addressed in the project. The project area is considered a transit priority area. As such, aesthetic resources should be removed from the EIR discussion and impacts on aesthetic resources should not be considered significant under CEQA. For more information on this topic, see Section 3.1, Aesthetics.
- Greenhouse Gas Emissions: The analysis should include what impacts plan implementation will have on emissions and drivers traveling longer distances. For more information on this topic, see Section 3.7, Greenhouse Gas Emissions.
- Noise: The project would increase noise from cars, children, and school activities. For more information on this topic, see Section 3.11, Noise.
- Transportation: El Camino Real is a transit priority area, and regional government and transit agencies should commit to supporting El Camino Real as such. For this reason, discussion of parking impacts should be removed from the EIR. A fifth transit stop should be installed along the El Camino Real corridor to make the entire Sunnyvale corridor a transit priority area. Placing housing and jobs closer together would have a positive impact on traffic conditions. Traffic analysis should include studying delays at major intersections and traffic diversions to roads east and west of El Camino Real. Traffic analysis should include a comparison of full plan implementation to existing conditions. For more information on this topic, see Section 3.15, Transportation.

Commenters suggested incorporating traffic-calming design features into the plan, such as installing speed bumps on the roadway. Commenters also expressed concern regarding increased congestion and safety issues on neighboring streets surrounding El Camino Real. Some commenters stated that installing bike lanes along El Camino Real would slow traffic and suggested installing bike lanes on alternative streets instead. Commenters stated that El Camino Real is a priority transit corridor and should have increased transit services, including closer bus stops and more frequent service schedules. Parking should be addressed in the scope of the project. The City should implement a commuter shuttle system to and from major transit hubs (see Section 3.15, Transportation).

Caltrans recommended that the City use its guidelines and manuals in planning and design considerations for the project. Caltrans requests that a travel demand analysis be performed



and submitted to the agency for review. The analysis should include a multimodal approach with VMT metrics. It should also include mitigation measures related to an increase in VMT as the result of the project, as well as evaluation of the project's primary and secondary effects on pedestrians, bicycles, and transit facilities. Caltrans also asked for the lane configuration along the El Camino Real corridor to include a dedicated bus lane (see Section 3.15, Transportation).

- Utilities and Service Systems: The project should examine Sunnyvale's wastewater and sewage infrastructure and identify any relevant deficiencies. For more information on this topic see Section 3.16, Utilities and Service Systems.).

The State Water Resources Control Board, Santa Clara County District, requested documentation on how the project would comply with applicable California Waterworks Standards, California Code of Regulations, Chapter 16, Title 22. The district also stated that any capital improvement projects in connection with the project would need to obtain the necessary permits for additions and/or alterations to the City's existing water system (see Section 3.16, Utilities and Service Systems).

The City of Santa Clara requested that the project's traffic impact analysis (TIA) include neighboring cities along El Camino Real. The City also requested that the TIA include cumulative impacts in compliance with County of Santa Clara's Congestion Management Plan. Cumulative impacts on traffic and greenhouse gases should extend beyond 2020. The City of Santa Clara also requests clarification on the level of service analysis as it relates to significant impacts on roadways, intersections, and expressways, if applicable (see Section 3.15, Transportation).

The County of Santa Clara stated that the project would have significant traffic impacts on Lawrence Expressway operations. The County requested that any significant traffic impacts from the project incorporate mitigation measures from the traffic impact analysis prepared for the EIR. The County's Comprehensive County Expressway Planning Guide should be consulted for any mitigation measures not included in the TIA (see Section 3.15, Transportation).

The Santa Clara Valley Transportation Authority (VTA) supported the project. The VTA recommended including some of its publications as background documentation in the EIR; the VTA stated that a TIA is required for the project to comply with its Congestion Management Plan. The agency stated that transit service along El Camino Real is in decline and recommended that the EIR include a transit delay analysis. Further, the VTA recommends employing appropriate roadway design safety features along the corridor (see Section 3.15, Transportation).

A commenter asked whether the Bus Rapid Transit Project was being analyzed along with the project (see Section 3.15, Transportation).



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## 1.0 Introduction

- Economic Impacts: A commenter noted that mixed-use residential development has not been successful in Sunnyvale. This comment is not applicable to CEQA and was not addressed in the Draft EIR.
- Miscellaneous: A commenter requested a list of developers associated with the project, and that the City share the budget and scope of the EIR showing allocations for each studied environmental resource area. These topics are not applicable to CEQA and were not addressed in the Draft EIR.

## 1.3 Environmental Review Process

This Draft EIR, with an accompanying Notice of Completion, is being circulated to the State Clearinghouse, trustee agencies, responsible agencies, other government agencies, and interested members of the public for a 45-day review period in accordance with CEQA Guidelines Sections 15087 and 15105. The review period for this Draft EIR will begin the day the document is released for public review and will end 45 calendar days later. During this period, public agencies and members of the public may submit written comments on the analysis and content of the Draft EIR. The City will hold a public meeting on the Draft EIR during the review period identified above. All interested parties are invited to attend the public hearing to provide either verbal or written comments on this Draft EIR. In reviewing a Draft EIR, readers should focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and on ways in which the significant effects of the proposed project might be avoided or mitigated.

As most of the Planning Division is currently working remotely, we prefer that all comments are provided via email to the project planner:

Jeffrey Cucinotta, AICP, Senior Planner  
[jcucinotta@sunnyvale.ca.gov](mailto:jcucinotta@sunnyvale.ca.gov)

However, if a comment letter must be mailed, please direct it to the following address:

City of Sunnyvale – Community Development Dept.  
Attn: Jeffrey Cucinotta, AICP, Senior Planner  
456 W. Olive Avenue  
Sunnyvale, CA 94088-3707

Following the close of the public comment period, a Final EIR will be prepared and will include responses to all substantive comments related to environmental issues surrounding the proposed project, and any revisions or corrections to the Draft EIR.



## 1.4 Report Organization

The Draft EIR is organized as follows:

### Section ES – Executive Summary

The Executive Summary outlines the description and background of the proposed project, addresses the format of this Draft EIR, identifies alternatives to the proposed project, and includes a summary of the potential environmental impacts, any mitigation measures identified for the proposed project, and the level of significance of the impact after mitigation.

### Section 1.0 – Introduction

This section describes the purpose of the Draft EIR, the background of the proposed project, the NOP and scoping process, the use of incorporation by reference, and the Final EIR certification.

### Section 2.0 – Project Description

This section describes the proposed project, the objectives of the proposed project, the proposed project area and location, approvals anticipated to be included as part of the proposed project, the necessary environmental clearances for the proposed project, and the intended uses of the EIR.

### Section 3.0 – Introduction to the Environmental Analysis and Assumptions Used

This section contains a detailed environmental analysis of the existing (baseline) conditions, potential project impacts, recommended mitigation measures, and possible unavoidable adverse impacts for the following environmental issue areas:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural and Tribal Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Utilities and Service Systems

### Section 4.0 – Effects Found Not To Be Significant

This section summarizes effects found not to be significant or to be less than significant.



### Section 5.0 – Alternatives

This section discusses alternatives to the project, including the CEQA mandatory “No Project” alternative, that are intended to avoid or reduce the project’s significant environmental impacts.

### Section 6.0 – Other CEQA Considerations

This section summarizes the project’s significant and unavoidable impacts and significant irreversible environmental changes. It also analyzes potential environmental consequences of the foreseeable growth and development that could be induced by implementation of the proposed project.

### Section 7.0 – Report Preparers

This section lists all authors and agencies that assisted in the preparation of the EIR by name, title, and company or agency affiliation.

### Section 8.0 – References

This section lists the materials, documents, and reports, used in the preparation of the EIR, delineated by section.

### Appendices

The appendices contain the technical materials prepared to support the analyses.

### Approach to Cumulative Impact Analysis

CEQA Guidelines Section 15130 requires that EIRs include an analysis of the project’s cumulative impacts when the project’s effect is considered cumulatively considerable. Each technical section in the EIR considers whether the project’s effect on anticipated cumulative setting conditions is cumulatively considerable (i.e., a significant effect).

## 1.5 Incorporation by Reference

The documents outlined below, which were utilized during preparation of this Draft EIR and are a matter of public record, are hereby incorporated by reference. These documents are available for review on the City’s website and by contacting Jeffrey Cucinotta, Senior Planner, at [jcucinotta@sunnyvale.ca.gov](mailto:jcucinotta@sunnyvale.ca.gov) (preferred) or (408) 730-7424.

- *Sunnyvale General Plan, Consolidated July 26, 2011.* A General Plan is the local government’s long-term blueprint for the community’s vision of future growth. It includes goals, policies, and programs that convey a long-term vision for the Sunnyvale community and guides local decision-making to advance that vision. The General Plan is the basis for determining acceptable land uses and related park, road, and other infrastructure needs. The Sunnyvale General Plan contains the seven elements mandated by state law and was adopted as a consolidated document on July 26, 2011. The Land Use and Transportation Element (LUTE) of the General Plan, which was adopted in April 2017, anticipates and is intended to facilitate the transformation of future development and building forms along El Camino Real. The Specific



Plan would allow for an increase of 2,700 dwelling units (or 8,500 dwelling units total) over that currently allowed with future buildout of the General Plan.

- *Sunnyvale Municipal Code*. The Sunnyvale Municipal Code (SMC) establishes detailed zoning districts and regulations based on the General Plan. SMC Title 19 includes the Uniform Planning and Zoning Code of the City of Sunnyvale (Zoning Code), which serves as the primary implementation tool for the General Plan. In addition to protecting and promoting the public health, safety, peace, comfort, and general welfare, the Zoning Code establishes the procedure for adoption of the General Plan for the physical development of the City and land outside its corporate limits that may be included within the City at a future time, and adoption of specific plans, precise plans, including precise zoning plans, and amendments thereof. The Zoning Code creates zoning districts and regulations applicable thereto, and acts to classify, regulate, restrict, and segregate the uses of land and buildings. The location, height, and bulk of buildings, dimensions, and areas of yards and other open spaces, and the density of population, and of commercial and industrial activities, are regulated and restricted by SMC Title 19. The SMC is referenced throughout this Draft EIR to establish the proposed project's baseline requirements according to the City's regulatory framework.
- *Precise Plan for El Camino Real* The Precise Plan for El Camino Real was originally adopted by the City Council in 1993 and was last updated in 2007. The Precise Plan for El Camino Real is established to maintain and increase the vibrancy and vitality of El Camino Real as it extends through Sunnyvale. The Precise Plan serves as a guide to encourage well-designed, appropriate developments along El Camino Real. The Precise Plan offers strategies to capitalize on the strengths of El Camino Real and to overcome the limitations in order to enhance the ability of the corridor to remain a vibrant and successful part of the City. The Precise Plan for El Camino Real is adopted under the authority of the SMC Title 19.



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## 2.0 Project Description

The City of Sunnyvale (City), as the lead agency under the California Environmental Quality Act (CEQA), has prepared this Environmental Impact Report (EIR) for the El Camino Real Specific Plan (“Specific Plan” or “project”).

The project description is provided in conformance with CEQA Guidelines Section 15124. As required by CEQA Guidelines Section 15124, this section discusses the geographic setting, project location, project setting, current City General Plan land use designations and zoning, project objectives, a general description of the project’s technical and environmental characteristics, and discretionary actions required to implement the proposed project. This information is the basis for analyzing the proposed project’s impacts on the existing physical environment in Section 3.0 of this EIR.

### 2.1 Project Location

Sunnyvale is located in northwestern Santa Clara County in an area commonly referred to as the South Bay or Silicon Valley. Sunnyvale is surrounded by the Cities of Mountain View and Los Altos to the west, Cupertino to the south, Santa Clara to the east, and the San Francisco Bay Area to the north. Regional access to the Specific Plan Area is provided by US Highway 101 to the north, Interstate-280 to the south, and State Route 85 and State Route 237 to the west. The Specific Plan Area is composed of approximately 350 acres of properties that are located immediately adjacent to El Camino Real (with a few additional properties adjacent to sites fronting on El Camino Real), which traverses the City diagonally from east to west (Santa Clara to Mountain View). The regional context of the Specific Plan Area is shown in **Figure 2-1, Regional Map**; the Specific Plan Area is shown in greater detail in **Figure 2-2, Local Vicinity Map/Specific Plan Area**.

### 2.2 Introduction to the Specific Plan

The Specific Plan has been drafted with the goal of enabling the transition of the corridor to a vibrant, mixed-use area with improved streetscapes and safer environments for walking, bicycling, and other modes of transportation. The Specific Plan builds upon the City’s 2007 *Precise Plan for El Camino Real* and the corridor’s assets and includes a comprehensive strategy to address land use, economic vitality, urban design, and multimodal connectivity. The Plan further builds on the 2017 update to the Land Use and Transportation Element of the General Plan that added the potential for additional housing; however, the details of how that would be accomplished require further action.

Additionally, the *Grand Boulevard Initiative*, the regional land use and transportation strategy for the El Camino Real corridor along its entire length through 19 cities from Daly City to San Jose, envisions increased transit service and enhanced opportunities for residential development along the length of the corridor. This is in alignment with the City’s Land Use and Transportation Element



(LUTE) of the General Plan, which plans for the transformation of the El Camino Real corridor through significant changes to building form and development character.

### 2.2.1 Existing Setting and Context

El Camino Real is the oldest transportation corridor in the City of Sunnyvale. It existed long before the incorporation of the City as part of a roadway linking the 21 Spanish missions from San Diego to Sonoma. Before that time, the roadway existed as pathways used by indigenous people. Within the Peninsula and South Bay Area, it is now a state highway (Route 82). Although major north-south freeways have been constructed on either side of it (Highway 101 and Interstate 280), it continues to provide an important transportation link among the 19 cities and 2 counties through which it passes.

The development pattern along El Camino Real is commercially-oriented, a reflection of the Highway Business Commercial (C-2) zoning district designation that has applied to the majority of street-facing parcels with some higher-density residential uses intermixed throughout the corridor. 82 percent of the land within the Specific Plan Area has a C-2 zoning designation. El Camino Real's built environment is characterized by retail businesses, restaurants, automobile dealerships, and hotels. Several sites included mixed uses of retail commercial and residential development (both vertically and horizontally integrated). The highway commercial identity of the corridor is apparent through the large road width, substantial building setbacks from the street, low-rise structures, and large parking lots in front of buildings. Two properties in the Specific Plan Area are in the Office (O) zoning district, but such lots account for less than 1 percent of the land area. Sunnyvale's publicly owned Civic Center and the adjacent former County courthouse site, which is also located along the corridor, is zoned Public Facility (P-F) and constitutes approximately four percent of the area. Residentially-zoned land within the Specific Plan Area largely includes parcels zoned High Density Residential (R-4), with a handful of properties zoned for Medium Density Residential (R-3). Residential properties constitute approximately 13 percent of the land area. While the corridor is generally characterized by its commercial nature, the residential zoning districts and the mixed-use retail/residential sites found in the Specific Plan Area serve an important role in providing multifamily residential opportunities on El Camino Real. Refer to **Figure 2-3, Existing Zoning Map**.

There are also many lower-density residential uses immediately adjacent to the corridor, with parcels supporting single-family homes, duplexes, and townhomes sharing a property line with properties that have frontage along El Camino Real. Such conditions may present unique challenges related to future building design and sensitivity to neighboring uses that may differ from more intensive uses proposed for El Camino Real.

## 2.3 Project Background

The *Precise Plan for El Camino Real* was originally adopted by the City Council in 1993 and was last updated in 2007. Since that time, market conditions have continued to evolve and development interest along El Camino Real has increased. Today, the four-mile stretch of El



Camino Real in Sunnyvale remains an important regional connector as well as a valuable economic asset to the City. The corridor is the most traveled multimodal corridor in the City and serves the needs of local neighborhoods as well as regional communities. Although the 2007 *Precise Plan* enhanced the vision for El Camino Real, it lacked sufficient detail to effectively guide future development and address the perceived challenges raised by community stakeholders. Therefore, in January 2014, the Sunnyvale City Council initiated the process to update the *Precise Plan for El Camino Real*.

After kicking off the update of the *Precise Plan* in 2015, which will now be entitled *El Camino Real Specific Plan*, the City Council created the El Camino Real Plan Advisory Committee, a citizen's advisory committee, to work with staff and consultants to identify the development concepts, vision statement, policies, and land use alternatives for the corridor. In September 2016, the City began a series of ongoing public workshops to report on recent project activities and support an open discussion on the City's Vision Statement, Vision Priorities, and Land Use Alternatives that would guide the project moving forward. In August 2017, the City Council identified a Preferred Land Use Alternative (now the proposed project), and the analysis began to assess and refine the details of the proposed land use mix.

## 2.4 Project Characteristics

The purpose of the Specific Plan is to provide an overall vision and guidance to transform the Specific Plan Area into a commercial and mixed-use corridor with additional housing opportunities. The Plan envisions improved streetscapes, and safer, more enjoyable environments for walking, bicycling, and other modes of transportation, while preserving the quality of life for adjacent neighborhoods and existing assets to the community. The Specific Plan includes development policies, land use regulations, design guidelines, infrastructure improvement plans, and an implementation and financing program to help guide development within the Specific Plan Area. The Specific Plan is expected to guide development through the year 2035 and includes recommendations for conceptual modifications to the roadway and streetscape enhancements to enable safer and a greater number of multimodal transportation options along Sunnyvale's stretch of El Camino Real. The project would also include amendments to the Sunnyvale General Plan and the Sunnyvale Municipal Code.

### 2.4.1 Specific Plan Vision

The Vision Statement adopted to guide the development of the Specific Plan is as follows:

*Sunnyvale's El Camino Real corridor will offer vibrant destinations and a people-friendly environment while continuing to be the community serving arterial residents of Sunnyvale and surrounding cities will use for their daily needs. It will build on its strengths and opportunities and evolve into a dynamic place where people live, work, shop, and gather.*



*Residents and visitors will walk along wide sidewalks lined with mature, large-canopied trees. They will meet friends and family at public plazas surrounded by a variety of shopping and dining options. Throughout the corridor, they will enjoy public art that exhibit local talents and cultural diversity, celebrate Sunnyvale's agricultural origins, or display the City's role in high tech evolution.*

*Streetscape and road improvements will provide safety and help promote everyday walking, biking, and transit use in and around the corridor. Connecting paths from surrounding neighborhoods and parallel streets created through developments fronting El Camino Real will give residents the option to walk or bike to shops and restaurants. Gateways, signs, and clear pedestrian paths will lead to the lively Downtown or the Community Center.*

*The corridor will feature four main nodes of greater activity at key intersections where public transportation, housing, amenities, and services will be strongly integrated. A variety of new residences will be built in mixed-use developments for a range of incomes and generations.*

*New and long-established businesses and auto dealerships will coexist and continue to thrive in updated and prominent storefronts. Developments will display the City's commitment to sustainability. Buildings will be designed in timeless architecture with forms that seamlessly transition to and respect the surrounding residential neighborhoods, especially those with one- or two-story residences.*

*El Camino Real will continue to change over time, but will continue to play a vital role for Sunnyvale. It will retain existing viable uses while accommodating new uses through reinvestment that promotes economic vitality. Change will be managed in a manner that continues to create positive community benefits for generations to come.*

More specifically, the Specific Plan would create an environment that emphasizes circulation and accessibility and prioritizes the following:

1. Efficient circulation patterns.
2. Safe, connected and convenient multimodal access.
3. Appropriately scaled buildings that preserve the quality of life of adjacent neighborhoods and existing community assets.
4. Supportive environment for small and local businesses.
5. Housing opportunities that help meet the needs of the community.
6. Supporting a sustainable community.



### 2.4.2 Project Objectives

Using the Vision Statement as a guide, the project is intended to accomplish the following objectives:

- Increase opportunities for new mixed-use developments and encourage the development of unique, smaller-scale housing types such as studios and micro-units.
- Provide opportunities for a variety of housing options to serve residents at all income levels and various stages of life.
- Facilitate the efficient flow of traffic for all modes of travel and prioritize environmentally efficient modes of transportation.
- Improve pedestrian amenities, bicycle facilities, transit, and landscaping to enhance multimodal environments and promote safe, convenient access to all locations along the corridor and beyond.
- Promote high-quality and appropriately scaled buildings that preserve quality of life for adjacent neighborhoods and contribute to an attractive, comfortable, and safe streetscape along the corridor.
- Support local and regional-serving commercial uses that highlight the corridor's history and support economic vitality.
- Support coexistence of auto-dealerships and other businesses with a regional draw with nearby small businesses and residences.
- Provide a diverse range of shopping and dining options within walking distance of surrounding residences.
- Encourage a focus on sustainable options in building design, transportation, construction, site planning, energy, stormwater management, and greenhouse gas emissions reduction.

### 2.4.3 Land Uses and Design

A key strategy in the Specific Plan updates the defining concept of "nodes," which was originally introduced and detailed in the 2007 *Precise Plan for El Camino Real*. The Specific Plan envisions the nodes as unique neighborhoods that draw on the differing characteristics that define them, in combination with the land use amenities and transportation opportunities that exist for each.

With a focus on development in the nodes, the Preferred Land Use Alternative (proposed project) that was selected by the City Council to be studied (and analyzed herein) includes a net increase of 6,900 residential units and up to 730,000 square feet of commercial development (over **existing** conditions) within the Specific Plan Area. **Figure 2-4, Proposed Zoning Map** and **Figure 2-5, Proposed Land Use Map** identify the land use and zoning for the four nodes and three segments along the corridor.



The nodes also contain transit stops and bicycle lanes to provide circulation access by a variety of means. Nodes (and the corridor segments that connect them) are intended to be distinct areas of development form and design. Each node would be guided by specific development standards and design guidelines that are established to promote high-quality design, a vibrant mix of uses, and environments supportive of access to all modes of transportation. By understanding specific qualities that are present in each of the nodes, including their physical histories as well as their future opportunities, the Specific Plan directs future growth of each node as a natural evolution of the characteristics that have shaped them. A description of the four nodes included within the Specific Plan Area is provided below.

### Bernardo Gateway

The Bernardo Gateway Node, which has been referred to in past planning studies as the Western Node, serves as a gateway to Sunnyvale from Mountain View and provides regional access from Highway 85. Transit lines cross El Camino Real on Bernardo Avenue. The node currently contains higher densities of residential streets and developments close to El Camino Real. A series of parcels on the northwest corner of Bernardo Avenue and El Camino Real could be combined to form a significant catalyst for change at some point in the future. Future development in this neighborhood should ensure that buildings shape a vibrant pedestrian realm with access to ground-floor restaurants and retail/service establishments as well as upper-level residential entries.

### Civic Center

The Civic Center Node, which has been referred to in past planning studies as the Downtown Node, is adjacent and provides immediate access to downtown Sunnyvale. This node contains a wider range of uses and activities than any of the other nodes or segments. There are several large commercial centers in the Civic Center Node that front on El Camino Real. Street connections with limited vehicular access connect El Camino Real to the historic district, which lies between the Civic Center Node and the Downtown Specific Plan area. This node is surrounded by residential neighborhoods with a range of densities and transit lines that cross El Camino Real, connecting to other parts of Sunnyvale and the region. Future development in the Civic Center Node would provide a range of uses that build on the retail, office, and residential uses that characterize this neighborhood. Building frontages should shape a vibrant pedestrian realm with access to ground-floor restaurants and retail/service establishments as well as upper-level residential entries.

### Orchard District

The Orchard District Node, which has been referred to in past planning studies as the Community Node, includes the Sunnyvale Community Center. The Sunnyvale Community Center serves as a significant public amenity, and new development in this node should facilitate safe and attractive pedestrian access to this public gathering space. Immediately south of the Orchard District Node is Heritage Park and the historic 10-acre orchard. This community asset provides this neighborhood with a tangible link to Sunnyvale's cultural history. As such, it can become a unique



community icon for the neighborhood. Future development in this node should ensure that buildings shape a vibrant pedestrian realm with access to ground-floor restaurants and retail/service establishments as well as upper-level residential entries when allowed.

### Three Points District

The Three Points District Node has been referred to in past planning studies as the Eastern Node. The 2007 *Precise Plan for El Camino Real* identifies the triangular City-owned open space at the center of this neighborhood as “Three Points.” At slightly less than one-acre in size, this open space contains many large trees, and transit connections are made at bus shelters that line its edges. On the edges of this node are higher density residential developments; with small scale commercial development on the south. These uses are provided easy access to El Camino Real. The smaller parcel sizes and older development provide a smaller scale for this neighborhood than in the other corridor mixed-use areas on El Camino Real. A new mixed-use development at the southwest corner of this node would be larger in scale and would provide a range of housing types and a commercial/office component. Future development in this node should provide a vibrant pedestrian realm with access to ground-floor restaurants and retail/service establishments with upper-level residential entries.

### Segments

There are three segments along El Camino Real: the West Segment, the Center Segment, and the East Segment. The segments within the Specific Plan serve as important linkages between the four nodes. The segments have historically been developed with automobile-oriented businesses providing primarily retail and service opportunities along the corridor. There are several physical constraints (such as limited lot width and depth) or development issues associated with many of the parcels in the segments, which make them less suited for mixed-use redevelopment. Due to these constraints, residential mixed-use redevelopment in the corridor segments is only allowed on key parcels within the Center and East Segments.

### Land Use Designation Changes

The properties shown below in **Table 2-1** are currently included within the Precise Plan for El Camino Real area, but are developed with only residential uses, are not located directly on El Camino Real, and in some cases, have a zoning designation that is not directly tied to the future goals and policies of the plan. As such, these parcels will be removed from the El Camino Real Specific Plan area and associated combining district and given land use designations/zoning designations that mirror the existing development on the site.



Table 2-1  
Land Use Designation Changes

Address	APN	Existing Zoning	Proposed Zoning	Existing General Plan Designation	Proposed General Plan Designation	Remove from ECR Specific Plan Area & Combining District
815 E. Fremont Ave	211-25-013	High Density Residential (R-4)	R-4 (no change)	Corridor Mixed Use	High Density Residential	Yes
801-834 Kingfisher Terrace	211-43-013 through 211-43-033	High Density Residential (R-4)	R-4 (no change)	Corridor Mixed Use	High Density Residential	Yes
1332 Poplar Ave	313-03-006	Low Density Residential (R-1)	R-1 (no change)	Commercial	Low Density Residential	Yes
1075-1088 Ed Roth Terrace	213-35-052 through 213-35-058	Highway Business (C-2)	Medium Density Residential (R-3)	Commercial	Medium Density Residential	Yes

Specific Plan Area Build-Out

The Specific Plan contains goals, policies, development standards, and design guidelines to regulate development within each of the Specific Plan Area’s nodes and segments. The Specific Plan establishes new land use designations that promote additional housing within the corridor while maintaining existing commercial uses and providing opportunities for additional commercial development. In addition to maintaining the existing commercial uses, the project also identifies opportunities for new residential development.

Due to changes in state law, the Specific Plan will no longer impose a maximum housing cap for the Plan Area. Instead, the Specific Plan will establish base maximum residential densities. By using local incentives and the state Density Bonus Law, the proposed plan has the potential to result in a total buildout within the Plan Area of approximately 8,500 residential units and 3,980,000 square feet of commercial floor area. This represents a net increase (above **existing conditions**) of approximately 6,900 residential units and 730,000 square feet of commercial floor area (made up of approximately 426,000 square feet of retail commercial, 80,000 square feet of office commercial, and 224,000 square feet of hotel uses). When compared to development totals



currently allowed with the future buildout of the General Plan, the 8,500 residential units included in the Specific Plan has the potential to represent an increase of 2,700 dwelling units and a decrease of approximately 220,000 square feet of commercial floor area under the General Plan.

Under the Specific Plan, new base maximum densities are established for the residentially zoned sites, which range from 24 to 42 dwelling units per acre on specific sites in the nodes and 24 to 33 dwelling units per acre on specific sites in the Center and East Segments. However, applicants may still achieve densities above these base maximum densities on some of the residentially-zoned sites through the local community benefits program (known as the ECR Incentive Program), through the State Density Bonus Law on all residentially-zoned sites, or through both on sites eligible to use the ECR Incentive Program. Depending on the total number of incentive points a project is eligible to achieve through provision of community benefits, when allowed by the zoning, an applicant may achieve densities ranging from 30 to 80 du/ac on specific sites in the Nodes and 30 to 45 dwelling units per acre on specific sites in the Center and East Segments. Additionally, if a project proposes to include affordable units under State Density Bonus Law, the bonus percentage that must be provided under state law is added to the maximum density obtained with incentive points, if applicable, for the particular project. If a project does not propose or is not eligible for incentive points through the ECR Incentive Program, the bonus percentage that must be provided under state law is added to the base maximum density.

Refer to **Table 2-2** below for the base maximum densities in each residential zoning district, the total available incentive points allowed for eligible residential zoning districts, and the minimum commercial floor area ratio (FAR) requirement for the mixed-use and non-residential zoning districts. The additional densities achieved through State Density Bonus Law are not listed due to the voluntary nature of the program and varying percentages by participating projects.

**Table 2-2  
Permitted Density with Points Applied Through the ECR Incentives Program**

Zoning District	Base Maximum Density (dwelling units/acre) <sup>[1][2]</sup>	Maximum Incentive Points Available	Permitted Density with Maximum Incentive Points Applied	Minimum Commercial/Retail FAR
ECR-MU24	24	6	30	Required, per Table 2-3
ECR-MU28	28	10	38	
ECR-MU33	33	12	45	
ECR-MU42	42	14	56	
ECR-MU54	54	20	74	

[1] New residential development in the ECR Specific Plan Area is required to build to at least 85 percent of the zoning district’s base maximum zoning density.

[2] Additional densities may be achieved above the base maximum density or density obtained through the ECR Incentives Program by providing affordable housing consistent with State Density Bonus Law.

**Table 2-3  
Minimum Required Commercial Area in ECR-MU Zoning District Properties**

Lot Size	Minimum Required Commercial Area, whichever is greater <sup>[1]</sup> <sup>[2]</sup>	
≤ 50,000 sq. ft.	7,000 sq. ft.	
50,001-100,000 sq. ft.	10,000 sq. ft.	75% of El Camino Real frontage length x 50
100,001-150,000 sq. ft.	20,000 sq. ft.	
150,001-200,000 sq. ft.	30,000 sq. ft.	
200,001-300,000 sq. ft.	40,000 sq. ft.	
300,001-400,000 sq. ft.	50,000 sq. ft.	
≥400,000 sq. ft.	60,000 sq. ft.	

[1] If the floor area values/calculations presented above yield a value that is over 20% of the lot size, a commercial area capped at 20% of the lot size shall also be permitted.

[2] If a property has no frontage along El Camino Real, a commercial area capped at 10% of the lot size shall also be permitted.

*2.4.4 Circulation*

El Camino Real is a vital part of the local and regional circulation network. The corridor also serves as an important route for the transit network. El Camino Real is an uninterrupted route for east-west travel, which can serve bicyclists seeking more direct routes to travel across the City. The corridor was identified in the City’s Active Transportation Plan as a focus pedestrian corridor, which means it is a location with high potential for increasing walkability. In terms of walkability and regional importance, much of the Specific Plan Area has been identified as a regional Priority Development Area (PDA) with potential for higher density and walkable infill development.

Current infrastructure along El Camino Real favors the movement of automobiles through the corridor and does not contain many features that are safe or attractive to pedestrians and bicyclists. A complete streets approach that accommodates transit, bicycle, and pedestrian travel would require modifications to the infrastructure within the existing circulation framework and the existing street right of way. Future modifications in conjunction with implementation of the Specific Plan and the City’s Active Transportation Plan would create an environment that is safe, comfortable, and appealing to users of different modes.

Vehicular Travel

The layout of the street facilitates the movement of vehicles through the corridor. The segment of El Camino Real in Sunnyvale is approximately four miles with three lanes in each direction (including a 20-foot-wide curb lane). The street is approximately 100 feet wide from curb to curb.. At the most prominent intersections, including Mathilda Avenue, the curb-to-curb distance extends to 125 feet wide to accommodate dual left-turn lanes or exclusive left- and right-turn lanes. Most road segments consist of two 12-foot travel lanes and a curb lane accommodating



both parking and through movements. Within Sunnyvale, El Camino Real has 13 signalized intersections with a posted speed limit of 35 miles per hour.

### Transit

The Specific Plan Area is served by the Santa Clara Valley Transportation Authority (VTA). The key stop locations are the intersections with Remington Drive and Fair Oaks Avenue, Wolfe Road, Hollenbeck Avenue, and Bernardo Avenue.

### Pedestrian Access

Although sidewalks generally remain continuous along El Camino Real, the environment is not considered “walkable” in a Complete Streets context. The characteristics of walkable streets feature slow to moderate speeds (of vehicles) of approximately 20 to 30 miles per hour, short block lengths (of approximately 400 feet), short crossing distances, and facilities and amenities to create a comfortable environment for travelers.

### Bicycling Facilities

Bicycling on El Camino Real is challenging due to roadway design that primarily accommodates automobile throughput. The majority of the corridor does not provide dedicated bicycle travel lanes to bicyclists, and is characterized by wide crossing distances, heavy vehicular traffic, fast moving vehicles, wide travel lanes, and long blocks. Only a limited stretch of El Camino Real has a Class II bike lane: a 6-foot-wide dedicated lane with paint for bicycles that extends for a half-mile between Sunnyvale Avenue/Sunnyvale-Saratoga Road and Remington Drive/Fair Oaks Avenue.

The Specific Plan Area aims to incorporate a complete streets approach in design, which promotes safety, mobility, connectivity and accessibility for all users who travel along El Camino Real. Street design is addressed in the Specific Plan for El Camino Real and intersections within the corridor. Several street typologies are proposed that are intended to recognize the unique character of each node while linking together to create a connected network.

## 2.5 Regulatory Requirements, Permits, and Approvals

This EIR is intended to evaluate the environmental impacts of adoption and implementation of the project. The document will be a source of information for the City and other entities in the review of subsequent planning and development proposals.

The project may interact with a variety of additional planning initiatives throughout its implementation. The following is an overview of existing plans that may affect the project:

- The Land Use and Transportation Element of the Sunnyvale General Plan
- Adopted City Design Guidelines
- Active Transportation Plan



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## 2.0 Project Description

- Multi-family Residential Transportation Demand Management Program
- Citywide Transportation Demand Management Policies and Practices
- The Moffett Federal Airfield Comprehensive Land Use Plan
- Climate Action Playbook
- Green Stormwater Infrastructure Plan
- Vision Zero Plan
- Roadway Safety Plan

The City of Sunnyvale is the lead agency for the Specific Plan. Responsible agencies, as defined under CEQA, include public agencies other than the lead agency that may have discretionary actions associated with the implementation of the project or an aspect of subsequent implementation of the project. As implementation decisions for the proposed project may occur years from now, the parties involved cannot be known with certainty. However, the following potential responsible agencies have been identified from which permits and/or approvals may be required:

- Bay Area Air Quality Management District
- San Francisco Bay Regional Water Quality Control Board
- Santa Clara Valley Water District
- Santa Clara Valley Transportation Authority
- Santa Clara County Airport Land Use Commission
- Santa Clara County Roads and Airports Department

The Specific Plan will be presented to the Sunnyvale Planning Commission for review, comment, and recommendations which will subsequently be considered by the City Council. The Specific Plan may also be reviewed by other advisory bodies that could include the Sunnyvale Sustainability Commission, Bicycle and Pedestrian Advisory Commission, and/or Housing and Human Services Commission. The City Council, as the City's legislative body, is the approving authority for the Specific Plan. In adopting the Specific Plan, the City Council would take the following actions:

- Certify the Final EIR;
- Amend the General Plan and adopt the Specific Plan;
- Adopt required findings for the adoption of the Specific Plan, including required findings under CEQA Guidelines Sections 15090, 15091, and 15093;



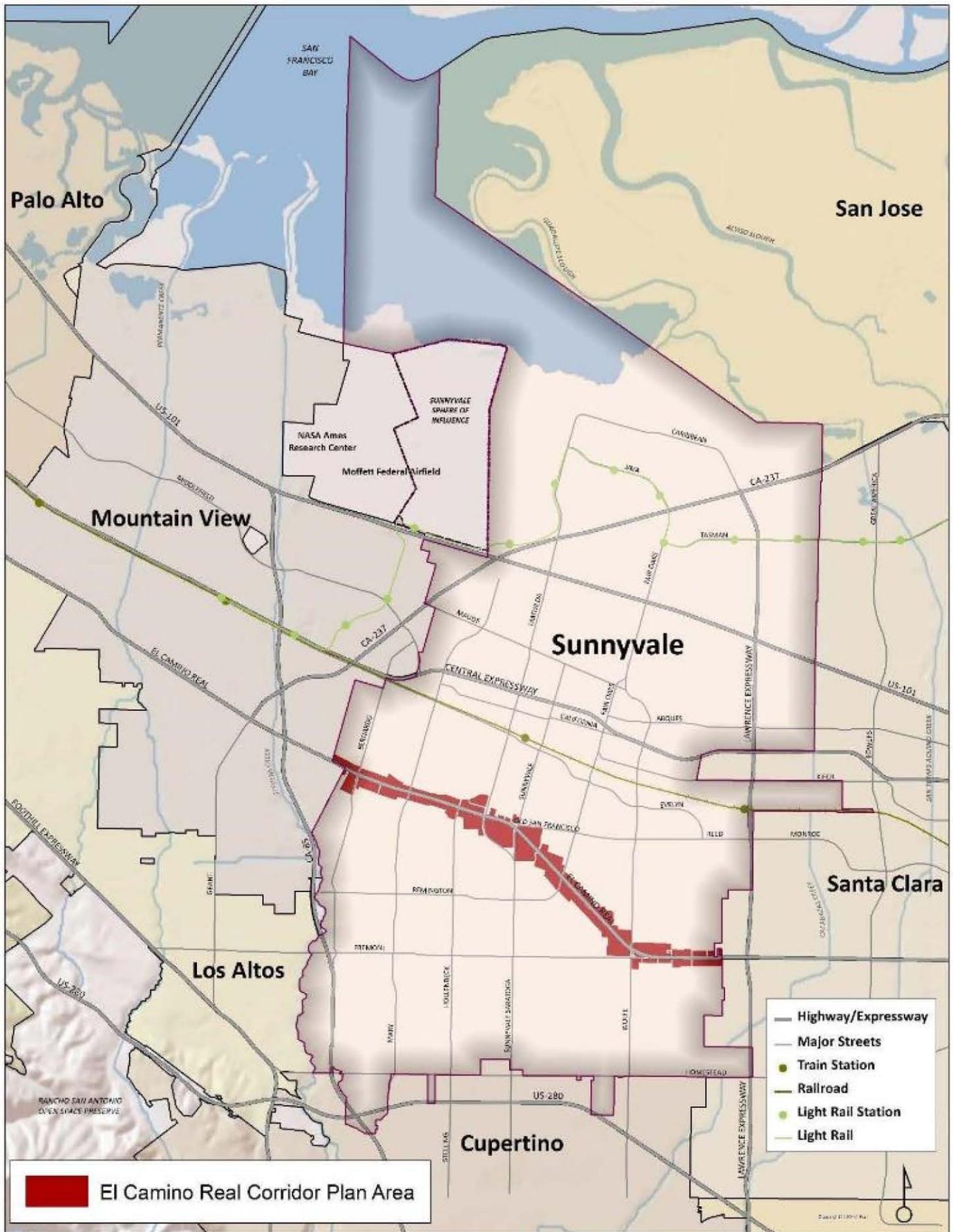
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## 2.0 Project Description

- Amend the Sunnyvale Municipal Code; and
- Adopt a Mitigation Monitoring and Reporting Program.

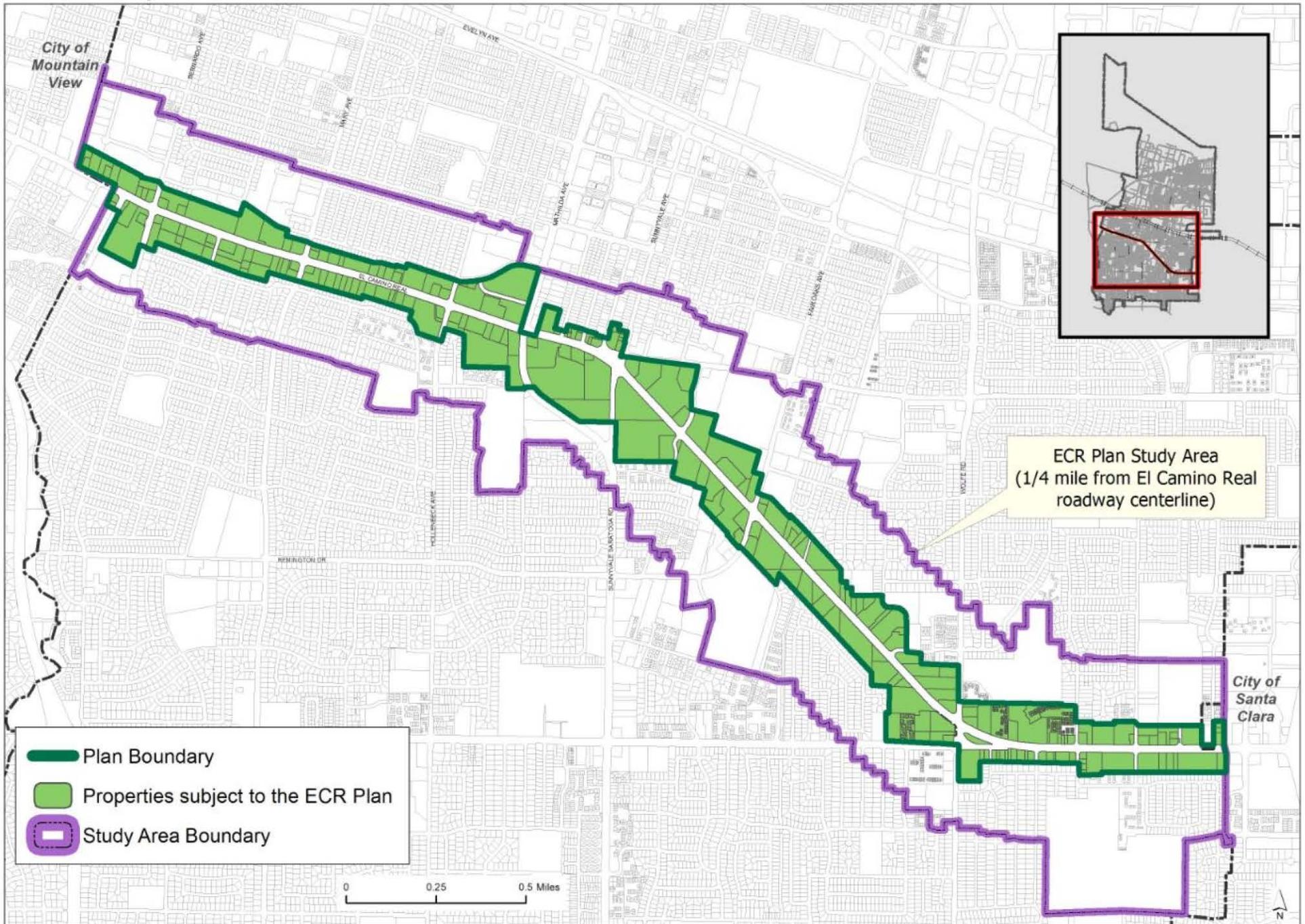


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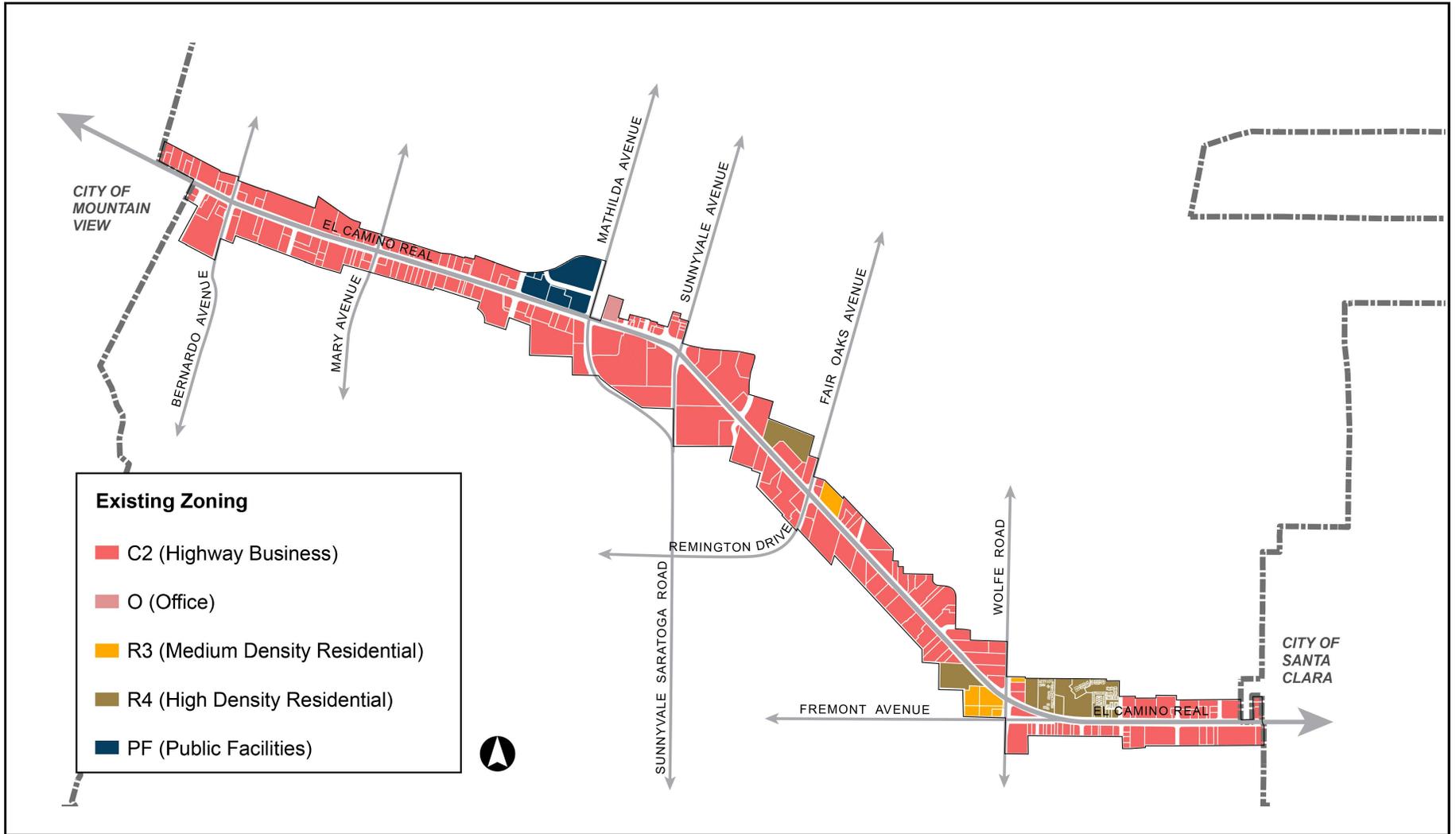


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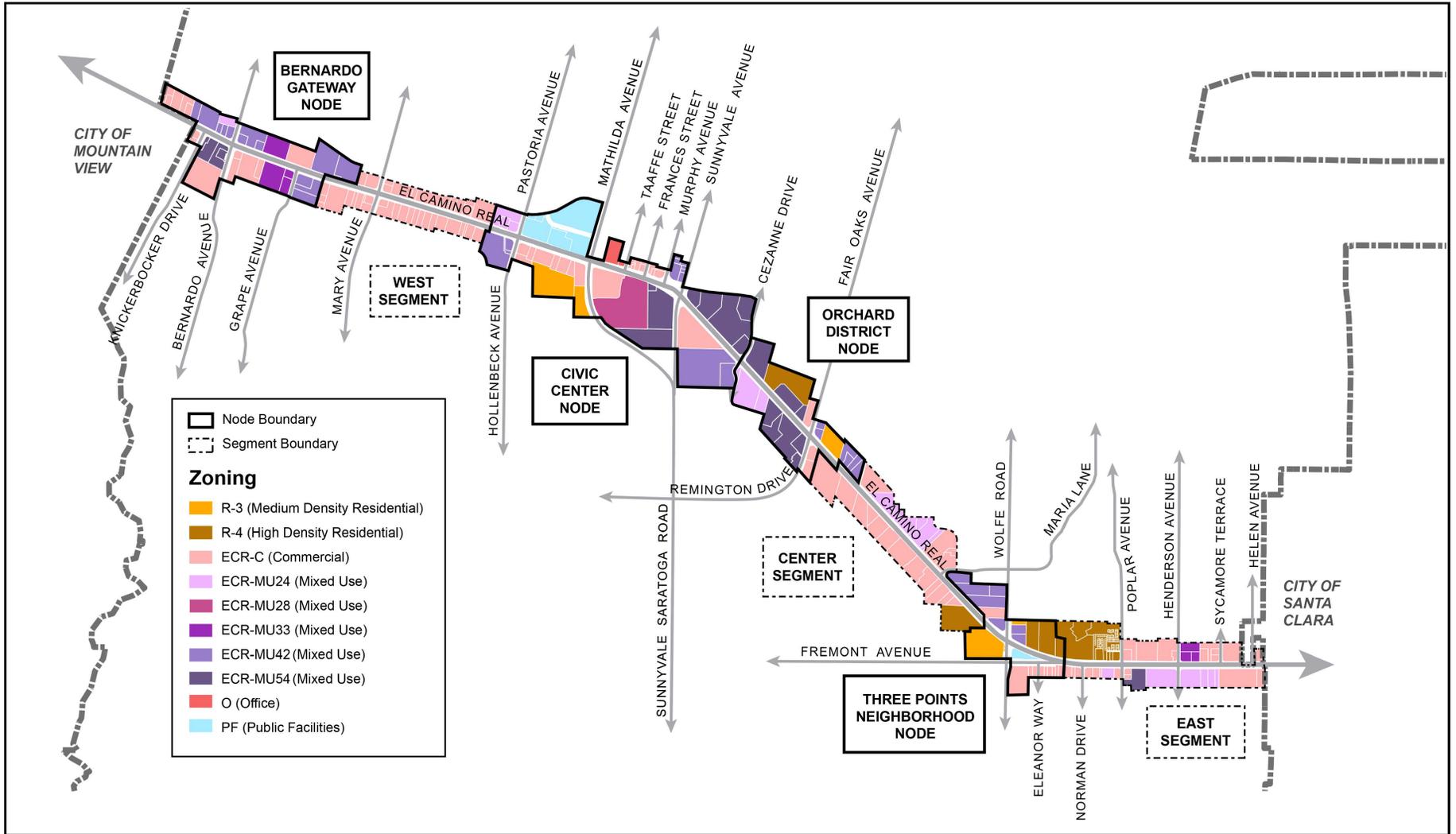


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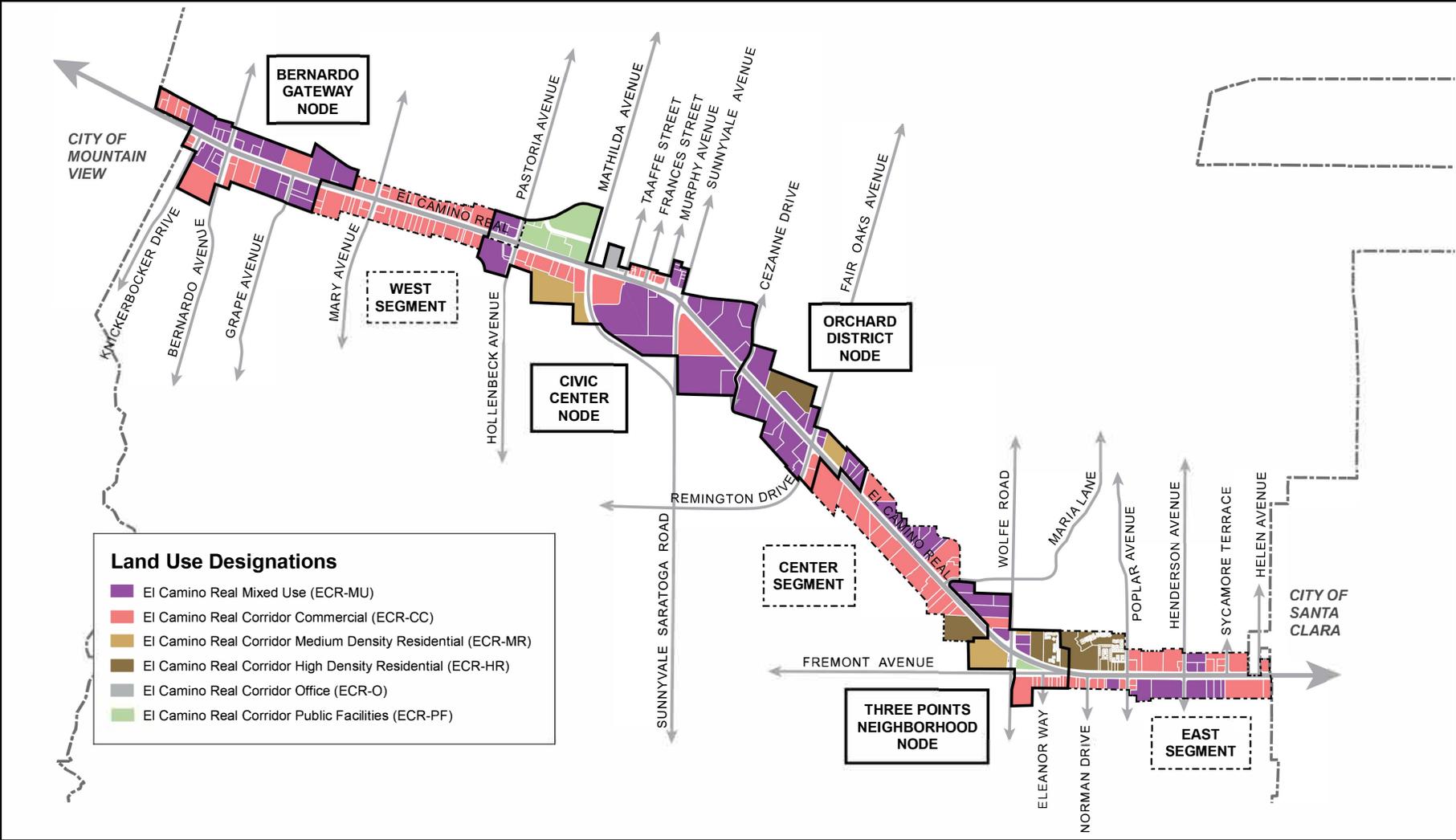


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## 3.0 Introduction to the Environmental Analysis and Assumptions Used

The following is an introduction to the environmental analysis for the project, including a cumulative analysis and a discussion of general assumptions used in the environmental analysis. The reader is referred to the individual technical sections of the Draft Environmental Impact Report (Draft EIR) (Sections 3.1 through 3.16) for further information on the specific assumptions and methodologies used in analyzing each technical subject.

### Approach to Evaluating Project Impacts

Section 15125(a) of the California Environmental Quality Act (CEQA) Guidelines requires that an EIR include a description of the physical environmental conditions in the project vicinity as they exist at the time the Notice of Preparation (NOP) is published and the environmental analysis is initiated. The CEQA Guidelines also specify that this description of the physical environmental conditions is to serve as the baseline physical conditions by which a lead agency determines whether impacts of a project are considered significant.

The project area is defined as a one-quarter-mile radius buffer centered on a 4-mile stretch of the El Camino Real roadway in the City of Sunnyvale. The project area is bisected north to south by the major roads of Sunnyvale-Saratoga Road and South Wolfe Road and is paralleled by the Central Expressway and US Highway 101 to the north. For further information related to the Project Area, refer to Section 2.0 (Project Description), **Figure 2-2, Local Vicinity Map/Specific Plan Area**.

### Environmental Impact Analysis Structure

Sections 3.1 through 3.16 of this EIR contain a detailed description of existing setting conditions (including applicable regulatory setting) and an evaluation of the direct and indirect environmental effects resulting from the project. Each section contains feasible mitigation measures (as applicable) and a determination as to whether significant project environmental effects would remain after the implementation of such measures.

Each individual technical section in Chapter 3.0 of this EIR includes the following information:

#### *Existing Setting*

This subsection includes a description of the physical setting associated with the technical area of discussion, consistent with CEQA Guidelines Section 15125. As previously identified, the existing setting is based on conditions as they existed when the NOP for the project was released on October 30, 2017, for a 30-day public comment period ending December 1, 2017.



### Regulatory Framework

This subsection consists of the identification of applicable federal, State, regional, and local plans, policies, laws, and regulations that apply to the technical area of discussion.

### Impacts and Mitigation Measures

This subsection identifies direct and indirect environmental effects associated with implementation of the project and the associated development potential and implementation of its policy provisions as compared to that allowed under existing conditions. The project does not entitle any future development project or require that the City meet the build-out projections discussed in this EIR. Subsequent implementation and projects under the project would be evaluated for consistency with the plan and the City's General Plan Land Use and Transportation Element (LUTE) in evaluating potential environmental impacts discussed in this EIR. Programmatic analysis to evaluate future projects resulting from project implementation is provided in Section 1.0, Introduction.

### Mitigation Measures

If impacts are considered significant and it is determined the project's implementation policies would not reduce impacts to a less than significant level, mitigation measures are proposed to reduce or avoid these impacts. Impacts are defined as either "significant but mitigable" or as "significant and unavoidable." Significant but mitigable impacts could be reduced to a less than significant level with mitigation. Significant and unavoidable impacts would remain significant either because feasible mitigation to reduce impacts is unavailable or because proposed mitigation measures would not reduce impacts to a less than significant level.

### Approach to the Cumulative Impact Analysis

CEQA Guidelines Section 15355 provides the following definition of cumulative impacts:

"Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

- (a) *The individual effects may be changes resulting from a single project or a number of separate projects.*
- (b) *The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.*

CEQA Guidelines Section 15130 further addresses the discussion of cumulative impacts, as follows:

- (1) *An EIR should not discuss impacts which do not result in part from the project evaluated in the EIR.*



- (2) If the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, the EIR should briefly indicate why the cumulative impact is not significant and is not discussed in further detail in the EIR.*
- (3) If the combined cumulative impact associated with the project's incremental effect and the effects of other projects is significant, the EIR must determine whether the project's contribution is cumulatively considerable.*
- (4) The EIR may conclude the project's contribution to a significant cumulative impact is less than cumulatively considerable and thus is not significant, if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.*

Sections 3.1 through 3.16 assess the cumulative impacts for each applicable environmental issue, and do so to a degree that reflects each impact's severity and likelihood of occurrence.

In accordance with CEQA Guidelines Section 15130(b), the discussion of cumulative impacts shall be guided by the standards of practicality and reasonableness, and should include the following elements in its discussion of significant cumulative impacts:

1. *Either:*
  - A. *A list of past, present and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the Agency, or*
  - B. *A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projects may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency.*
2. *When utilizing a list, as suggested in paragraph (1) of subdivision (b), factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project and its type. Location may be important, for example, when water quality impacts are at issue since projects outside the watershed would probably not contribute to a cumulative effect. Project type may be important, for example, when the impact is specialized, such as a particular air pollutant or mode of traffic.*
3. *Lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used.*
4. *A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available.*



5. *A reasonable analysis of the cumulative impacts of the relevant projects, including examination of reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.*

This EIR evaluates the project's potential cumulative impacts using both the list and summary of projections approaches depending upon which approach is appropriate/relevant for each environmental issue area. The geographic area considered for cumulative impacts varies depending on environmental issue area. For example, the project's operational effects have geographic scopes that are global (such as greenhouse gases, addressed in Section 3.7, Greenhouse Gas Emissions), regional (such as air quality, addressed in Section 3.2, Air Quality), and local (such as light and glare, addressed in Section 3.1, Aesthetics).

Related projects in the area that have been determined as having the potential to interact with the proposed project to the extent that a significant cumulative effect may occur are identified below. The following list of projects was developed based on data provided by the City and adjacent jurisdictions as part of the Traffic Impact Analysis (Hexagon 2020). The implementation of each project was determined to be reasonably foreseeable.

- **Sunnyvale General Plan**

- On July 26, 2011, the Sunnyvale General Plan was adopted as a consolidated document containing seven distinct elements. The Land Use and Transportation Element was subsequently updated in April 2017, which plans for the City's growth until 2035. By the year 2035, Sunnyvale plans for a population of approximately 174,500 people, 72,460 housing units, 59.2 million square feet of industrial/office/commercial space, and 123,010 jobs within City limits.

- **Lawrence Station Area Plan**

- The Lawrence Station Area Plan was initially adopted in December 2016 and updated in September 2021 to allow for more housing opportunities, guiding development around the City's Caltrain station. The 2021 update allows for the potential of an additional 3,612 units (5,935 total units) of housing, up from the 2,323 units of housing and 1.2 million square feet of office space originally adopted in 2016.

- **Downtown Specific Plan**

- The Sunnyvale Downtown Specific Plan was adopted on August 11, 2020. The plan serves as a long-term planning document, with implementation expected to occur over a 10 to 15-year period. Within a 120-acre planning area, the Specific Plan anticipates up to 2,682 residential units, 1,554,300 square feet of office space, and 991,00 square feet of retail space.

## Common Terminology Used in the EIR

This EIR uses the following terminology to describe the environmental effects of the proposed project:

- **No Impact:** A no impact determination would result when implementation of the project would have no environmental effect relative to the threshold being evaluated (i.e., no change in physical conditions or other related effects).
- **Less than Significant Impact:** A less than significant impact would cause no substantial change in the physical condition of the environment (no mitigation would be required for project effects found to be less than significant).
- **Less than Significant Impact with Mitigation Incorporated:** A less than significant impact with mitigation incorporated would cause no substantial change in the physical condition of the environment (mitigation would be required for project effects found to be less than significant).
- **Significant and Unavoidable Impact:** A significant and unavoidable impact would result in a substantial negative change in the environment that cannot be avoided or mitigated to a less than significant level if the project is implemented.
- **Cumulatively Considerable Impact:** A cumulatively considerable impact would result when the incremental effects of an individual project result in a significant adverse physical impact on the environment under cumulative conditions.
- **Standards of Significance:** The standards are a set of significance criteria to determine at what level or “threshold” an impact would be considered significant. Significance criteria used in this EIR are based on the CEQA Guidelines; factual or scientific information; regulatory performance standards of local, State, and federal agencies; and City goals, objectives, and policies. Significance criteria used by the City of Sunnyvale are identified at the beginning of the impact analyses in each technical section of the EIR.
- **Subsequent Projects/Activities:** These are anticipated development projects (e.g., residential, commercial, industrial, or parks/open space projects) that could occur in the future as a result of the implementation of the project. These projects could also include public infrastructure and utility extension projects, including but not limited to roadway improvements and water, stormwater, and wastewater distribution improvements.



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## 3.1 Aesthetics

This section considers and evaluates the project's potential impacts on scenic vistas and resources, as well as potential conflicts with applicable zoning and other regulations pertaining to scenic quality. Additionally, an evaluation of potential light and glare impacts is provided.

### 3.1.1 Existing Setting

#### Regional Context

Within the unique aesthetic setting of the Silicon Valley and the Santa Clara Valley areas, Sunnyvale is surrounded by urban and natural landscapes. The San Francisco Bay is located to the north of Sunnyvale, the Diablo Range mountains are located to the east, and the Santa Cruz Mountains are located to the southwest. Most areas of Sunnyvale offer distant views of the mountains, while the San Francisco Bay is visible from higher vantage points and along the shore. Within its urban environment, Sunnyvale contains a variety of settings that include employment centers for office and innovation technology, residential neighborhoods, and a downtown area. Sunnyvale and the surrounding Cities of Mountain View, Los Altos, Cupertino, and Santa Clara contribute to the aesthetic of the urban environment in Silicon Valley that intermingles high-technology centers, offices, and commercial development together with new and traditional neighborhoods. Long distance views to regional resources are limited within the Specific Plan Area; however, views to the Santa Cruz Mountains and the Diablo Range east of the City can be seen from some portions of the corridor.

#### Project Area

##### *Scenic Vistas*

Scenic vistas generally encompass long-range or expansive views to natural environmental, historical, or architectural features of visual or aesthetic value to the community. A scenic vista is visible typically from elevated vantage points or open areas. There are no designated scenic vistas within the City of Sunnyvale.

##### *Scenic Highways*

The California Scenic Highway Program, maintained by the California Department of Transportation (Caltrans), identifies and designates scenic highways to protect the visual quality of land surrounding highways. The California Scenic Highway Mapping System does not identify any officially designated state scenic highways within or adjacent to the Specific Plan Area (Caltrans 2020).

##### *Visual Character*

The project area is characterized by urban development consisting of commercial, residential, and civic uses. The commercial character of the corridor includes shopping centers with single-story buildings. Commercial centers throughout the corridor embody the traditional auto-oriented commercial nature of the corridor with large parking lots facing the street and in front of the retail



and commercial service buildings. Higher-density residential development, predominantly in the form of apartments and townhomes in residential developments or mixed-use developments, is found throughout the corridor.

Existing development generally ranges from one to eight stories (approximately 30 to 75 feet) in height that is characterized by land use type: buildings of lesser height (medium/high residential, retail buildings, and commercial shopping plazas) and buildings of greater height (hotels, higher-density residential buildings, and vertical mixed-use buildings). El Camino Real is a wide, multi-lane road through the Specific Plan Area with a right-of-way approximately 100 feet in width. Where buildings are set back behind parking lots along the corridor and street trees are sparse, the sense of openness from the right-of-way is further amplified. Landscaping features within the largely urban context include medians lined with trees, street trees, and landscape frontages, and open space areas at the Civic Center and the Three Points parcel located at the intersection of El Camino Real and Wolfe Road.

### *Light and Glare*

Lighting effects are associated with the use of artificial light during the evening and nighttime hours. There are two primary sources of light: light emanating from building interiors passing through windows, and light from exterior sources (i.e., street lighting, building illumination, security lighting, parking lot lighting, and landscape lighting). Light introduction can be a nuisance to adjacent residential areas, can diminish the view of the clear night sky, and if uncontrolled, can cause disturbances. Uses such as residences and hotels are considered light sensitive, since occupants have expectations of privacy during evening hours and may be subject to disturbance by bright light sources. Light spill is typically defined as the presence of unwanted light on properties adjacent to the property being illuminated. With respect to lighting, the degree of illumination may vary widely depending on the amount of light generated, height of the light source, presence of barriers or obstructions, type of light source, and weather conditions.

Glare is primarily a daytime occurrence caused by the reflection of sunlight or artificial light by highly polished surfaces such as window glass or reflective materials and, to a lesser degree, from broad expanses of light-colored surfaces. Perceived glare is the unwanted and potentially objectionable sensation as observed by a person as they look directly into the light source of a luminaire. Daytime glare generation is common in urban areas and is typically associated with buildings having exterior facades largely or entirely comprised of highly reflective glass. Glare can also be produced during evening and nighttime hours by the reflection of artificial light sources such as automobile headlights. Glare-sensitive uses include residences, hotels, transportation corridors, and aircraft landing corridors.

Lighting within the project area is sourced from the typical generation of interior and exterior lighting within developed properties and adjacent roadways. Existing development along the corridor generates light through ambient nighttime lighting, such as from signs, exterior light fixtures from buildings, interior lighting that shines through window openings, streetlights, and



vehicle headlights. Glare is the result of light reflecting off windows and/or building surfaces. Building materials such as glass and metallic siding possess qualities that may reflect sunlight and artificial light, resulting in glare effects.

### 3.1.2 Regulatory Setting

#### Federal

No federal laws, regulations, or executive orders apply to scenic resources in the Specific Plan Area.

#### State

##### *Caltrans Scenic Highway Program*

The Caltrans Scenic Highway Program is intended to protect the natural scenic beauty of California's highway corridors through restrictions on signage and other special conservation treatments. The program operates under Sections 260 through 263 of the California State Streets and Highway Code. A scenic highway is a roadway located in areas of outstanding natural beauty where the natural scenic beauty should be protected and enhanced. There are no designated scenic highways within the City of Sunnyvale.

##### *Senate Bill (SB) 743 Environmental Quality: Transit Oriented Infill projects*

SB 743 (Public Resources Code Section 21099(d)(1)), which was approved in 2013, added provisions to the California Environmental Quality Act (CEQA) and mandated that any aesthetic or parking impacts resulting from a residential, mixed-use residential, or employment center on an infill site within a transit priority area shall not be considered significant impacts on the environment. The El Camino Real corridor through Sunnyvale is designated as a Priority Development Area and a Transit Priority Area.

#### Local

##### *City of Sunnyvale General Plan*

The City of Sunnyvale General Plan is a long-range and strategic planning document, containing long-term goals and policies for the next 10-20 years (buildout in year 2035). Policies identified in the General Plan indicate approaches and instructional guidelines to achieve the goals of the plan—the desired future outcome the community hopes to achieve. The General Plan contains the following policies that are relevant to the City's visual resources and overall aesthetics:

##### Land Use and Transportation

Policy LT-2.3 Accelerate the planting of large canopy trees to increase tree coverage in Sunnyvale in order to add to the scenic beauty and walkability of the community; provide environmental benefits such as air quality improvements, wildlife habitat, and reduction of heat islands; and enhance the health, safety, and welfare of residents.



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3.1 Aesthetics

- Policy LT-4.1 Preserve and enhance an attractive community, with a positive image, a sense of place, landscaping, and a human scale.
- Policy LT-4.3 Enforce design review guidelines and zoning standards that ensure the mass and scale of new structures are compatible with adjacent structures, and also recognize the City’s vision of the future for transition areas such as neighborhood Village Centers and El Camino Real nodes.
- Policy LT-4.4 Avoid monotony and maintain visual interest in newly developing neighborhoods and promote appropriate architectural diversity and variety. Encourage appropriate variations in lot sizes, setbacks, orientation of homes, and other site features.
- Policy LT-5.2 Preserve and enhance the character of Sunnyvale’s residential neighborhoods by promoting land use patterns and transportation opportunities that support a neighborhood concept as a place to live, work, shop, entertain, and enjoy public services, open space, and community near one’s home and without significant travel.
- Policy LT-5.3 Require new development, renovation, and redevelopment to be compatible and well-integrated with existing residential neighborhoods.
- Policy LT-13.2 Improve the visual appearance of business areas and districts by applying high standards of architectural design, landscaping, and sign standards for new development and the reuse or remodeling of existing buildings.

**Community Character**

- Policy CC-1.3 Ensure that new development is compatible with the character of special districts and residential neighborhoods.
- Policy CC-1.4 Support measures which enhance the identity of special districts and residential neighborhoods to create more variety in the physical environment.
- Policy CC-2.1 Maintain and provide attractive landscaping in the public right-of-way to identify the different types of roadways and districts, make motorists comfortable and improve the enjoyment of residential neighborhoods.
- Policy CC-3.1 Place a priority on quality architecture and site design which will enhance the image of Sunnyvale and create a vital and attractive environment for businesses, residents and visitors, and be reasonably balanced with the need for economic development to assure Sunnyvale’s economic prosperity.
- Policy CC-3.2 Ensure site design is compatible with the natural and surrounding built environment.



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### 3.1 Aesthetics

Policy CC-4.2 Maintain beautiful and comfortable outdoor public places which provide a shared sense of ownership and belonging for Sunnyvale residents, business owners, and visitors.

Policy CC-5.2 Enhance the visual character of the City by preserving diverse as well as harmonious architectural styles, reflecting various phases of the City's historical development and the cultural traditions of past and present residents.

### Housing

Policy F.1 Continue efforts to balance the need for additional housing with other community values, including preserving the character of established neighborhoods, high quality design, and promoting a sense of identity in each neighborhood.

### *City of Sunnyvale Zoning Code*

Title 19 (Zoning) of the Sunnyvale Municipal Code (SMC) provides the development standards and regulations intended to enhance the visual quality of new development through height limits, density, design standards, architectural features, setback requirements, sign regulations, landscape standards, open space requirements, and public artwork in private developments.

The SMC establishes development review processes to ensure the design of developments enhances the visual environment. The City reviews private and public development applications for conformance with City plans, policies, and ordinances. Project consideration and determination of approval may include the Zoning Administrator, Planning Commission, and/or City Council depending on the required level of review and procedures established by the SMC. Other boards and committees with oversight and authority in design include the Arts Commission, Bicycle and Pedestrian Advisory Commission, Heritage Preservation Commission, Housing and Human Services Commission, Sustainability Commission, and Parks and Recreation Commission.

### *City of Sunnyvale Design Guidelines and Plans*

The City maintains other citywide guidelines and plans that may be potentially relevant to future development projects within the Specific Plan, some of which are described here:

- **Citywide Design Guidelines.** These guidelines are intended to enhance the overall image of the City, protect and preserve the existing character of the community, communicate the image the community desires, and achieve a higher design quality. (Sunnyvale 2013)
- **High Density Residential Design Guidelines.** These guidelines were developed to ensure that new development respects the scale and character of existing neighborhoods, provide a guide for high-quality design, and identify design expectations for project review. The guidelines apply to all projects within the R-4 and R-5 zoning districts.
- **A Toolkit for Mixed-Use Development in Sunnyvale.** This document provides a framework and works in conjunction with zoning regulations to shape the form and character of mixed-use development. The toolkit provides guidance for development,



3.1 Aesthetics

particularly with regard to site, landscape, and building design, and sustainable development practices.

3.1.3 Impacts and Mitigation Measures

Standards of Significance

This analysis evaluates potential impacts on aesthetic resources based on the standards of significance identified in the CEQA Guidelines Appendix G. The project would have a significant impact if implementation of the project would:

1. Have a substantial adverse effect on a scenic vista. (Refer to Section 4.0, Effects Found Not To Be Significant)
2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. (Refer to Section 4.0)
3. Substantially degrade the existing visual character or quality public views of the site and its surroundings in non-urbanized areas. Public views are those that are experienced from publicly accessible vantage points. If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?
4. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Project Impacts and Mitigation Measures

*CONFLICT WITH APPLICABLE ZONING AND OTHER REGULATIONS GOVERNING SCENIC QUALITY (STANDARD OF SIGNIFICANCE 3)*

**Impact 3.1.1 The project would potentially conflict with applicable zoning and other regulations governing scenic quality.**

The project site is surrounded by urbanized uses; refer to **Figure 2-2, Local Vicinity Map/Specific Plan Area**. Thus, for the purposes of this threshold, consideration of whether the project would conflict with applicable zoning or other regulations governing scenic quality is made.

Specific Plan

The purpose of the Specific Plan is to provide an overall vision and guidance to transform the Specific Plan Area into a commercial and mixed-use corridor with additional housing opportunities. The plan envisions improved streetscapes and safer, more enjoyable environments for walking, bicycling, and other modes of transportation, while preserving the quality of life for adjacent neighborhoods and existing community assets. The Specific Plan, in conjunction with the El Camino Real Specific Plan Chapter (ECRSPC) of the SMC, includes development policies, land use regulations, design guidelines, infrastructure improvement plans, and an implementation and



financing program to help guide development within the Specific Plan Area. Overall, buildout of the Specific Plan would allow for a maximum of 6,900 residential units and up to 730,000 square feet of commercial development beyond what has been constructed to date within the Specific Plan Area.

Specific Plan Chapter 4, Land Use and Development Standards, and Chapter 5, Urban Design Guidelines, in conjunction with the ECRSPC of the SMC, would facilitate development of the project features discussed above. Development Standards are indicators of firm requirements and pertain to such categories as building areas, building heights, building setbacks, residential density, parking, etc. As such, Development Standards are rules or measures pertaining to land uses and zoning that establish a level of quality or quantity that must be complied with or satisfied.

Urban Design Guidelines are intended to ensure the Specific Plan's objectives and Development Standards are implemented throughout the project site. The Urban Design Guidelines are not regulatory; rather, the Urban Design Guidelines serve as guides for redevelopment of the Specific Plan Area. These components are discussed in further detail below.

#### *Land Use and Development Standards*

The proposed Specific Plan, in conjunction with the ECRSPC of the SMC, would guide future development of the Specific Plan Area. The Land Use and Development Standards included in Chapter 4 of the Specific Plan, in conjunction with the ECRSPC of the SMC, would apply to all new development and existing development that undergoes remodeling, including site improvements, significant additions, and exterior renovations. Significant additions are defined as additions that are more than 20 percent of the building's floor area. In addition to identifying the land use classifications in the Specific Plan Area and applicable land use policies, Chapter 4 introduces the node and segment strategy, and the ECRSPC of the SMC discusses permitted uses within the nodes and segments. Zoning districts, which contain standards for allowed densities, are established. Development standards that either apply to all development within the Specific Plan Area or are specific to any given node or segment are established and outlined. Other development standards, such as building design and sustainability, are also specified in Chapter 4 and the ECRSPC of the Sunnyvale Municipal Ordinance.

The Specific Plan and ECRSPC of the SMC identify Development Standards addressing the following:

- Permitted uses
- Density requirements
- Maximum building height
- Setback requirements
- Minimum landscaping and open space requirements
- Daylight plane setback requirements
- Parking requirements
- Building design



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### 3.1 Aesthetics

- Mixed-use frontage
- Lighting requirements

If the Specific Plan, or ECRSPC of the SMC do not address a specific issue, general requirements in the SMC would apply.

#### *Urban Design Guidelines*

Specific Plan Chapter 5 provides objective design guidelines for all new development and any changes to the site development and building design of existing buildings within the Specific Plan Area. While Specific Plan Chapter 4 (Land Use and Development Standards), in conjunction with the ECRSPC of the SMC, establishes the zoning and development standards for new development, Chapter 5 provides specific objective guidelines for building and site design to achieve the desired vision and character for the Specific Plan Area. The Urban Design Guidelines also provide recommended design features that complement the policies in Specific Plan Chapter 6 (Streetscape and Circulation) for multimodal transportation and an active public realm on El Camino Real. The Urban Design Guidelines provide guidance on site design, building design, building frontages, residential neighborhood interface, parking lots and structures, landscaping and paving, plazas and open space, lighting, signage and wayfinding, and sustainability. All new and remodeled development in the Specific Plan Area would be subject to these guidelines. Additional guidelines are provided for development in the nodes and segments.

#### Zoning

Within the Specific Plan Area, 82 percent of the land has a Highway Business Commercial (C-2) zoning designation. Two lots located within the Specific Plan Area are zoned Office (O), but such lots account for less than 1 percent of the land area. Sunnyvale's publicly owned Civic Center is located along the corridor, is zoned Public Facility (P-F), and constitutes approximately four percent of the area. Residentially-zoned land within the Specific Plan Area largely includes parcels zoned High Density Residential (R-4), with a handful of properties zoned for Medium Density Residential (R-3); refer to **Figure 2-3, Existing Zoning Map**. Upon City approval of the proposed zone change, the project would be consistent with the Zoning Ordinance.

As discussed previously, the Land Use and Development Standards and Urban Design Guidelines included in the Specific Plan and the development standards included in the amended ECRSPC of the SMC will guide development in the Specific Plan Area. If the Specific Plan, or associated ECRSPC of the SMC, does not address a specific issue, the general requirements in the SMC would apply. As such, the proposed project would not conflict with zoning regulations governing scenic quality as the Specific Plan, and associated code amendments, would establish the regulatory framework for development of proposed projects. Impacts would be less than significant.



General Plan

Table 3.1-1, General Plan Scenic Quality Policies Consistency Analysis, provides a consistency analysis of the proposed project and relevant General Plan policies pertaining to scenic quality.

Table 3.1-1
General Plan Scenic Quality Policies Consistency Analysis

Table with 2 columns: Policy and Consistency Determination. It contains three rows detailing the consistency of various General Plan policies (LT-2.3, LT-4.1, and LT-4.3) with the proposed project.



Policy	Consistency Determination
	Specific Plan Area. The project would be consistent with General Plan Policy LT-4.3 in this regard.
Policy LT-4.4: Avoid monotony and maintain visual interest in newly developing neighborhoods, and promote appropriate architectural diversity and variety. Encourage appropriate variations in lot sizes, setbacks, orientation of homes, and other site features.	<u>Consistent</u> . The project would promote development of El Camino Real as a boulevard with a series of distinct neighborhoods, with a unified streetscape, sidewalk improvements, and pedestrian amenities. As stated in Section 2.0, Specific Plan implementation would guide the development of a rich mix of land uses including housing, retail, services, and small office. The project would be consistent with General Plan Policy LT-4.4 in this regard.
Policy LT-5.2: Preserve and enhance the character of Sunnyvale’s residential neighborhoods by promoting land use patterns and transportation opportunities that support a neighborhood concept as a place to live, work, shop, entertain, and enjoy public services, open space, and community near one’s home and without significant travel.	<u>Consistent</u> . The Specific Plan would provide a compatible transition between El Camino Real development and adjacent residential neighborhoods. The Specific Plan also establishes a goal to establish pedestrian and bicycle connections between El Camino Real frontages and adjacent neighborhoods. The mixed land use pattern proposed by the Specific Plan would create a balance of employment, commercial, and residential areas. The project would be consistent with General Plan Policy LT-5.2 in this regard.
Policy LT-5.3: Require new development, renovation, and redevelopment to be compatible and well-integrated with existing residential neighborhoods.	<u>Consistent</u> . Refer to response to General Plan Policy LT-5.2.
Policy LT-13.2: Improve the visual appearance of business areas and districts by applying high standards of architectural design, landscaping, and sign standards for new development and the reuse or remodeling of existing buildings.	<u>Consistent</u> . Refer to the discussion above. The Specific Plan, and the ECRSPC of the SMC, includes development policies, land use regulations, design guidelines, infrastructure improvement plans, and an implementation and financing program to help guide development within the Specific Plan Area. Specific Plan Chapter 4, Land Use and Development Standards, the ECRSPC of the SMC, and Chapter 5, Urban Design Guidelines, would apply to future redevelopment activities within the Specific Plan Area and would uphold the City’s policy to apply high standards of architectural design, landscaping, and sign standards for new development and the reuse or remodeling of



Policy	Consistency Determination
	existing buildings. The project would be consistent with General Plan Policy LT-13.2 in this regard.
Policy CC-1.3: Ensure that new development is compatible with the character of special districts and residential neighborhoods.	<u>Consistent</u> . Refer to response to General Plan Policy LT-5.2.
Policy CC-1.4: Support measures which enhance the identity of special districts and residential neighborhoods to create more variety in the physical environment.	<u>Consistent</u> . Refer to response to General Plan Policy LT-5.2.
Policy CC-2.1: Maintain and provide attractive landscaping in the public right-of-way to identify the different types of roadways and districts, make motorists comfortable and improve the enjoyment of residential neighborhoods.	<u>Consistent</u> . Refer to response to General Plan Policy LT-2.3.
Policy CC-3.1: Place a priority on quality architecture and site design which will enhance the image of Sunnyvale and create a vital and attractive environment for businesses, residents and visitors, and be reasonably balanced with the need for economic development to assure Sunnyvale’s economic prosperity.	<u>Consistent</u> . As stated in Chapter 5 of the Specific Plan, the Urban Design Guidelines are intended to ensure future development within the Specific Plan Area is designed to contribute to a cohesive yet visually diverse character along the corridor. The Urban Design Guidelines would ensure future development promotes high quality and creative architecture. The project would be consistent with General Plan Policy CC-3.1 in this regard.
Policy CC-3.2: Ensure site design is compatible with the natural and surrounding built environment.	<u>Consistent</u> . The project site is located within an urbanized area and thus would not conflict with the natural environment. Refer to response to General Plan Policy LT-5.2 regarding the project’s compatibility with the surrounding built environment. The project would be consistent with General Plan Policy CC-3.2 in this regard.
Policy CC-4.2: Maintain beautiful and comfortable outdoor public places which provide a shared sense of ownership and belonging for Sunnyvale residents, business owners, and visitors.	<u>Consistent</u> . The Specific Plan Land Use and Development Standards, in conjunction with the ECRSPC of the SMC, include a policy that would require a variety of publicly-accessible open spaces and gathering spaces in the El Camino Real setback areas to facilitate greater pedestrian circulation. Another policy is included



Policy	Consistency Determination
	to ensure new development and site designs shall create open space elements, such as plazas, seating areas, and courtyards to enhance a network of pedestrian and bicycle amenities along El Camino Real. The project would be consistent with General Plan Policy CC-4.2 in this regard.
Policy CC-5.2: Enhance the visual character of the City by preserving diverse as well as harmonious architectural styles, reflecting various phases of the City's historical development and the cultural traditions of past and present residents.	<u>Consistent</u> . The Specific Plan Land Use and Development Standards chapter includes a policy that would ensure buildings greater than 50 years old are subject to a historic resource evaluation prior to undertaking any modifications or demolitions in order to determine their level of historical significance and to inform the appropriate level of discretionary review and applicability of local historic preservation policies. The project would be consistent with General Plan Policy CC-5.2 in this regard.
Policy F.1 :Continue efforts to balance the need for additional housing with other community values, including preserving the character of established neighborhoods, high quality design, and promoting a sense of identity in each neighborhood.	<u>Consistent</u> . Refer to the responses above.

Source: City of Sunnyvale, City of Sunnyvale General Plan, 2017.

As demonstrated in **Table 3.1-1**, the proposed project is consistent with the City's applicable policies related to scenic quality. Impacts would be less than significant in this regard.

### Conclusion

The proposed project would not conflict with applicable zoning or other regulations governing scenic quality. Although future development in accordance with the Specific Plan would result in a change to the existing visual quality of the Specific Plan Area, the Specific Plan would promote high-quality and appropriately-scaled buildings that preserve quality of life for adjacent neighborhoods and contribute to an attractive, comfortable, and safe streetscape along the corridor. Components of the proposed project, including the Land Use and Development Standards, the ECRSPC of the SMC, and Urban Design Guidelines, would enhance the character and quality of the Specific Plan Area by creating a more pedestrian-oriented streetscape environment that would enhance, rather than degrade, the existing urban environment.



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### 3.1 Aesthetics

Implementation of the Specific Plan would not conflict with applicable zoning or other regulations governing scenic quality in this regard. Impacts would be **less than significant**.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

#### *NEW SOURCES OF LIGHT AND GLARE (STANDARD OF SIGNIFICANCE 4)*

**Impact 3.1.2 The project would potentially create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.**

The Specific Plan is located in a highly developed urban environment supporting residential and nonresidential uses that are sources of nighttime lighting and glare. New development permitted by the Specific Plan could result in the creation of additional sources of lighting and glare. Site improvements and redevelopment could result in changes that increase exterior lighting, security lighting, and parking lot lighting. Streetscape improvements in the right-of-way may add street lighting. Glare effects may be created from reflective surfaces such as windows, building materials, and vehicles in parking lots. The City will review and address unique lighting and glare characteristics of individual development proposals through the discretionary entitlement process.

New development must comply with all provisions of the Land Use and Development Standards, which requires site lighting and lighting in parking lots to be no more than 15 feet tall, including guidelines intended to ensure that development prohibits lighting from causing spillover on other properties and to ensure lighting is appropriately scaled and minimizes light pollution. Implementation of these requirements and guidelines included within the Specific Plan will mitigate potential off-site lighting or glare effects from future development within the project area. In accordance with SMC Chapter 19.80, any proposed use requiring a discretionary land use permit that includes new construction, changes to the exterior of a building or other site modification within the Specific Plan Area would be subject to the City's Design Review Process. This regulatory procedure would review building materials associated with future site-specific development to ensure neighboring uses are not exposed to substantial impacts related to lighting or daytime glare. Impacts would be **less than significant** in this regard.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

**CUMULATIVE IMPACTS**

**Impact 3.1.3** The project would potentially create a cumulative impact to aesthetic and visual resources.

### Conflict with Applicable Zoning and Other Regulations Governing Scenic Quality

The cumulative development projects identified in **Section 3.0** primarily involve infill development that would be similar to what currently exists in the surrounding vicinity. All cumulative projects occurring within City boundaries would be subject to the City's applicable policies and zoning requirements related to scenic quality. In addition, cumulative development would be subject to the City's adopted Design Guideline documents, which act to enhance the overall image of the City, protect and preserve the existing character of the community, communicate the image the community desires, and achieve a higher design quality.

As indicated in Impact 3.1.1, the proposed project would be consistent with applicable zoning and regulations related to scenic quality. Further, the Specific Plan would promote high-quality and appropriately scaled buildings that preserve quality of life for adjacent neighborhoods and contribute to an attractive, comfortable, and safe streetscape along the corridor. Components of the proposed project, including the Land Use and Development Standards, the ECRSPC of the SMC, and Urban Design Guidelines, would enhance the character and quality of the Specific Plan Area by creating a more pedestrian-oriented streetscape environment that would enhance, rather than degrade, the existing urban environment. Implementation of the Specific Plan would not conflict with applicable zoning or other regulations governing scenic quality in this regard. Thus, cumulative impacts to scenic quality regulations would be **less than significant**, and the proposed project would not significantly contribute to cumulative impacts in this regard.

### New Sources of Light and Glare

Development of cumulative projects could result in increased lighting in the City. All future development would be reviewed by the City to determine conformance with City plans, policies, and ordinances in place to eliminate negative effects as a result of light and glare. This regulatory procedure would review building materials to ensure neighboring uses are not exposed to substantial daytime glare or excessive lighting. Overall, cumulatively considerable increases in light and glare would be considered less than significant.

As discussed in Impact 3.1.2, short-term and long-term impacts to lighting would be reduced to less than significant levels following conformance with Section 5.6e, Lighting, of the Land Use and Development Standards and Section 4.8, Lighting, of the Urban Design Guidelines. Further, in accordance with SMC Chapter 19.80, any proposed use requiring a discretionary land use permit that includes new construction, changes to the exterior of a building or other site modification within the Specific Plan Area would be subject to the City's Design Review Process. Thus, the project would not cumulatively contribute to the creation of substantial new lighting or glare and impacts in this regard would be **less than significant**.



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3.1 Aesthetics

Mitigation Measures

None required.

Level of Significance

Less than significant.

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## 3.2 Air Quality

This section examines the air quality in Sunnyvale and the region, includes a summary of applicable air quality regulations, and analyzes potential air quality impacts associated with the Specific Plan. Refer to **Appendix B, Air Quality/Greenhouse Gas Emissions/Energy Data**.

### 3.2.1 Existing Setting

#### San Francisco Bay Area Air Basin

The Specific Plan is located in the San Francisco Bay Area Air Basin (SFBAAB). The Bay Area Air Quality Management District (BAAQMD) is the regional air quality agency for the SFBAAB, which comprises all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, the southern portion of Sonoma County, and the southwestern portion of Solano County. Air quality in this area is determined by such natural factors as topography, meteorology, and climate, in addition to the presence of existing air pollution sources and ambient conditions. These factors are briefly described below.

#### Topography

The topography of the SFBAAB is characterized by complex terrain, consisting of coastal mountain ranges, inland valleys, and bays, all of which distort normal wind flow patterns. This complex terrain, especially the higher elevations, distorts the normal wind flow patterns in the air basin.

#### Meteorology and Climate

During the summer, the large-scale meteorological condition that dominates the West Coast is a semi-permanent high-pressure cell over the Pacific Ocean. This high-pressure cell keeps storms from affecting the California coast. Hence, the SFBAAB experiences little precipitation in the summer months. Winds tend to blow onshore out of the north-northwest. Generally in the winter, the Pacific high-pressure cell weakens and shifts southward, winds tend to flow offshore, upwelling ceases, and storms occur. During the winter rainy periods, inversions (layers of warmer air over colder air; see below) are weak or nonexistent, winds are usually moderate, and air pollution potential is low. The Pacific high-pressure cell periodically becomes dominant, bringing strong inversions, light winds, and high pollution potential (BAAQMD 2017a).

During the summer, winds flowing from the northwest are drawn inland through the Golden Gate and over the lower portions of the San Francisco peninsula. This channeling of wind through the Golden Gate produces a jet that sweeps eastward and splits off to the northwest toward Richmond and to the southwest toward San Jose when it meets the East Bay hills. In the winter, the SFBAAB frequently experiences stormy conditions with moderate to strong winds, as well as periods of stagnation with very light winds. Winter stagnation episodes are characterized by nighttime drainage flows in coastal valleys (BAAQMD 2017a).

During rainy periods, ventilation (rapid horizontal movement of air and injection of cleaner air) and vertical mixing are usually high, and thus pollution levels tend to be low. However, frequent



dry periods do occur during the winter where mixing and ventilation are low and pollutant levels build up (BAAQMD 2017a).

Summertime temperatures in the SFBAAB are determined in large part by the effect of differential heating between land and water surfaces. Because land tends to heat up and cool off more quickly than water, a large-scale gradient (differential) in temperature is often created between the coast and the Central Valley, and small-scale local gradients are often produced along the shorelines of the ocean and bays. The temperature gradient near the ocean is also exaggerated, especially in summer, because of the upwelling of cold ocean bottom water along the coast. On summer afternoons, the temperatures at the coast can be 35°F cooler than temperatures 15 to 20 miles inland. At night, this contrast usually decreases to less than 10°F.

In the winter, the relationship of minimum and maximum temperatures is reversed. During the daytime, the temperature contrast between the coast and inland areas is small, whereas at night the variation in temperature is large (BAAQMD 2017a).

### Santa Clara Valley Climatological Subregion

There are eleven major climatological subregions in the SFBAAB. Sunnyvale is located in the Santa Clara Valley Climatological Subregion, which is bounded by the Bay to the north and by mountains to the east, south, and west. Temperatures are warm on summer days and cool on summer nights, and winter temperatures are fairly mild. At the northern end of the valley, mean maximum temperatures are in the low 80s during the summer and the high 50s during the winter, and mean minimum temperatures range from the high 50s in the summer to the low 40s in the winter. Further inland, where the moderating effect of the Bay is not as strong, temperature extremes are greater.

Winds in the valley are greatly influenced by the terrain, resulting in a prevailing flow that roughly parallels the valley's northwest-southeast axis. A north-northwesterly sea breeze flows through the valley during the afternoon and early evening, and a light south-southeasterly drainage flow occurs during the late evening and early morning. In the summer, the southern end of the valley sometimes becomes a "convergence zone," when air flowing from the Monterey Bay gets channeled northward into the southern end of the valley and meets with the prevailing north-northwesterly winds. Wind speeds are greatest in the spring and summer and weakest in the fall and winter. Nighttime and early morning hours frequently have calm winds in all seasons, while summer afternoons and evenings are quite breezy. Strong winds are rare, associated mostly with the occasional winter storm.

### Air Pollution Potential

The potential for high pollutant concentrations developing at a given location depends on the quantity of pollutants emitted into the atmosphere in the surrounding area or upwind and the ability of the atmosphere to disperse the contaminated air. The topographic and climatological factors discussed above influence the atmospheric pollution potential of an area. Atmospheric

pollution potential, as the term is used here, is independent of the location of emission sources and is instead a function of the factors described below.

### *Atmospheric Conditions*

The hills and mountains in the SFBAAB contribute to the high pollution potential of some areas. An inversion is a layer of warmer air over a layer of cooler air. Inversions affect air quality conditions significantly because they influence the mixing depth, i.e., the vertical depth in the atmosphere available for diluting air contaminants near the ground. The highest air pollutant concentrations in the SFBAAB, and therefore in Sunnyvale, generally occur during inversions.

The areas having the highest air pollution potential also tend to be those that experience the highest temperatures in the summer and the lowest temperatures in the winter. The frequency of hot, sunny days during the summer months in the SFBAAB is another important factor that affects air pollution potential. It is at the higher temperatures that ozone is formed. In the presence of ultraviolet sunlight and warm temperatures, reactive organic gases and oxides of nitrogen react to form secondary photochemical pollutants, including ozone. Because temperatures in many of the air basin's inland valleys are so much higher than near the coast, the inland areas are especially prone to photochemical air pollution. In late fall and winter, solar angles are low, resulting in insufficient ultraviolet light and warming of the atmosphere to drive the photochemical reactions. Ozone concentrations do not reach significant levels in the SFBAAB during these seasons (BAAQMD 2017a).

The air pollution potential in the Santa Clara Valley is high. High summer temperatures, stable air, and mountains surrounding the valley combine to promote ozone formation. In addition to the many local sources of pollution, ozone precursors from San Francisco, San Mateo, and Alameda counties are carried by prevailing winds to the Santa Clara Valley. The valley tends to channel pollutants to the southeast. In addition, on summer days with low-level inversions, ozone can be recirculated by southerly drainage flows in the late evening and early morning and by the prevailing northwesterly winds in the afternoon. A similar recirculation pattern occurs in the winter, affecting levels of carbon monoxide and particulate matter. This movement of the air up and down the valley increases the impact of the pollutants significantly.

### *Emission Sources*

Although air pollution potential is strongly influenced by climate and topography, the air pollution that occurs in a location also depends on the amount of air pollutant emissions in the surrounding area or those that have been transported from more distant places. Air pollutant emissions generally are highest in areas that have high population densities, high motor vehicle use, and/or industrialization. The contaminants created by photochemical processes in the atmosphere, such as ozone, may result in high concentrations many miles downwind from the sources of their precursor chemicals (BAAQMD 2017a).



Pollution sources are plentiful and complex in the Santa Clara Valley Climatological Subregion. The Santa Clara Valley has a high concentration of industry at the northern end, in Silicon Valley. Some of these industries are sources of air toxics as well as criteria air pollutants. In addition, the Santa Clara Valley’s large population and many work-site destinations generate the highest mobile source emissions of any subregion in the SFBAAB.

*Air Pollutants of Concern*

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and State law. These regulated air pollutants are known as criteria air pollutants and are categorized into primary and secondary pollutants. Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxide (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), coarse particulate matter (PM<sub>10</sub>) and fine particulate matter (PM<sub>2.5</sub>), and lead are primary air pollutants. Of these, CO, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are criteria pollutants. ROG and NO<sub>x</sub> are criteria pollutant precursors and go on to form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O<sub>3</sub>) and nitrogen dioxide (NO<sub>2</sub>) are the principal secondary pollutants. Presented in **Table 3.2-1** is a description of each of the primary and secondary criteria air pollutants and their known health effects.

**Table 3.2-1  
Criteria Air Pollutants Summary of Common Sources and Effects**

Pollutant	Major Man-Made Sources	Human Health Effects
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO <sub>2</sub> )	A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include motor vehicles, electric utilities, and other sources that burn fuel.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone. Contributes to global warming and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.
Ozone (O <sub>3</sub> )	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrous oxides (NO <sub>x</sub> ) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, gasoline storage and transport, solvents, paints, and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing, and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.

Pollutant	Major Man-Made Sources	Human Health Effects
Particulate Matter (PM <sub>10</sub> & PM <sub>2.5</sub> )	Produced by power plants, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; asthma; chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility.
Sulfur Dioxide (SO <sub>2</sub> )	A colorless gas formed when fuel containing sulfur is burned and when gasoline is extracted from oil. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships.	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain.
Lead	Metallic element emitted from metal refineries, smelters, battery manufacturers, iron and steel producers, use of leaded fuels by racing and aircraft industries.	Anemia, high blood pressure, brain and kidney damage, neurological disorders, cancer, lowered IQ. Affects animals, plants, and aquatic ecosystems.

Source: CAPCOA 2011

### Ambient Air Quality

Ambient air quality in Sunnyvale can be inferred from ambient air quality measurements conducted at nearby air quality monitoring stations. Existing levels of ambient air quality and historical trends and projections in the vicinity of Sunnyvale are documented by measurements made by the BAAQMD, the air pollution regulatory agency in the SFBAAB that maintains air quality monitoring stations which process ambient air quality measurements.

As described in more detail under the Regulatory Framework subsection below, O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are the primary pollutants affecting the SFBAAB. The 158 E. Jackson Street air quality monitoring station in San Jose is the closest station to the project site, approximately 5.7 miles to the east. This station monitors ambient concentrations of O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. Ambient emission concentrations will vary due to localized variations in emission sources and climate and should be considered "generally" representative of ambient concentrations in Sunnyvale. The concentrations of pollutants monitored at this station are representative of Sunnyvale because it is the closest monitoring station to Sunnyvale and is located in the same climatological subregion.

**Table 3.2-2** summarizes the published data since 2017 from the San Jose-Jackson Street air quality monitoring station for each year that monitoring data is provided.

**Table 3.2-2  
Summary of Ambient Air Quality Data**

Pollutant Standards	California Standard	Federal Primary Standard	2017	2018	2019
<b>Ozone (O<sub>3</sub>)</b>					
Max 1-hour concentration (ppm)	0.09	NA <sup>1</sup>	0.121	0.078	0.095
Max 8-hour concentration (ppm) (State/federal)	0.070	0.070	0.099	0.061	0.082
Number of days above State/federal 1-hour standard	-	-	3/0	0/0	1/0
Number of days above State/federal 8-hour standard	-	-	4/4	0/0	2/2
<b>Nitrogen Dioxides (NO<sub>x</sub>)</b>					
Max 1-hour concentration (ppm)	0.180	0.100	0.0675	0.0861	0.0598
Number of days above State/federal 1-hour standard	-	-	0/0	0/0	0/0
<b>Coarse Particulate Matter (PM<sub>10</sub>)</b>					
Max 24-hour concentration (µg/m <sup>3</sup> ) (State/federal)	50	150	69.4	115.4	75.4
Number of days above State/federal standard	-	-	0/19	0/12	0/12
<b>Fine Particulate Matter (PM<sub>2.5</sub>)</b>					
Max 24-hour concentration (µg/m <sup>3</sup> ) (State/federal)	No Separate Standard	35	49.7	133.9	27.6
Number of days above State/federal standard	-	-	6/6	16/16	0/0

Source: CARB 2019

Notes: 1. The Federal standard for 1-hour ozone was revoked in June 2005.

µg/m<sup>3</sup> = micrograms per cubic meter; ppm = parts per million

The attainment status for the Sunnyvale portion of the SFBAAB is included in **Table 3.2-3**. The region is nonattainment for State O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> standards in addition to federal O<sub>3</sub> and PM<sub>2.5</sub> standards (BAAQMD 2017c).

**Table 3.2-3  
Federal and State Ambient Air Quality Attainment Status for Sunnyvale**

Pollutant	Federal	State
Ozone (O <sub>3</sub> )	Nonattainment	Nonattainment
Coarse Particulate Matter (PM <sub>10</sub> )	Unclassified	Nonattainment
Fine Particulate Matter (PM <sub>2.5</sub> )	Nonattainment	Nonattainment

Pollutant	Federal	State
Carbon Monoxide (CO)	Unclassified/Attainment	Attainment
Nitrogen Dioxide (NO <sub>2</sub> )	Unclassified/Attainment	Attainment
Sulfur Dioxide (SO <sub>2</sub> )	Attainment	Attainment

Source: BAAQMD 2017c.

### Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes, such as petroleum refining; commercial operations, such as gasoline stations and dry cleaners; and motor vehicle exhaust. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects associated with TACs are quite diverse and generally are assessed locally rather than regionally.

To date, the California Air Resources Board (CARB) has designated nearly 200 compounds as TACs. Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to a relatively few compounds.

Most recently, CARB identified diesel particulate matter (diesel PM) as a TAC. Diesel PM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Diesel exhaust is a complex mixture of particles and gases produced when an engine burns diesel fuel. Diesel PM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. Diesel PM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of diesel PM vary between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine (EPA 2002, pp. 1-1 and 1-2). Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. Diesel PM poses the greatest health risk among the TACs; due to their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.



### Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others because of the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiorespiratory diseases.

Residential areas are considered to be sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Children are considered more susceptible to the health effects of air pollution due to their immature immune systems and developing organs (OEHHA 2007). As such, schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities.

#### *3.2.2 Regulatory Setting*

During project construction and operation there is potential that gaseous emissions of criteria pollutants and dust into the ambient air would be emitted; therefore, development activities under the project fall under the ambient air quality standards promulgated at the local, State, and federal levels. The federal Clean Air Act of 1971 and the Clean Air Act Amendments (1977) established the national ambient air quality standards (NAAQS), which are promulgated by the US Environmental Protection Agency (EPA). The State of California has also adopted its own California ambient air quality standards (CAAQS), which are promulgated by CARB. Implementation of the project would occur in the San Francisco Bay Area Air Basin, which is under the air quality regulatory jurisdiction of the BAAQMD and is subject to the rules and regulations adopted by the air district to achieve the national and State ambient air quality standards. Federal, State, regional, and local laws, regulations, plans, and guidelines are summarized below.

### Ambient Air Quality Standards

The Clean Air Act established NAAQS, with states retaining the option to adopt more stringent standards or to include other pollution species. These standards are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect those sensitive receptors most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both the State of California and the federal government have established health-based ambient air quality standards for six air pollutants. As shown in **Table 3.2-4**, these pollutants include O<sub>3</sub>, CO, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and lead. In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

**Table 3.2-4  
Air Quality Standards**

Pollutant	Averaging Time	California <sup>1</sup>		Federal <sup>2</sup>	
		Standard <sup>3</sup>	Attainment Status	Standards <sup>3,4</sup>	Attainment Status
Ozone (O <sub>3</sub> )	1 Hour	0.09 ppm (180 µg/m <sup>3</sup> )	Nonattainment	N/A	N/A <sup>5</sup>
	8 Hours	0.070 ppm (137 µg/m <sup>3</sup> )	Nonattainment	0.070 ppm (137 µg/m <sup>3</sup> )	Nonattainment
Particulate Matter (PM <sub>10</sub> )	24 Hours	50 µg/m <sup>3</sup>	Nonattainment	150 µg/m <sup>3</sup>	Attainment/ Maintenance
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>	Nonattainment	N/A	N/A
Fine Particulate Matter (PM <sub>2.5</sub> )	24 Hours	No Separate State Standard		35 µg/m <sup>3</sup>	Nonattainment
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	Nonattainment	12.0 µg/m <sup>3</sup>	Nonattainment
Carbon Monoxide (CO)	8 Hours	9.0 ppm (10 mg/m <sup>3</sup> )	Attainment	9 ppm (10 mg/m <sup>3</sup> )	Attainment/ Maintenance
	1 Hour	20 ppm (23 mg/m <sup>3</sup> )	Attainment	35 ppm (40 mg/m <sup>3</sup> )	Attainment/ Maintenance
Nitrogen Dioxide (NO <sub>2</sub> ) <sup>5</sup>	Annual Arithmetic Mean	0.030 ppm (57 µg/m <sup>3</sup> )	N/A	53 ppb (100 µg/m <sup>3</sup> )	Attainment/ Maintenance
	1 Hour	0.18 ppm (339 µg/m <sup>3</sup> )	Attainment	100 ppb (188 µg/m <sup>3</sup> )	Attainment/ Maintenance
Lead (Pb) <sup>7,8</sup>	30 days Average	1.5 µg/m <sup>3</sup>	Attainment	N/A	N/A
	Calendar Quarter	N/A	N/A	1.5 µg/m <sup>3</sup>	Nonattainment
	Rolling 3-Month Average	N/A	N/A	0.15 µg/m <sup>3</sup>	Nonattainment
Sulfur Dioxide (SO <sub>2</sub> ) <sup>6</sup>	24 Hours	0.04 ppm (105 µg/m <sup>3</sup> )	Attainment	0.14 ppm (for certain areas)	Unclassified/ Attainment
	3 Hours	N/A	N/A	N/A	N/A
	1 Hour	0.25 ppm (655 µg/m <sup>3</sup> )	Attainment	75 ppb (196 µg/m <sup>3</sup> )	N/A
	Annual Arithmetic Mean	N/A	N/A	0.30 ppm (for certain areas)	Unclassified/ Attainment
Visibility-Reducing Particles <sup>9</sup>	8 Hours (10 a.m. to 6 p.m., PST)	Extinction coefficient = 0.23 km@<70% RH	Unclassified	<b>No Federal Standards</b>	
Sulfates	24 Hour	25 µg/m <sup>3</sup>	Attainment		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m <sup>3</sup> )	Unclassified		
Vinyl Chloride <sup>7</sup>	24 Hour	0.01 ppm (26 µg/m <sup>3</sup> )	N/A		

mg/m<sup>3</sup> = micrograms per cubic meter; ppm = parts per million; ppb = parts per billion; km = kilometer(s); RH = relative humidity; PST = Pacific Standard Time; N/A = Not Applicable

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM<sub>10</sub>, PM<sub>2.5</sub>, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.



### 3.2 Air Quality

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM<sub>10</sub>, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m<sup>3</sup> is equal to or less than one. For PM<sub>2.5</sub>, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.
5. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
6. On June 2, 2010, a new 1-hour SO<sub>2</sub> standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO<sub>2</sub> national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of ppb. California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
7. CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
8. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m<sup>3</sup> as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
9. In 1989, CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Source: CARB 2016; BAAQMD 2017c.

#### City of Sunnyvale General Plan

The City's General Plan includes policies for the purpose of avoiding or mitigating environmental impacts resulting from planned development projects within the City. The following policies are specific to air quality and are applicable to the proposed project.

#### *Land Use and Transportation*

- Policy LT-2.1 Enhance the public's health and welfare by promoting the city's environmental and economic health through sustainable practices for the design, construction, maintenance, operation, and deconstruction of buildings, including measures in the Climate Action Plan.
- Policy LT-2.2 Reduce greenhouse gas emissions that affect climate and the environment through land use and transportation planning and development.

#### *Environmental Management*

- Policy EM-11.2 Utilize land use strategies to reduce air quality impact, including opportunities for citizens to live and work in close proximity.
- Policy EM-11.3 Require all new development to utilize site planning to protect citizens from unnecessary exposure to air pollutants.
- Policy EM-11.4 Apply the indirect source rule to new development with significant air quality impacts. Indirect source review would cover commercial and residential projects as well as other land uses that produce or attract motor vehicle traffic.
- Policy EM-11.6 Contribute to a reduction in Regional Vehicle Miles Traveled.

### Plan Bay Area

The Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) jointly adopted the *Plan Bay Area 2040 Final* (Plan Bay Area) on July 26, 2017. Plan Bay Area is the Bay Area's Regional Transportation Plan/Sustainable Community Strategy. The 2040 Plan Bay Area update serves as a limited and focused update to the 2013 Plan Bay Area, with updated planning assumptions that incorporate key economic, demographic, and financial trends from the last several years. It lays out a development scenario for the region, which when integrated with the transportation network and other transportation measures and policies, would reduce greenhouse gas (GHG) emissions from transportation (excluding goods movement) beyond the per capita reduction targets identified by CARB.

### Air Quality Attainment Plans

The BAAQMD is responsible for preparing plans to attain ambient air quality standards in the SFBAAB. The BAAQMD prepares ozone attainment plans for the national ozone standard and clean air plans for the California standard, both in coordination with the Metropolitan Transportation Commission and the Association of Bay Area Governments (ABAG).

With respect to applicable air quality plans, the BAAQMD prepared the Bay Area 2017 Clean Air Plan to address nonattainment of the national ozone standard in the air basin. The Clean Air Plan defines a control strategy that the BAAQMD and its partners will implement to (1) reduce emissions and decrease ambient concentrations of harmful pollutants; (2) safeguard public health by reducing exposure to air pollutants that pose the greatest health risk, with an emphasis on protecting the communities most heavily impacted by air pollution; and (3) reduce GHG emissions to protect the climate. It is important to note that, in addition to updating the previously prepared ozone plan, the Clean Air Plan also serves as a multipollutant plan to protect public health and the climate. BAAQMD believes that an integrated and comprehensive approach to planning is critical to respond to air quality and climate protection challenges in the years ahead. In its dual roles as an update to the State ozone plan and a multipollutant plan, the Bay Area 2017 Clean Air Plan addresses four categories of pollutants (BAAQMD 2017a):

- Ground-level ozone and its key precursors, ROG and NO<sub>x</sub>
- Particulate matter: primary PM<sub>2.5</sub>, as well as precursors to secondary PM<sub>2.5</sub>
- Air toxics
- Greenhouse gases

The Clean Air Plan provides local guidance for the State Implementation Plan (SIP), which provides the framework for air quality basins to achieve attainment of the State and federal ambient air quality standards (CAAQS and NAAQS). Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. Areas for which there is insufficient data available are designated unclassified.

### Toxic Air Contaminant Regulations

The California Health and Safety Code defines a TAC as “an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health.” California regulates TACs primarily through Assembly Bill (AB) 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics “Hot Spot” Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as toxic air contaminants. Once a TAC is identified, CARB adopts an “airborne toxics control measure” for sources that emit designated TACs. If there is a safe threshold for a substance (a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions. CARB has, to date, established formal control measures for eleven TACs, all of which are identified as having no safe threshold.

Air toxics from stationary sources are also regulated in California under the Air Toxics “Hot Spot” Information and Assessment Act of 1987. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High-priority facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings. Stationary sources of air toxics in Sunnyvale include gasoline fuel stations, diesel-powered backup generators, and dry cleaning facilities.

### Land Use Compatibility with TAC Emission Sources

The location of a development project is a major factor in determining whether it will result in localized air quality impacts. The potential for adverse air quality impacts increases as the distance between the source of emissions and members of the public decreases. While impacts on all members of the population should be considered, impacts on sensitive receptors, such as schools or hospitals, are of particular concern. CARB (2005) published an informational guide entitled *Air Quality and Land Use Handbook: A Community Health Perspective*. The purpose of this guide is to provide information to aid local jurisdictions in addressing issues and concerns related to the placement of sensitive land uses near major sources of air pollution. The handbook includes recommended separation distances between TAC sources and new sensitive land uses. However, these recommendations are not site-specific and should not be interpreted as mandated “buffer zones.” It is also important to note that the recommendations are advisory and need to be balanced with other State and local policies (CARB 2005). The recommended distances for potential TAC sources that are relevant to evaluating Specific Plan impacts are listed in

**Table 3.2-5.**

**Table 3.2-5**  
**Recommendations on Siting New Sensitive Land Uses Near Air Pollutant Sources**

Source Category	Advisory Recommendations
Freeways and High-Traffic Roads	<ul style="list-style-type: none"> <li>• Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles per day.</li> </ul>

Source Category	Advisory Recommendations
Dry Cleaners Using Perchloroethylene	<ul style="list-style-type: none"> <li>• Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with three or more machines, consult with the local air district.</li> <li>• Do not site new sensitive land uses in the same building with perchloroethylene ("perc") dry cleaners.</li> </ul>
Gasoline Dispensing Facilities	<ul style="list-style-type: none"> <li>• Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50-foot separation is recommended for typical gas dispensing facilities.</li> </ul>

Source: CARB 2005

Notes: Recommendations are advisory, are not site-specific, and may not fully account for future reductions in emissions, including those resulting from compliance with existing/future regulatory requirements, such as reductions in diesel-exhaust emissions anticipated to occur with continued implementation of CARB's Diesel Risk Reduction Plan.

### Bay Area Air Quality Management District

The BAAQMD attains and maintains air quality conditions in the San Francisco Bay Area Air Basin through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The BAAQMD's clean air strategy includes the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, and issuance of permits for stationary sources of air pollution. The BAAQMD also inspects stationary sources of air pollution and responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements programs and regulations required by the federal Clean Air Act, the Clean Air Act Amendments, and the California Clean Air Act.

### Rules and Regulations

The BAAQMD develops regulations to improve air quality and protect the health and welfare of Bay Area residents and their environment. BAAQMD rules and regulations most applicable to the Specific Plan Area include but are not limited to the following:

- **Regulation 2, Rule 2: New Source Review.** Requires any new source resulting in an increase of any criteria pollutant to be evaluated for adherence to best available control technology. For compression internal combustion engines, best available control technology requires that the generator be fired on California diesel fuel (fuel oil with a sulfur content less than 0.05 percent by weight and less than 20 percent by volume of aromatic hydrocarbons). All stationary internal combustion engines larger than 50 horsepower must obtain a Permit to Operate. If the engine is diesel fueled, it must also comply with the BAAQMD-administered Statewide Air Toxics Control Measure for Stationary Diesel Engines.
- **Regulation 7: Odorous Substances.** Establishes general limitations on odorous substances and specific emission limitations on certain odorous compounds.



- **Regulation 8, Rule 3: Architectural Coatings.** Limits the quantity of volatile organic compounds in architectural coatings supplied, sold, offered for sale, applied, solicited for application, or manufactured for use within the district.
- **Regulation 8, Rule 15: Emulsified and Liquid Asphalts.** Limits the emissions of volatile organic compounds caused by the use of emulsified and liquid asphalt in paving materials and paving and maintenance operations.
- **Regulation 14: Mobile Source Emissions Reduction Measures.** Includes measures to reduce emissions of air pollutants from mobile sources by reducing motor vehicle use and/or promoting the use of clean fuels and low-emission vehicles.

The above list represents rules and regulations most applicable to the project. Additional rules and regulations may apply, depending on the sources proposed and the activities conducted.

*BAAQMD Construction Mitigation Measures*

The BAAQMD recommends quantifying a proposed project’s construction-generated emissions implementing the Basic Construction Mitigation Measures as mitigation for dust and exhaust construction impacts in the CEQA compliance documentation. If additional construction measures are required to reduce construction generated emissions, the Additional Construction Mitigation Measures should be applied to mitigate construction impacts, according to the BAAQMD. **Table 3.2-6** identifies the Basic and Additional Construction Mitigation Measures. In addition, all projects must implement any applicable air toxic control measures (ATCM). For example, projects that have the potential to disturb asbestos (from soil or building material) must comply with all the requirements of CARB’s ATCM for Construction, Grading, Quarrying, and Surface Mining Operations (BAAQMD 2017b).

**Table 3.2-6  
BAAQMD Basic and Additional Construction Mitigation Measures**

<b>BAAQMD Basic Construction Mitigation Measures</b>	
1.	All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2.	All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
<b>BAAQMD Basic Construction Mitigation Measures</b>	
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. The use of dry power sweeping is prohibited.
4.	All vehicle speeds on unpaved roads shall be limited to 15 mph.
5.	All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.



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6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. All equipment shall be checked by a certified visible emissions evaluator.
8. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The air district's phone number shall also be visible to ensure compliance with applicable regulations.
<b>BAAQMD Additional Construction Mitigation Measures</b>
1. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
2. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
3. 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.
4. 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.
5. 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.
6. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
7. 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.
<b>BAAQMD Additional Construction Mitigation Measures</b>
8. Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than 1 percent.
9. Minimize the idling time of diesel-powered construction equipment to 2 minutes.
10. The project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project-wide fleet average 20 percent NOX reduction and 45 percent PM reduction compared to the most recent CARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.
11. Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).
12. Require that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOX and PM.



13. Require all contractors use equipment that meets CARB's most recent certification standard for off-road heavy-duty diesel engines.

Source: BAAQMD 2017b

### 3.2.3 Impacts and Mitigation Measures

The impact analysis provided below is based on the following California Environmental Quality Act (CEQA) Guidelines Appendix G thresholds of significance:

- 1) Conflict with or obstruct implementation of any applicable air quality plan.
- 2) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard.
- 3) Expose sensitive receptors to substantial pollutant concentrations.
- 4) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

#### CEQA Guidance

The BAAQMD CEQA Air Quality Guidelines were prepared to assist in the evaluation of air quality impacts of projects and plans proposed within the Bay Area. The guidelines provide recommended procedures for evaluating potential air impacts during the environmental review process, consistent with CEQA requirements, and include recommended thresholds of significance, mitigation measures, and background air quality information. They also include recommended assessment methodologies for air toxics, odors, and GHG emissions. In June 2010, the BAAQMD's Board of Directors adopted CEQA thresholds of significance and an update of the CEQA Guidelines. These thresholds are designed to establish the level at which the BAAQMD believed air pollution emissions would cause significant environmental impacts under CEQA.

In May 2011, the updated BAAQMD CEQA Air Quality Guidelines were amended to include a risk and hazards threshold for new receptors and modified procedures for assessing impacts related to risk and hazard impacts; however, this later amendment regarding risk and hazards was the subject of the December 17, 2015, California Supreme Court decision (*California Building Industry Association v BAAQMD*), which clarified that CEQA does not require an evaluation of impacts of the environment on a project. The Supreme Court also found that CEQA requires the analysis of exposing people to environmental hazards in specific circumstances, including the location of development near airports, schools near sources of toxic contamination, and certain exemptions for infill and workforce housing. The Supreme Court also held that public agencies remain free to conduct this analysis regardless of whether it is required by CEQA. To account for these updates, BAAQMD published a new version of the Guidelines dated May 2017, which includes revisions made to address the Supreme Court's opinion. This latest version of the BAAQMD CEQA Guidelines was used to prepare the analysis in this EIR.

The BAAQMD CEQA Guidelines do not contain numeric thresholds related to criteria pollutant emissions resulting from “plan implementation,” such as implementation of the proposed Specific Plan. According to the BAAQMD CEQA Guidelines, in order to identify whether a plan would violate any ambient air quality standard or contribute substantially to an existing or projected air quality violation, the proposed plan (i.e., the proposed Specific Plan) must demonstrate consistency with the control measures contained in the Bay Area 2017 Clean Air Plan described above, and show that projected vehicle miles traveled (VMT) increases as a result of the plan are less than or equal to projected population increases over the planning period of the plan.

### CO Hot-Spot Analysis

In addition to the significance thresholds listed above, the project would be subject to the ambient air quality standards. These are addressed through an analysis of localized CO impacts. The California 1-hour and 8-hour CO standards are:

- 1-hour = 20 parts per million
- 8-hour = 9 parts per million

The significance of localized impacts depends on whether ambient CO levels within or in the vicinity of the project area are above State and federal CO standards. CO concentrations in Sunnyvale no longer exceed the CAAQS or NAAQS criteria, and the SFBAAB has been designated as attainment under the 1-hour and 8-hour CO standards. Based on BAAQMD guidance, projects meeting all of the following screening criteria would be considered to have a less than significant impact on localized CO concentrations if:

- 1) The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plans, and local congestion management agency plans.
- 2) The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
- 3) The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

### Toxic Air Contaminant Thresholds

In addition to the above thresholds relating to criteria air pollutants and CO hot spots, this EIR evaluates the project’s impacts with respect to toxic air contaminants. The BAAQMD regulates levels of air toxics through a permitting process that covers both construction and operation. If emissions of TACs exceed an excess cancer risk level of more than 10 in one million or a non-cancer hazard index greater than 1.0, the project would result in a significant impact.

**CONFLICT WITH THE BAY AREA 2017 CLEAN AIR PLAN (STANDARD OF SIGNIFICANCE 1)****Impact 3.2.1 Would the project conflict with implementation of the Bay Area 2017 Clean Air Plan?**

As part of its enforcement responsibilities, the EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the federal standards. The SIP must integrate federal, State, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under State law, the California Clean Air Act requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the federal and State ambient air quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

As previously stated, the BAAQMD prepared the Bay Area 2017 Clean Air Plan as a multipollutant plan to address the air basin's ozone nonattainment status, as well as particulate matter, air toxics, and greenhouse gases. The plan establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving the State and federal ambient air quality standards (CAAQS and NAAQS). The 2017 Clean Air Plan pollutant control strategies are based on the latest scientific and technical information and planning assumptions, updated emission inventory methodologies for various source categories, and the latest population growth projections and VMT projections for the region.

Criteria for determining consistency with the 2017 Clean Air Plan are defined by the following indicators:

- Consistency Criterion No. 1: The project supports the primary goals of the Clean Air Plan.
- Consistency Criterion No. 2: The project conforms to applicable control measures from the Clean Air Plan and does not disrupt or hinder the implementation of any Clean Air Plan control measures.

#### 2017 Clean Air Plan Goals

The primary goals of the 2017 Clean Air Plan are to attain the State and federal ambient air quality standards (CAAQS and NAAQS), reduce population exposure, protect public health in the Bay Area, and reduce GHG emissions and protect the climate. Furthermore, the 2017 Clean Air Plan also lays the groundwork for reducing GHG emissions in the Bay Area to meet the State's 2030 GHG reduction target and 2050 GHG reduction goal.

#### *Attain Air Quality Standards*

BAAQMDs 2017 Clean Air Plan strategy is based on regional population and employment projections in the Bay Area compiled by ABAG, which are based in part on cities' general plan land

use designations. These demographic projections are incorporated into Plan Bay Area. Demographic trends incorporated into Plan Bay Area determine VMT in the Bay Area, which BAAQMD uses to forecast future air quality trends. The SFBAAB is currently designated a CAAQS nonattainment area for O<sub>3</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub>.

Future growth associated with the proposed Specific Plan would occur incrementally throughout the proposed Specific Plan's 2035 buildout horizon. The anticipated growth from the proposed Specific Plan is within the population and employment projections identified by ABAG for the City, as discussed further in Section 3.12, *Population and Housing*, of this EIR. Because population and employment projections of the proposed Specific Plan are consistent with regional projections, BAAQMD emissions forecasts consider the additional growth and associated emissions from the proposed Specific Plan. Thus, emissions resulting from potential future development associated with the proposed Specific Plan are included in BAAQMD projections, and future development accommodated under the proposed Specific Plan would not hinder BAAQMD's ability to attain the State or federal ambient air quality standards (CAAQS and NAAQS). Therefore, impacts would be **less than significant**.

#### *Reduce Population Exposure and Protect Public Health*

Buildout of the proposed Specific Plan would not result in development of light industrial and warehousing land uses, as these types of uses would not be permitted. Commercial developments accommodated under the proposed Specific Plan could result in smaller stationary sources (e.g., dry cleaners, restaurants with charbroilers, emergency generators and boilers). However, adherence to BAAQMD permitting regulations would ensure that new stationary sources of TACs do not expose populations to significant health risk. Thus, implementation of the proposed Specific Plan would not result in significant health risks associated with exposure of TACs to sensitive populations. Therefore, impacts would be **less than significant**.

#### *Reduce GHG Emissions and Protect the Climate*

Consistency of the proposed Specific Plan with State, regional, and local plans adopted for the purpose of reducing GHG emissions are discussed under Impact 3.7.2 in Chapter 3.7, *Greenhouse Gases*, of this EIR. Future development allowed by the proposed Specific Plan would be required to adhere to statewide measures that have been adopted to achieve the GHG reduction targets of AB 32 and SB 32. The proposed Specific Plan is consistent with regional strategies for infill development identified in Plan Bay Area. Furthermore, the proposed Specific Plan would also be consistent with the City's Climate Action Playbook (i.e. Climate Action Plan); refer to Section 3.7, *Greenhouse Gases*, Impact 3.7.2. Therefore, the proposed Specific Plan is consistent with the goal of the 2017 Clean Air Plan to reduce GHG emissions and protect the climate, and the impact would be **less than significant**.

#### 2017 Clean Air Plan Control Measures



Control measures included in the 2017 Clean Air Plan that are required by BAAQMD to reduce emissions for a wide range of both stationary and mobile sources are depicted in **Table 3.2-7**. As shown in **Table 3.2-7**, the proposed Specific Plan would not conflict with applicable measures identified in the 2017 Clean Air Plan. Further, the Specific Plan would not hinder BAAQMD from implementing the 2017 Clean Air Plan control measures. Therefore, impacts would be **less than significant**.

**Table 3.2-7  
2017 Clean Air Plan Control Measures**

Type	Measure Number/Title	Project Consistency
Stationary Source Control Measures	<ul style="list-style-type: none"> <li>• SS 18 – Basin-Wide Combustion Strategy</li> <li>• SS 21 – New Source Review for Toxics</li> <li>• SS 25 – Coatings, Solvents, Lubricants, Sealants and Adhesives</li> <li>• SS 26 – Surface Prep and Cleaning Solvent</li> <li>• SS 27 – Digital Printing</li> <li>• SS 28 – LPG, Propane, Butane</li> <li>• SS 29 – Asphaltic Concrete</li> <li>• SS 30 – Residential Fan Type Furnaces</li> <li>• SS 31 – General Particulate Matter Emission Limitation</li> <li>• SS 32 – Emergency Backup Generators</li> <li>• SS 33 – Commercial Cooking Equipment</li> <li>• SS 34 – Wood Smoke</li> <li>• SS 35 – PM from Bulk Material Storage, Handling and Transport, Including Coke and Coal</li> </ul>	Stationary and area sources are regulated directly by BAAQMD; therefore, as the implementing agency, new stationary and area sources within the Specific Plan Area would be required to comply with BAAQMD’s regulations. BAAQMD routinely adopts/revises rules or regulations to implement the stationary source (SS) control measures to reduce stationary source emissions. Based on the type of the proposed land uses (primarily residential and commercial) under the proposed Specific Plan, implementation of the proposed Specific Plan would not hinder the ability of BAAQMD to implement these SS control measures. Implementation of the proposed Specific Plan would not result in any new major stationary source emissions or toxic air contaminants, which are generally associated with industrial manufacturing or warehousing uses. Commercial land uses may generate small quantities of stationary source emissions during project operations (e.g., emergency generators, dry cleaners, and gasoline dispensing facilities); however, these small-quantity generators would require review by BAAQMD for permitted sources of air toxics, which would ensure consistency with the 2017 Clean Air Plan.
Transportation Control Measures	<ul style="list-style-type: none"> <li>• R 1 – Clean Air Teleworking Initiative</li> <li>• TR 2 – Trip Reduction Programs</li> <li>• TR 5 – Transit Efficiency and Use</li> </ul>	Transportation (TR) control measures are strategies to reduce vehicle trips, vehicle use, VMT, vehicle idling, and traffic congestion for the purpose of reducing

Type	Measure Number/Title	Project Consistency
	<ul style="list-style-type: none"> <li>• TR 8 – Ridesharing, Last-Mile Connection</li> <li>• TR 9 – Bicycle and Pedestrian Access and Facilities</li> <li>• TR 10 – Land Use Strategies</li> <li>• TR 12 – Smart Driving</li> <li>• TR 13 – Parking Policies</li> <li>• TR 14 – Cars and Light Trucks</li> <li>• TR 16 – Indirect Source Review</li> <li>• TR 19 – Medium and Heavy Duty Trucks</li> <li>• TR 22 – Construction, Freight and Farming Equipment</li> <li>• TR 23 – Lawn and Garden Equipment</li> </ul>	<p>motor vehicle emissions. Although most of the TR control measures are implemented at the regional level—that is, by MTC or Caltrans—the 2017 Clean Air Plan relies on local communities to assist with implementation of some measures. The Specific Plan establishes design standards and guidelines for enhanced transit, pedestrian, bicycle and automobile circulation specific to the Specific Plan Area. Therefore, because the transportation improvements included in the Specific Plan were developed to enhance transit, pedestrian, and bicycle facilities and connectivity in the project area, the transportation improvements associated with the Specific Plan would not result in a substantial or measurable increase in VMT. Additionally, the proposed intersection improvements provided in the project’s <i>Transportation Impact Analysis prepared by Hexagon Transportation Consultants</i> (2020) would serve to improve access to the Sunnyvale Caltrain Station and the Lawrence Caltrain Station, improving multimodal safety, and enhancing the overall transit-oriented nature of the project area; refer to Section 3.15, <i>Transportation</i>, of this EIR. Therefore, the Specific Plan would support TR control measures.</p>
<p>Energy and Climate Control Measures</p>	<ul style="list-style-type: none"> <li>• EN 1 – Decarbonize Electricity Production</li> <li>• EN 2 – Renewable Energy Decrease Electricity Demand</li> </ul>	<p>The energy and climate (EN) control measures are intended to reduce energy use as a means to reducing adverse air quality emissions. Future development within the project area would analyze sustainability policies and would be required to comply with the most recent version of the Title 24 Building Standards Code and the California Green Building Standards Code (CALGreen). These building codes would require electric vehicle (EV) charging stations, designated EV parking, as well as bike parking and</p>



Type	Measure Number/Title	Project Consistency
		<p>storage. Furthermore, as of 2020, the Title 24 code requires photovoltaic solar panels on residential development. Refer to Section 3.5, Energy, of this EIR. In addition, in compliance with the City’s reach code ordinance effective in February 2022, development within the project area would only use electric appliances, install solar panels, and include EV charging stations. Therefore, implementation of the proposed Specific Plan would support EN control measures.</p>
<p>Buildings Control Measures</p>	<ul style="list-style-type: none"> <li>• BL 1 – Green Buildings</li> <li>• BL 2 – Decarbonize Buildings</li> <li>• BL 3 – Market-Based Solutions</li> <li>• BL 4 – Urban Heat Island Mitigation</li> </ul>	<p>The buildings (BL) control measures focus on working with local governments to facilitate adoption of best GHG emissions control practices and policies. Energy efficiency within future buildings would be accomplished through compliance with the Title 24 Building Standards Code, CALGreen, and the City’s reach code ordinance. Specifically, the project would include high efficiency lighting, low flow plumbing fixtures, solid waste diversion, and electricity from renewable energy sources. Refer to Section 3.5 of this EIR. Thus, the proposed Specific Plan would not conflict with these BL control measures.</p>
<p>Waste Management Control Measures</p>	<ul style="list-style-type: none"> <li>• WA 1 – Landfills</li> <li>• WA 2 – Composting and Anaerobic Digesters</li> <li>• WA 3 – Green Waste Diversion</li> <li>• WA 4 – Recycling and Waste Reduction</li> </ul>	<p>The waste management (WA) control measures include strategies to increase waste diversion rates through efforts to reduce, reuse and recycle. As discussed in Chapter 3.16, <i>Utilities and Service Systems</i>, the City has an existing solid waste source reduction program which promotes recycling, composting, and zero waste. Additionally, per AB 341, the project would be required to reduce, recycle, or compost 75 percent of solid waste generated. Implementation of the City’s solid waste source reduction program and State regulations to reduce waste would ensure implementation of the proposed</p>

Type	Measure Number/Title	Project Consistency
		Specific Plan would not conflict with these WA control measures.
Water Control Measures	<ul style="list-style-type: none"> <li>• WR 2 – Support Water Conservation</li> </ul>	The Specific Plan would be required to comply with the CALGreen Code, which requires newer developments to be fitted with low flow plumbing fixtures and fittings, as well as water-efficient landscaping. Therefore, the Specific Plan would not conflict with the WR control measures.
Super-GHG Control Measures	<ul style="list-style-type: none"> <li>• SL 1 – Short-Lived Climate Pollutants</li> <li>• SL 2 – Guidance for Local Planners</li> <li>• SL 3 – GHG Monitoring and Emissions Measurements Network</li> </ul>	Super-GHGs include methane, black carbon and fluorinated gases. The compounds are sometimes referred to as short-lived climate pollutants because their lifetime in the atmosphere is generally short. Measures to reduce super GHGs are addressed on a sector-by-sector basis in the 2017 Clean Air Plan. Through ongoing implementation of the City's Climate Action Playbook, the City will continue to reduce local GHG emissions, meet State, regional, and local reduction targets, which would ensure implementation of the proposed Specific Plan would not conflict with these SL control measures.

Source: BAAQMD 2017a

### Mitigation Measures

None required.

### Level of Significance

Less than significant.

## RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE OF ANY CRITERIA POLLUTANT FOR WHICH THE PROJECT REGION IS NON-ATTAINMENT DURING CONSTRUCTION (STANDARD OF SIGNIFICANCE 2)

**Impact 3.2.2**      **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 during construction?**

The project estimates that total buildout of the Specific Plan Area through the year 2035 would accommodate approximately 8,500 residential units and 3,980,000 square feet of commercial floor



area, which would be equivalent to net increases of approximately 6,900 residential units and 730,000 square feet of commercial floor area above existing conditions. Emissions commonly associated with construction activities include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty diesel- and gasoline-powered equipment, portable auxiliary equipment, and worker commute trips. During construction, fugitive dust, the dominant source of PM<sub>10</sub> and PM<sub>2.5</sub> emissions, is generated when wheels or blades disturb surface materials. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby. Demolition and renovation of buildings can also generate PM<sub>10</sub> and PM<sub>2.5</sub> emissions. Off-road construction equipment is often diesel-powered and can be a substantial source of NO<sub>x</sub> emissions, in addition to exhaust PM<sub>10</sub> and PM<sub>2.5</sub> emissions. Worker commute trips and architectural coatings are dominant sources of ROG emissions.

Quantifying the air quality pollutant emissions from future, short-term, temporary construction activities allowed under the proposed Specific Plan Area is not possible due to project-level variability and uncertainties related to future individual projects in terms of detailed site plans, construction schedules, equipment requirements, etc., which are not currently determined. However, depending on how development proceeds, construction-generated emissions associated with the Specific Plan Area could potentially exceed BAAQMD thresholds of significance. Therefore, future project-level analyses of air quality impacts may be conducted on a case-by-case basis as individual, future development projects allowed under the Specific Plan proceed. The BAAQMD has promulgated methodology protocols for the preparation of air quality analyses. For instance, the BAAQMD has adopted thresholds of significance depicting the approximate level of construction-generated emissions that would result in a potentially significant impact (i.e., violation of an ambient air quality standard) for each pollutant of concern in the SFBAAB. The significance criteria established by the BAAQMD may be relied upon to make a determination of impact significance level. In addition, the BAAQMD recommends appropriate emissions modeling input parameters for the SFBAAB in addition to other recommended procedures for evaluating potential air quality impacts during the environmental review process consistent with CEQA requirements.

Projects estimated to exceed BAAQMD significance thresholds are required to implement mitigation measures in order to reduce air pollutant emissions as much as feasible. Such measures could include the requirement that all construction equipment employ the use of the most efficient diesel engines available, which are able to reduce NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions by 60 to 90 percent (e.g., EPA-classified Tier 3 and/or Tier 4 engines), and/or that construction equipment be equipped with diesel particulate filters. Furthermore, all development projects in the SFBAAB are subject to BAAQMD rules and regulations adopted to reduce air pollutant emissions. For example, BAAQMD Regulation 8, Rule 3: Architectural Coatings, limits the quantity of volatile organic compounds in architectural coatings supplied, sold, offered for sale, applied, solicited for application, or manufactured for use within the district. Regulation 8, Rule 15:

Emulsified and Liquid Asphalts, limits the emissions of volatile organic compounds caused by the use of emulsified and liquid asphalt in paving materials and paving and maintenance operations.

As previously mentioned, the quantification of air quality emissions from short-term, temporary construction activities associated with the proposed Specific Plan Area is not possible due to project-level variability and uncertainties related to future individual projects in terms of market conditions of development, detailed site plans, construction schedules, equipment requirements, etc. However, all construction projects can produce O<sub>3</sub> precursors and nuisance dust emissions. Therefore, future project-level analyses of air quality impacts, in accordance with CEQA requirements, would be required to be conducted on a case-by-case basis as individual, future development projects allowed in the proposed Specific Plan Area proceed. While the BAAQMD has promulgated methodology protocols for the preparation of air quality analyses, and future development projects allowed under the Specific Plan that are projected to exceed BAAQMD significance thresholds are required to implement mitigation measures in order to reduce air pollutant emissions as much as feasible, BAAQMD significance thresholds may still be exceeded during project construction. Since it cannot be guaranteed that construction of future projects allowed under the Specific Plan would generate air pollutant emissions below BAAQMD significance thresholds due to the programmatic and conceptual nature of the proposed project and uncertainties related to future individual projects, this is considered a significant impact. Impacts associated with project construction emissions would be reduced through implementation of Mitigation Measures AQ-1 and AQ-2. Mitigation Measure AQ-1 would require the project to implement BAAQMD's basic construction mitigation measures. Mitigation Measure AQ-2 would require CARB Tier 3 or better engine standards for construction projects which exceed BAAQMD significance thresholds. Although Mitigation Measures AQ-1 and AQ-2 would reduce construction-generated air pollutants, impacts would remain **significant and unavoidable**.

### Mitigation Measures

**AQ-1** Prior to the issuance of grading or building permits, the City of Sunnyvale shall ensure that the Bay Area Air Quality Management District's (BAAQMD) basic construction mitigation measures from **Table 8-2** of the BAAQMD 2017 CEQA Air Quality Guidelines (or subsequent updates) are noted on the construction documents. These basic construction mitigation measures include the following:

- 1) All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- 2) All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- 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. The use of dry power sweeping is prohibited.



- 4) All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
- 5) All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- 6) Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points
- 7) All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- 8) A publicly visible sign shall be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

**AQ-2**

In the cases where construction projects are projected to exceed the Bay Area Air Quality Management District's air pollutant significance thresholds for NO<sub>x</sub>, PM<sub>10</sub>, and/or PM<sub>2.5</sub>, all off-road diesel-fueled equipment (e.g., rubber-tired dozers, graders, scrapers, excavators, asphalt paving equipment, cranes, and tractors) shall be at least California Air Resources Board (CARB) Tier 3 Certified or better.

**Level of Significance**

Significant and Unavoidable.

**RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE OF ANY CRITERIA POLLUTANT FOR WHICH THE PROJECT REGION IS NON-ATTAINMENT DURING OPERATIONS (STANDARD OF SIGNIFICANCE 2)**

**Impact 3.2.3      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 during operations?**

As previously described, the BAAQMD CEQA Guidelines do not contain numeric thresholds related to criteria pollutant emissions resulting from "plan implementation", such as implementation of the proposed Specific Plan. According to the BAAQMD CEQA Guidelines, in order to identify whether the proposed Specific Plan would violate any ambient air quality standard or contribute substantially to an existing or projected air quality violation, the proposed Specific Plan Area must

demonstrate consistency with the control measures contained in the Bay Area 2017 Clean Air Plan and show that projected VMT increases as a result of the Specific Plan Area are less than or equal to projected population increases over its planning period. As demonstrated in Impact 3.2.1, the proposed Specific Plan Area would be consistent with the 2017 Clean Air Plan. Therefore, the proposed Specific Plan would be considered to have a less than significant impact if projected increases in VMT are less than or equal to projected increases in population growth.

The proposed Specific Plan Area would result in an estimated additional 17,474 persons and 256,852 daily VMT over existing conditions by year 2035.<sup>1</sup> Population within the Specific Plan Area and daily VMT estimates were based on existing 2013 conditions and buildout of the Specific Plan in 2035. **Table 3.2-8** identifies the VMT and population for the proposed Specific Plan Area.

**Table 3.2-8**  
**Summary of Existing and Horizon Vehicle Miles Traveled and Service Population**

Metric/Variable	2013 (Existing Conditions)	Specific Plan 2035	Percent Change
VMT	111,798	368,650	230%
Population	7,573	25,047	231%
Are Increases in VMT > Increases in Population Compared with Existing Conditions?			<b>No</b>

Source: Based on VMT data provided by Hexagon Transportation Consultants, Inc., on January 8, 2021.

In comparison to existing conditions, VMT attributable to the Specific Plan Area is anticipated to increase 230 percent. The increase in population is estimated to be 231 percent. As a result, VMT would increase at a lower rate than population growth in comparison to existing conditions. Therefore, this impact would be **less than significant**.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

### EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL CARBON MONOXIDE POLLUTANT CONCENTRATIONS DURING CONSTRUCTION (STANDARD OF SIGNIFICANCE 3)

**Impact 3.2.4**      **Would the project contribute to localized concentrations of carbon monoxide that would exceed applicable ambient air quality standards?**

<sup>1</sup> Based on data provided by Hexagon Transportation Consultants, Inc., on January 8, 2021. It should be noted that the population estimates included in as part of Hexagon's VMT data differ from those disclosed in Section 3.12, Population and Housing. Hexagon's VMT estimates are based on Service Population (residents + employment), whereas the population estimates provided in Section 3.12 are based upon residents only.

The primary mobile-source criteria pollutant of local concern is CO. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Transport of this criteria pollutant is extremely limited; CO disperses rapidly with distance from the source under normal meteorological conditions. Under certain meteorological conditions, however, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Areas of high CO concentrations, or “hot spots,” are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours.<sup>2</sup> Modeling is therefore typically conducted for intersections that are projected to operate at unacceptable levels of service during peak commute hours.

Based on BAAQMD guidance, projects meeting all of the following screening criteria would be considered to have a less than significant impact on localized carbon monoxide concentrations if:

1. The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plans, and local congestion management agency plans.
2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

The Specific Plan would generate approximately 13,845 daily trips under project operations and the highest peak-hour volumes would be 8,614 trips.<sup>3</sup> Additionally, the Specific Plan in combination with cumulative projects would generate a maximum of 16,777 peak hour trips.<sup>4</sup> Therefore, the project would not increase traffic volumes to more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal mixing of pollutants and atmosphere is substantially limited (i.e., an enclosed parking structure). As a result, this impact would be **less than significant**.

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<sup>2</sup> Level of service (LOS) is a measure used by traffic engineers to determine the effectiveness of transportation infrastructure. LOS is most commonly used to analyze intersections by categorizing traffic flow with corresponding safe driving conditions. LOS A is considered the most efficient level of service and LOS F the least efficient.

<sup>3</sup> Project generated daily trips and peak-hour volumes are based on traffic data provided by Hexagon Transportation Consultants, Inc., via email on December 14, 2020 and January 8, 2021, respectively.

<sup>4</sup> Ibid.

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## 3.2 Air Quality

### Mitigation Measures

None required.

### Level of Significance

Less than significant.

## EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL TOXIC AIR CONTAMINANT CONCENTRATIONS DURING CONSTRUCTION (STANDARD OF SIGNIFICANCE 3)

### Impact 3.2.5 Would the project expose sensitive receptors to substantial toxic air contaminant concentrations during construction?

Sensitive land uses are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers.

Implementation of the Specific Plan would result in the development of residential and commercial land uses. Sources of construction-related TACs potentially affecting the sensitive receptors include off-road diesel-powered equipment. Construction would result in the generation of diesel PM emissions from the use of off-road diesel equipment required for site grading and excavation, paving, and other construction activities. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer. Concentrations of mobile-source diesel PM emissions are typically reduced by 70 percent at a distance of approximately 500 feet (CARB 2005). In addition, current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9, 40, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities.

In the case of most construction projects allowed under the Specific Plan, duration would be short-term. According to the BAAQMD (2017), construction-generated diesel PM emissions contribute to negative health impacts when construction is extended over lengthy periods of time. The use of diesel-powered construction equipment during construction would be temporary and episodic and would occur over several locations isolated from one another. Furthermore, the proposed project would be subject to, and would comply with, California regulations limiting idling to no more than five minutes, which would further reduce nearby sensitive receptors exposure to temporary and variable diesel PM emissions. Many of the individual construction projects would span small areas. Construction projects contained in a site of less than 5 acres are generally considered by CARB to represent less than significant health risk impacts due to (1) limitations on the off-road diesel equipment able to operate and thus a reduced amount of generated diesel



PM, (2) the reduced amount of dust-generating ground disturbance possible compared to larger construction sites, and (3) the reduced duration of construction activities compared to the development of larger sites.

For the reasons mentioned above, and because diesel fumes disperse rapidly over relatively short distances, diesel PM generated by most construction activities, in and of itself, would not be expected to create conditions where the probability of contracting cancer is greater than 10 in 1 million for nearby receptors. In addition, Mitigation Measure AQ-2 requires that off-road diesel-fueled equipment employed during construction activities be CARB Tier 3 Certified or better when construction activities are projected to exceed NO<sub>x</sub> and PM thresholds. Implementation of Mitigation Measure AQ-2 would reduce the emissions of toxic pollutants generated by heavy-duty diesel-powered equipment during larger scale construction projects. Mitigation Measure AQ-3 would require a site-specific analysis of large-scale construction projects (larger than 5 acres and lasting longer than 2 years) for the potential of construction-generated air pollutant impacts based on specific project details of future development, and the development of adequate mitigation, in consultation of the BAAQMD, to address any such impacts. Mitigation Measure AQ-4 shall require site-specific analysis to determine the level of health risk during the site planning and design for projects with the potential for new sensitive receptors located within 1,000 feet of emissions sources. Therefore, with implementation of Mitigation Measures AQ-2, AQ-3, and AQ-4 project impacts associated with construction TACs would be **less than significant with mitigation incorporated**.

### Mitigation Measures

Refer to Mitigation Measure AQ-2 above, in addition to the following.

**AQ-3** In the case when a subsequent project's construction is greater than five acres and is scheduled to last more than two years, the subsequent project shall be required to prepare a site-specific construction pollutant mitigation plan in consultation with the Bay Area Air Quality Management District (BAAQMD) staff prior to the issuance of grading permits. A project-specific construction-related dispersion modeling acceptable to BAAQMD shall be used to identify potential toxic air contaminant impacts, including diesel particulate matter. If BAAQMD risk thresholds (i.e., probability of contracting cancer is greater than 10 in 1 million) would be exceeded, mitigation measures shall be identified in the construction pollutant mitigation plan to address potential impacts and shall be based on site-specific information such as the distance to the nearest sensitive receptors, project site plan details, and construction schedule. The City shall ensure construction contracts include all identified measures and that the measures reduce the health risk below BAAQMD risk thresholds. Construction pollutant mitigation plan measures shall include, but not be limited to:

- 1) Limiting the amount of acreage to be graded in a single day,

- 2) Notification of affected sensitive receptors one week prior to commencing on-site construction so that any necessary precautions (such as rescheduling or relocation of outdoor activities) can be implemented. The written notification shall include the name and telephone number of the individual empowered to manage construction of the project. In the event that complaints are received, the individual empowered to manage construction shall respond to the complaint within 24 hours. The response shall include identification of measures being taken by the project construction contractor to reduce construction-related air pollutants. Such a measure may include the relocation of equipment.

**AQ-4**

The following measures shall be utilized in site planning and building designs to reduce TAC and PM<sub>2.5</sub> exposure where new receptors are located within 1,000 feet of emissions sources:

- Future development that includes sensitive receptors (such as residences, schools, hospitals, daycare centers, or retirement homes) located within 1,000 feet of Caltrain, Central Expressway, El Camino Real, Lawrence Expressway, Mathilda Avenue, Sunnyvale-Saratoga Road, US 101, State Route 237, State Route 85, and/or stationary sources shall require site-specific analysis to determine the level of health risk. This analysis shall be conducted following procedures outlined by the BAAQMD. If the site-specific analysis reveals significant exposures from all sources (i.e., health risk in terms of excess cancer risk greater than 100 in one million, acute or chronic hazards with a hazard Index greater than 10, or annual PM<sub>2.5</sub> exposures greater than 0.8 µg/m<sup>3</sup>) measures shall be employed to reduce the risk to below the threshold (e.g., electrostatic filtering systems or equivalent systems and location of vents away from TAC sources). If this is not possible, the sensitive receptors shall be relocated.
- Future nonresidential developments identified as a permitted stationary TAC source or projected to generate more than 100 heavy-duty truck trips daily will be evaluated through the CEQA process or BAAQMD permit process to ensure they do not cause a significant health risk in terms of excess cancer risk greater than 10 in one million, acute or chronic hazards with a hazard Index greater than 1.0, or annual PM<sub>2.5</sub> exposures greater than 0.3 µg/m<sup>3</sup> through source control measures.
- For significant cancer risk exposure, as defined by the BAAQMD, indoor air filtration systems shall be installed to effectively reduce particulate levels to avoid adverse public health impacts. Projects shall submit performance specifications and design details to demonstrate that lifetime residential exposures would not result in adverse public health impacts (less than 10 in one million chances).



### Level of Significance

Less than significant with mitigation incorporated.

#### EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL TOXIC AIR CONTAMINANT CONCENTRATIONS DURING OPERATIONS (STANDARD OF SIGNIFICANCE 3)

##### Impact 3.2.6 Would the project expose sensitive receptors to substantial toxic air contaminant concentrations during operations?

Types of land uses that typically generate substantial quantities of criteria air pollutants and TACs include industrial (stationary sources), manufacturing, and warehousing (truck idling) land uses. These types of major air pollutant emissions sources are not permitted under the proposed Specific Plan. Thus, implementation of the proposed Specific Plan would not result in creation of land uses that would generate substantial concentrations of TACs.

Development of the commercial land uses that are allowed under the Specific Plan may result in stationary sources of TACs emissions (e.g., dry cleaners, gas stations, restaurants with charbroilers, or buildings with emergency generators and boilers). However, these sources are not considered to be substantial emitters of TACs. In addition, emissions of TACs generated by these types of smaller sources would be controlled by BAAQMD through permitting and would be subject to further study and health risk assessment prior to the issuance of any necessary air quality permits. The permitting process ensures that stationary source emissions would be below the BAAQMD significance thresholds of 10 in one million cancer risk and 1.0 for acute risk at the maximally exposed individual. Therefore, impacts associated with project-generated operational TACs would be **less than significant**.

### Mitigation Measures

None required.

### Level of Significance

Less than significant.

#### RESULT IN OTHER EMISSIONS (SUCH AS THOSE LEADING TO ODORS) ADVERSELY AFFECTING A SUBSTANTIAL AMOUNT OF PEOPLE (STANDARD OF SIGNIFICANCE 4)

##### Impact 3.2.7 Would the project result in other emission (such as those leading to odors) adversely affecting a substantial number of people?

The BAAQMD does not have a recommended odor threshold for construction activities. For purposes of this analysis, it is anticipated that heavy-duty construction equipment associated with future development activities would emit odors. However, construction activities would be short term and finite in nature. Furthermore, equipment exhaust odors would dissipate quickly and are common in an urban environment. In addition, developments within the Specific Plan Area would be required to comply with the California Code of Regulations, Title 13, Sections 2449(d)(3) and

2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. This would further reduce the detectable odors from heavy-duty equipment exhaust. For these reasons, project construction is not anticipated to create objectionable odors affecting a substantial number of people and thus this impact would be **less than significant**.

The land uses identified by the BAAQMD as sources of odors include wastewater treatment plants, wastewater pumping facilities, sanitary landfills, transfer stations, composting facilities, petroleum refineries, asphalt batch plants, chemical manufacturing and fiberglass manufacturing facilities, painting/coating operations, rendering plants, coffee roasters, food processing facilities, confined animal facilities, feedlots, dairies, green waste and recycling operations, and metal smelting plants. The proposed Specific Plan would guide the development of residential and commercial land uses, which are not considered major sources of odorous emissions. The proposed project would not be expected to result in the installation of any major odor emission sources. In addition, no existing major stationary sources of odors have been identified in the Specific Plan area. Therefore, long-term exposure to odorous emissions would be considered **less than significant**.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

### CUMULATIVELY CONSIDERABLE NET INCREASE IN NONATTAINMENT CRITERIA POLLUTANTS (STANDARD OF SIGNIFICANCE 2)

**Impact 3.2.8**      **Would the project result in a cumulatively considerable net increase of criteria air pollutants for which the air basin is designated nonattainment?**

The cumulative setting for air quality includes Sunnyvale and the SFBAAB. The SFBAAB is designated as a nonattainment area related to the State standards for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> in addition to federal O<sub>3</sub> and PM<sub>2.5</sub> standards. The SFBAAB is designated as being unclassified and/or attainment for all other pollutants. Cumulative growth in population, vehicle use, and industrial activity could inhibit efforts to improve regional air quality and attain the ambient air quality standards. Thus, the setting for this cumulative analysis consists of the SFBAAB and associated growth and development anticipated in the air basin.

By its very nature, air pollution is largely a cumulative impact. According to the BAAQMD, no single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. In developing thresholds of significance for air pollutants, the BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively



considerable. According to the BAAQMD, if a project exceeds its identified significance thresholds, the project would be cumulatively considerable (BAAQMD 2017a). As stated under Impact 3.2.2, it cannot be guaranteed, despite mitigation, that construction of subsequent projects allowed under the Specific Plan would generate air pollutant emissions below BAAQMD significance thresholds due to the programmatic and conceptual nature of the proposed project and uncertainties related to future subsequent projects. Although implementation of Mitigation Measures AQ-1 and AQ-2 would likely mitigate most construction emissions from development under the Specific Plan, it is currently unknown the extent of construction that may occur at any specific period of time to determine whether Mitigation Measures AQ-1 and AQ-2 would fully mitigate construction emissions below BAAQMD thresholds. Therefore, based on future uncertainties, cumulative impacts would be **cumulatively considerable** and **significant and unavoidable**.

#### Mitigation Measures

Refer to Mitigation Measures AQ-1 and AQ-2.

#### Level of Significance

**Significant and unavoidable.**



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### 3.3 Biological Resources

This section describes the existing biological resources, including special-status species and sensitive habitats known to occur or potentially occur in Sunnyvale, as well as the regulations and programs that provide for their protection. This section also provides an assessment of the potential impacts of implementing the Specific Plan.

#### 3.3.1 Existing Setting

##### Vegetative Communities

Sunnyvale is located along the southern San Francisco Bay. The interface of the City with the bay constitutes some of the best natural areas in and around the City. Beyond this zone characterized by fine interstitial soils, Sunnyvale is built out, with few natural areas remaining. Small patches of fresh emergent marsh occur, as well as segments of Stevens Creek, Calabazas Creek, and Moffett Channel. The natural areas near the bay are designated as the baylands in the City's (2017) adopted Land Use and Transportation Element (LUTE) and are proposed to be retained as open space. The Specific Plan Area is developed with and is surrounded by urbanized uses; refer to **Figure 2-2, Local Vicinity Map/Specific Plan Area**. Thus, the following discussion identifies the two vegetative communities anticipated to occur within the remaining urbanized environment in Sunnyvale.

##### *Non-native Annual Grassland*

Non-native annual grassland is the most common "natural community" or undeveloped habitat type in Sunnyvale. In urban areas, this habitat type is often called ruderal, or disturbed. This community is composed almost entirely of annual grasses and other herbaceous species. Plants typical of this community include several species of brome (*Bromus* spp.), wild oats (*Avena* spp.), filarees (*Erodium* spp.), schismus (*Schismus* spp.), fescues (*Vulpia* spp.), and a variety of native wildflowers such as California poppy (*Eschscholtzia californica*) and phacelia (*Phacelia* spp.), along with other non-native species.

Ruderal grassland areas can be found in freeway cloverleaves, along roadways, and in vacant, undeveloped urban lots. Although they do not support many native species, these areas can be a refuge for common species such as raccoon (*Procyon lotor*), dark-eyed junco (*Junco hyemalis*), lesser goldfinch (*Carduelis psaltria*), and many others. Special-status species that may occur in ruderal areas include western burrowing owl (*Athene cunicularia*) and Congdon's tarplant (*Centromadia parryi* spp. *congdonii*). Western burrowing owl is known to occur at Shoreline Regional Park.

##### *Urban*

Urban communities are characterized by residential and commercial developments that generally include structures, roadways and other hardscapes, remnant mature native trees, and ornamental landscaping. Park communities are integrated into the urban community and include designated open space areas that are predominantly landscaped. Typical landscape species in the urban



community are generally non-natives such as junipers (*Juniperus* spp.), roses (*Rosa* spp.), Bradford pear (*Pyrus callereyana* 'Bradford'), crepe myrtle (*Lagerstroemia indica*), weeping willow (*Salix babylonica*), oleander (*Nerium oleander*), and English ivy (*Hedera helix*). Common urban street trees in the City include California black walnut (*Juglans californica*), Chinese pistache (*Pistacia chinensis*), liquidamber (*Liquidamber styraciflua*), eucalyptus (*Eucalyptus* spp.), London plane (*Plantanus acerifolia*), olive (*Olea europaea*), and tulip tree (*Liriodendron tulipifera*). Ruderal habitats in vacant lots are generally dominated by species such as yellow star thistle (*Centaurea solstitialis*), prickly lettuce (*Latuca serriola*), flax-leaved fleabane (*Conyza bonariensis*), and non-native grasses, including soft chess, ripgut brome, and foxtail barley. Vegetation in park communities largely consists of turf with occasional non-native tree species similar to those found in urban habitats. Parks can include golf courses, playing fields, and baseball and softball diamonds.

Many common wildlife species have adapted to use urban and park areas for foraging, shelter, and breeding habitat. These species readily adapt to tolerate human disturbance and to non-native vegetation. Species associated with urban and park areas in the City include mockingbird (*Mimus polyglottos*), scrub jay (*Aphelocoma californica*), house finch (*Carpodacus mexicanus*), European starling (*Sturnus vulgaris*), lesser goldfinch, house sparrow (*Passer domesticus*), western gray squirrel (*Sciurus griseus*), California ground squirrel (*Spermophilus beecheyi*), rock dove (*Columba livia*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), Brewer's blackbird (*Euphagus cyanocephalus*), sandhill crane (*Grus canadensis*), various raptor species, egrets, and many species of rodents. A few other species that may be found, particularly in park areas, include raccoon, opossum (*Didelphis virginiana*), Pacific treefrog (*Hyla regilla*), and western toad (*Bufo boreas*).

### Special-Status Species

Special-status plant and animal species are those that are afforded special recognition by federal, State, or local resource agencies or organizations. Special-status species are of relatively limited distribution and generally require specialized habitat conditions.

Special-status plant species are defined as:

- Listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (ESA) (50 Code of Federal Regulations (50 CFR 17 12 [listed plants] and various notices in the Federal Register [proposed species]).
- Candidates for possible future listing as threatened or endangered under the ESA.
- Listed or candidates for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA) (14 California Code of Regulations [CCR] 670.5).
- Listed as rare under the California Native Plant Protection Act (California Fish and Game Code Section 1900 et seq.).



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### 3.3 Biological Resources

- Considered by the California Native Plant Society (CNPS) to be rare, threatened, or endangered in California (CNPS Lists 1B and 2).

Special-status wildlife are animals that meet the definition of “endangered, rare, or threatened” under the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15380). For the purposes of this document, this includes all species that meet any of the following criteria:

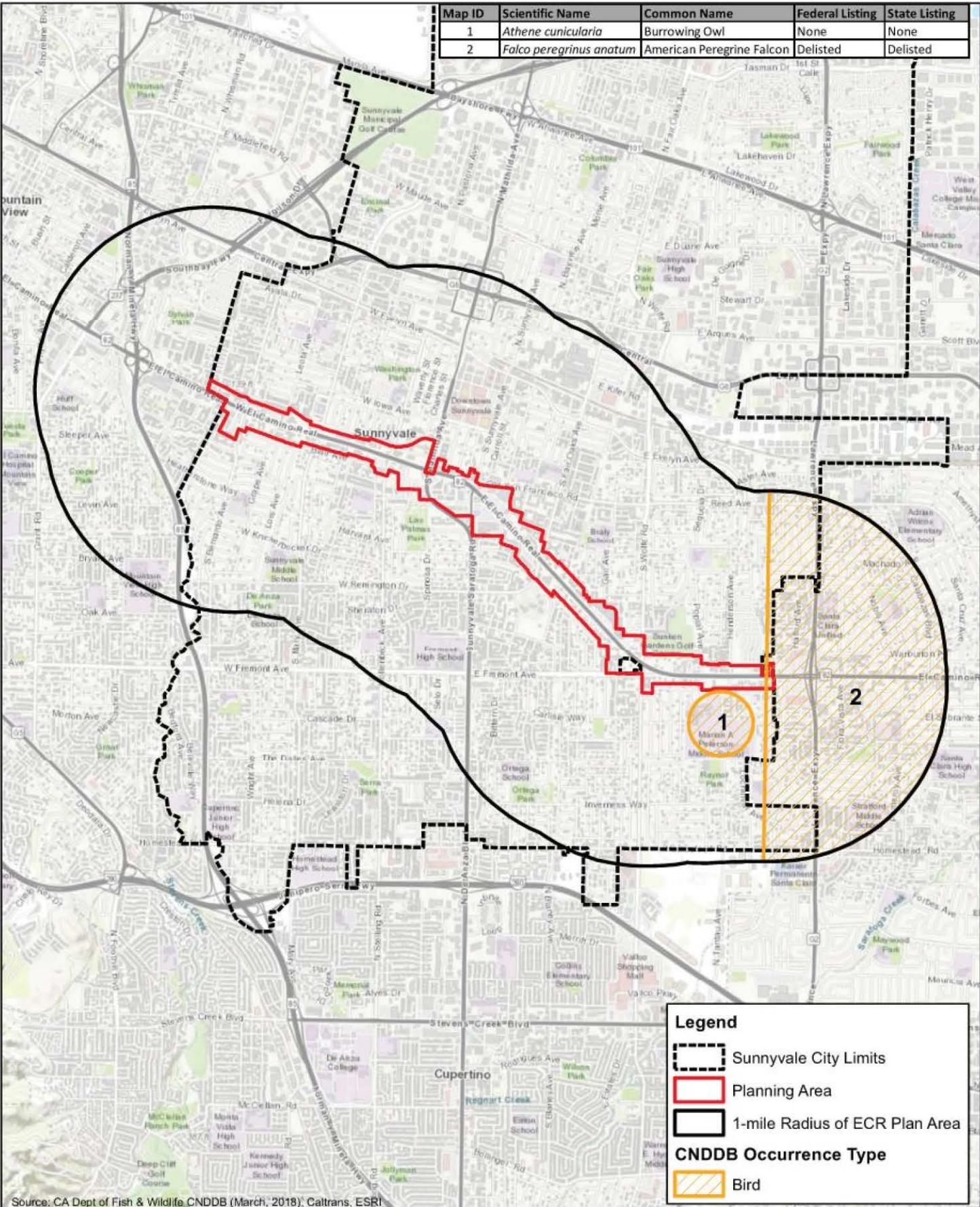
- Listed or proposed for listing as threatened or endangered under the ESA (50 CFR 17.11 [listed animals] and various notices in the Federal Register [proposed species]).
- Candidates for possible future listing as threatened or endangered under the ESA.
- Listed or candidates for listing by the State of California as threatened or endangered under the CESA (14 CCR 670.5).
- Otherwise protected under State or federal law.

The plan area was evaluated by querying the California Natural Diversity Database (CNDDDB), the US Fish and Wildlife Service (USFWS), and the CNPS for previously recorded occurrences of special-status species.

The California Department of Fish and Wildlife (CDFW) maintains records for the distribution and known occurrences of sensitive species and habitats in the CNDDDB, which is organized into map areas based on 7.5-minute topographic maps produced by the US Geological Survey (USGS). The CNDDDB is based on actual recorded occurrences but does not constitute an exhaustive inventory of every resource. The absence of an occurrence in a particular location does not necessarily mean that special-status species are absent from that area, but that no data has been entered into the CNDDDB inventory. Detailed field surveys are generally required to provide a conclusive determination on the presence or absence of sensitive resources from a particular location where there is evidence of potential occurrence.

**Figure 3.3-1** and **Table 3.3-1** identify the special-status species plant and animal species, respectively, which have potential to be affected by future development in the plan area vicinity. The habitat preferences for each special-status species were carefully reviewed and considered in the context of the plan area and the surrounding areas.

Map ID	Scientific Name	Common Name	Federal Listing	State Listing
1	<i>Athene cunicularia</i>	Burrowing Owl	None	None
2	<i>Falco peregrinus anatum</i>	American Peregrine Falcon	Delisted	Delisted



Source: CA Dept of Fish & Wildlife CNDDB (March, 2018); Caltrans, ESRI

**Table 3.3-1**  
**Special-Status Species Potentially Occurring in Urbanized Portions of Sunnyvale**

Scientific Name Common Name	Status* Federal/State CRPR or G-Rank/S-Rank	Habitat Preferences and Distribution Affinities	Potential for Occurrence
<b>Plants</b>			
<i>Calandrinia breweri</i> Brewer's calandrinia	-- / -- 4.2	Found in sandy or loamy soils within disturbed or burn sites, as well as chaparral and coastal scrub.	None. No suitable habitat is present.
<i>Chorizanthe robusta</i> var. <i>robusta</i> robust spineflower	FE / -- 1B.1	Found along sandy terraces and bluffs or in loose sand within chaparral, cismontane woodland, coastal bluff scrub, and coastal dunes.	None. No suitable habitat is present.
<i>Clarkia concinna</i> ssp. <i>automixa</i> clustered lady's-slipper	-- / -- 4.3	Found on slopes and near drainages in cismontane woodland and chaparral.	None. No suitable habitat is present.
<i>Dirca occidentalis</i> western leatherwood	-- / -- 1B.2	Found on brushy slopes in mixed evergreen and foothill woodland communities.	None. No suitable habitat is present.
<i>Hoita strobilina</i> Loma Prieta hoita	-- / -- 1B.1	Found in serpentine soils in chaparral, cismontane woodland, and riparian woodland.	None. No suitable habitat is present.
<i>Iris longipetala</i> coast iris	-- / -- 4.2	Found in mesic sites in coastal prairie, lower montane coniferous forests, and meadows and seeps.	None. No suitable habitat is present.
<i>Malacothamnus arcuatus</i> arcuate bush-mallow	-- / -- 1B.2	Found in gravelly alluvium in chaparral and cismontane woodland.	None. No suitable habitat is present.
<i>Monolopia gracilens</i> woodland woollythreads	-- / -- 1B.2	Found within chaparral, valley and foothill grassland, cismontane woodland, broadleafed upland forest, and North Coast coniferous forest.	None. No suitable habitat is present.
<i>Tropidocarpum capparideum</i> caper-fruited tropidocarpum	-- / -- 1B.1	Found in valley and foothill grassland.	None. No suitable habitat is present.

Table 3.3-1, continued

Scientific Name Common Name	Status* Federal/State CRPR or G-Rank/S-Rank	Habitat Preferences and Distribution Affinities	Potential for Occurrence																				
<b>Birds</b>																							
<i>Athene cunicularia</i> burrowing owl	-- / SSC G4 / S3	Primarily found in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation, but it persists and even thrives in some landscapes highly altered by human activity, such as earthen canals, berms, rock piles, and pipes. Subterranean nester, most often dependent upon burrowing mammals, most notably, the California ground squirrel.	<b>Low.</b> May be present within open lots.																				
<i>Falco peregrinus anatum</i> American peregrine falcon	FD / SD, FP G4T4 / S3S4	Found near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	<b>Low.</b> Foraging or nesting habitat may be present.																				
<p>* <u>California Rare Plant Rank (CRPR)</u></p> <p>1A Plants presumed extirpated in California and either rare or extinct elsewhere                      1B Plants rare, threatened, or endangered in California and elsewhere                      2A Plants presumed extirpated in California, but common elsewhere                      2B Plants rare, threatened, or endangered in California, but more common elsewhere                      3 Plants about which more information is needed – a Review List                      4 Plants of limited distribution – a Watch List</p> <p><u>Threat Ranks</u></p> <p>1. Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)                      2. Moderately threatened in California (20 to 80 percent occurrences threatened/moderate degree and immediacy of threat)                      3. Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known)</p> <table border="0"> <tr> <td colspan="2"><u>Federal Classifications</u></td> <td colspan="2"><u>State Classifications</u></td> </tr> <tr> <td>FE</td> <td>Federally Endangered</td> <td>SE</td> <td>State Endangered</td> </tr> <tr> <td>FT</td> <td>Federally Threatened</td> <td>ST</td> <td>State Threatened</td> </tr> <tr> <td>FD</td> <td>Federally Delisted</td> <td>SD</td> <td>State Delisted</td> </tr> <tr> <td></td> <td></td> <td>SSC</td> <td>California Species of Special Concern</td> </tr> </table> <p><u>G-Rank/S-Rank</u>                      Global Rank and State Rank as per NatureServe and the CDFW's CNDDDB RareFind5, ranging from critically imperiled (G1/S1) to demonstrably secure (G5/S5)</p>				<u>Federal Classifications</u>		<u>State Classifications</u>		FE	Federally Endangered	SE	State Endangered	FT	Federally Threatened	ST	State Threatened	FD	Federally Delisted	SD	State Delisted			SSC	California Species of Special Concern
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FD	Federally Delisted	SD	State Delisted																				
		SSC	California Species of Special Concern																				

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### Jurisdictional Resources

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The United States Army Corps of Engineers (USACE) Regulatory Branch regulates discharge of dredge or fill materials into “waters of the United States” pursuant to Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the California Department of Fish and Wildlife (CDFW) regulates alterations to streambed and bank under Fish and Wildlife Code Sections 1600 et seq., and the Regional Water Quality Control Board (RWQCB) regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

The only waterways in the Specific Plan Area are concrete lined drainage basins which bisect El Camino Real at various locations (Kennedy/Jenks Consultants, 2011). These channels are manmade and do not support wetland or riparian vegetation. All other areas in the Specific Plan Area are completely developed or disturbed and no longer support natural communities.

### Wildlife Corridors

Wildlife corridors refer to established migration routes commonly used by resident and migratory species for passage from one geographic location to another. Corridors are present in a variety of habitats and link otherwise fragmented acres of undisturbed area. Maintaining the continuity of established wildlife corridors is important to sustain species with specific foraging requirements, preserve a species’ distribution potential, and retain diversity among many wildlife populations. Therefore, resource agencies consider wildlife corridors to be a sensitive resource. The waterways in the City, including Stevens Creek, Calabazas Creek, and Moffett Channel, and surrounding open spaces serve as aquatic and terrestrial wildlife migration corridors. However, Stevens Creek, Calabazas Creek, and Moffett Channel are not located within the Specific Plan Area.

### *3.3.2 Regulatory Setting*

#### Federal

##### *Federal Endangered Species Act*

The Federal Endangered Species Act (FESA) of 1973 is intended to protect plants and animals that have been identified as being at risk of extinction and classified as either threatened or endangered. FESA also regulates the “taking” of any endangered fish or wildlife species, per Section 9 of the Act. A responsible agency or individual landowners are required to submit to a formal consultation with the USFWS to assess potential impacts to listed species as the result of a development project, pursuant to FESA Sections 7 and 10. The USFWS is required to make a determination as to the extent of impact to a particular species a project would have. If it is determined that potential impacts to a species would likely occur, measures to avoid or reduce such impacts must be identified.

### *Fish and Wildlife Coordination Act*

The Fish and Wildlife Coordination Act (16 U.S.C. Sections 661-667e) requires that whenever waters or channel of a stream or other body of water are proposed or authorized to be modified by a public or private agency under a federal license or permit, the federal agency must first consult with the USFWS and/or National Oceanic and Atmospheric Administration Fisheries and with the head of the agency exercising administration over the wildlife resources of the State where construction would occur (in this case the CDFW), with a view to conservation of birds, fish, mammals, and all other classes of wild animals and all types of aquatic and land vegetation upon which wildlife is dependent.

### *Migratory Bird Treaty Act and the Bald Eagle Protection Act*

The Migratory Bird Treaty Act (MBTA) implements various treaties for the protection of migratory birds. Under the MBTA, taking, killing, or possessing migratory birds is unlawful. Unless permitted by regulations, the MBTA provides that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. The MBTA protects the nests of all native bird species, including common species, such as mourning dove, Anna's hummingbird, and common yellowthroat.

The Bald Eagle Protection Act (16 U.S.C. 668) was passed in 1940 to protect bald eagles and was later amended to include golden eagles. Under the act, it is unlawful to import, export, take, sell, purchase, or barter any bald eagle or golden eagle, their parts, products, nests, or eggs. Take includes pursuing, shooting, poisoning, wounding, killing, capturing, trapping, collecting, molesting, or disturbing eagles.

### *Federal Clean Water Act*

#### *Section 404*

The USACE maintains regulatory authority over the discharge of dredged or fill material into the waters of the United States, pursuant to Section 404 of the CWA. The USACE and U.S. Environmental Protection Agency (EPA) define "fill material" as any "material placed in waters of the United States where the material has the effect of: (i) Replacing any portion of a water of the United States with dry land; or (ii) Changing the bottom elevation of any portion of the waters of the United States." Fill material may include sand, rock, clay, construction debris, wood chips, or other similar "materials used to create any structure or infrastructure in the waters of the United States." The term "waters of the United States" includes the following:

- All waters that have, are, or may be used in interstate or foreign commerce (including sightseeing or hunting), including all waters subject to the ebb and flow of the tide;
- Wetlands;
- All waters such as interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or



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### 3.3 Biological Resources

natural ponds; the use, degradation or destruction of which could affect interstate or foreign commerce;

- All impoundments of water mentioned above;
- All tributaries of waters mentioned above;
- Territorial seas; and
- All wetlands adjacent to the waters mentioned above.

In the absence of wetlands, the USACE's jurisdiction in non-tidal waters extends to the Ordinary High Water Mark, which is defined as "...that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area (33 CFR 328.3(e))."

Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands are jointly defined by the USACE and EPA as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (33 CFR 328.3(b))."

It is important to note that on January 23, 2020, the EPA and the Department of the Army (Army) finalized the Navigable Waters Protection Rule to define "waters of the United States." The Navigable Waters Protection Rule outlines four clear categories of waters that are considered "waters of the United States." These four categories protect the nation's navigable waters and the core perennial and intermittent tributary systems that flow into those waters.

#### Section 401

The RWQCB is the primary agency responsible for protecting water quality in California. The RWQCB regulates discharges to surface waters under the Federal CWA and the California Porter-Cologne Water Quality Control Act. The RWQCB's jurisdiction extends to all waters of the State and to all waters of the United States, including wetlands (isolated and non-isolated conditions). Through 401 Certification, Section 401 of the CWA allows the RWQCB to regulate any proposed federally-permitted activity that may affect water quality. Such activities include the discharge of dredged or fill material, as permitted by the USACE, pursuant to Section 404 of the CWA. The RWQCB is required to provide "certification that there is reasonable assurance that an activity which may result in the discharge to waters of the United States will not violate water quality standards," pursuant to Section 401. Water Quality Certification must be based on the finding that proposed discharge would comply with applicable water quality standards, which are given as objectives in each of the RWQCB's Basin Plans.

In addition, pursuant to the Porter-Cologne Water Quality Control Act, the State is given authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. As such, any person proposing to discharge waste into a water body that could affect its water quality must first file a Report of Waste Discharge if a Section 404 does not apply.

“Waste” is partially defined as any waste substance associated with human habitation, including fill material discharged into water bodies.

## State

### *California Endangered Species Act*

The California Endangered Species Act (CESA) of 1984, in combination with the California Native Plant Protection Act of 1977, regulates the listing and take of plant and animal species designated as endangered, threatened, or rare within the State (Sections 2074.2 and 2075.5 of the Fish and Wildlife Code). The State of California also lists Species of Special Concern based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. The CDFW is given the responsibility by the State to assess development projects for their potential to impact listed species and their habitats. State listed special-status species are also addressed through the issuance of a 2081 permit (Memorandum of Understanding).

### *California Department of Fish and Game Code*

Within the State of California, fish, wildlife, and native plant resources are protected and managed by the CDFW. The CDFW is responsible for issuing permits for the take or possession of protected species. The following sections of the Fish and Game Code address the protected species: Section 3511 (birds); Section 4700 (mammals); Section 5050 (reptiles and amphibians); and Section 5515 (fish).

### *California Department of Fish and Wildlife Lake and Streambed Alteration Agreements*

Section 1602 of the Fish and Game Code requires any person, State, or local governmental agency, or public utility to notify the CDFW before commencing any activity that would result in one or more of the following:

- Substantially obstruct or divert the natural flow of a river, stream, or lake;
- Substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or
- Deposit debris, waste, or other material that could pass into any river, stream, or lake.

Fish and Game Code Section 1602 applies to all perennial, intermittent, ephemeral, and episodic rivers, streams, and lakes within the State of California. While the jurisdictional limits are similar to the limits defined by USACE regulations, CDFW jurisdiction includes riparian habitat supported by a river, stream, or lake with or without the presence or absence of saturated soil conditions or hydric soils. CDFW jurisdiction generally includes to the top of bank of the stream, or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Any project that occurs within or in the vicinity of a river, stream, lake, or their tributaries typically requires notification of the CDFW, including rivers or streams that flow at least periodically or permanently

through a bed or channel with banks that support fish or other aquatic life, and watercourses having a surface or subsurface flow that supports or has supported riparian vegetation.

### *California Native Plant Society*

The CNPS publishes and maintains an Inventory of Rare and Endangered Vascular Plants of California (Inventory) in both hard copy and electronic version. The Inventory assigns plants to the following categories:

- 1A – Presumed extinct in California and either rare or extinct elsewhere;
- 1B – Rare, threatened, or endangered in California and elsewhere;
- 2A – Presumed extirpated in California, but common elsewhere;
- 2B – Rare, threatened, or endangered in California, but more common elsewhere;
- 3 – Plants for which more information is needed; and
- 4 – Plants of limited distribution.

Additional endangerment codes are assigned to each taxa as follows:

- 0.1 – Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat);
- 0.2 – Moderately threatened in California (20-80 percent occurrences threatened/moderate degree and immediacy of threat); and
- 0.3 – Not very threatened in California (<20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known).

Plants on Lists 1A, 1B, 2A, 2B, and 3 of the CNPS Inventory consist of plants that may qualify for listing and are given special consideration under CEQA during project review. Although plants on List 4 have little or no protection under CEQA, they are usually included in the project review for completeness.

### *Sensitive Vegetation Communities*

Sensitive vegetation communities are natural communities and habitats that are either unique, of relatively limited distribution in the region, or of particularly high wildlife value. These resources have been defined by federal, State, and local conservation plans, policies, or regulations. The CDFW ranks sensitive communities as “threatened” or “endangered” and keeps records of their occurrences in its CNDDDB. Sensitive vegetation communities are also identified by CDFW on its Natural Communities List recognized by the CNDDDB. Impacts to sensitive natural communities and habitats identified in local or regional plans, policies, and regulations, or by federal or State agencies, must be considered and evaluated under CEQA (CCR: Title 14, Div. 6, Chap. 3, Appendix G).

### *Fully Protected Species and Species of Special Concern*

The classification of “fully protected” was the CDFW’s initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibian and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA. The Fish and Game Code sections (fish at Section 5515, amphibian and reptiles at Section 5050, birds at Section 3511, and mammals at Section 4700) dealing with “fully protected” species states that these species “. . . may not be taken or possessed at any time. No provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take a fully protected (species),” although take may be authorized for necessary scientific research. This language makes the “fully protected” designation the strongest and most restrictive regarding the “take” of these species. In 2003, the code sections dealing with fully protected species were amended to allow the CDFW to authorize take resulting from recovery activities for State-listed species.

Species of special concern are broadly defined as animals not listed under the FESA or CESA, but which are nonetheless of concern to the CDFW because they are declining at a rate that could result in listing, or historically occurred in low numbers and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals by the CDFW, land managers, consulting biologists, and others, and is intended to focus attention on the species to help avert the need for costly listing under FESA and CESA and cumbersome recovery efforts that might ultimately be required. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them. Although these species generally have no special legal status, they are given special consideration under CEQA during project review.

### *California Environmental Quality Act*

In addition to specific federal and State statutes for the protection of threatened and endangered species, CEQA Guidelines Section 15380(b) provides that a species not listed on the federal or State list of protected species may be considered rare or endangered if it can be shown that the species meets certain specified criteria. Modeled after definitions in the FESA and the section of the California Fish and Wildlife Code dealing with rare or endangered plants and animals, these criteria are given in CEQA Guidelines Section 15380(b). The effect of Section 15380(b) is to require public agencies to undertake reviews to determine if projects would result in significant effects on species not listed by either the USFWS or CDFW (i.e., candidate species). Through this process, agencies are provided with the authority to protect additional species from the potential impacts of a project until the appropriate government agencies have an opportunity to designate the species as protected, if deemed appropriate.

## Local

### *City of Sunnyvale Municipal Code*

Sunnyvale Municipal Code (SMC) Chapter 13.16, City Trees, pertains to preserving trees in the public right-of-way (City trees). All City trees with a diameter at breast height (dbh) of 4 inches or greater are protected.

SMC Chapter 19.94 is the City's tree preservation ordinance. The purpose of the ordinance is to "regulate the protection, installation and removal and long term management of significantly sized trees on private property within the City and City owned golf courses and parks; encourage the proper protection and maintenance of significantly sized trees which are located on such property; establish a review and permit procedure to assure the correct planting, maintenance, protection and removal of significant trees on such property; and establish penalties for violation of its provisions." SMC Chapter 19.94.030 defines a significant tree as "a tree thirty-eight inches or greater in circumference measured four and one-half feet above ground for single-trunk trees. For multi-trunk trees, "significant size" means a tree which has at least one trunk with a circumference thirty-eight inches or greater measured four and one-half feet above ground level, or in which the measurements of the circumferences of each of the multi-trunks, when measured four and one-half feet above the ground level, added together equal an overall circumference one hundred thirteen inches or greater."

Chapter 12.60 provides regulation requirements for stormwater and wastewater management under the National Pollutant Discharge Elimination System (NPDES) permitting system, Federal Clean Water Act, and Porter-Cologne Act.

These requirements are discussed in detail in Section 3.8, Hydrology and Water Quality.

### *City of Sunnyvale General Plan*

The following provisions of the City's General Plan apply to biological resources:

- Policy EM-8.6 Minimize the impacts from stormwater and urban runoff on the biological integrity of natural drainage systems and water bodies.
- Policy LT-1.10 Participate in federal, State, and regional programs and processes in order to protect the natural and human environment in Sunnyvale and the region.
- Policy LT-1.10e Continue to evaluate and ensure mitigation of potential biological impacts of future development and redevelopment projects in a manner consistent with applicable local, State, and federal laws and regulations.
- Policy LT-2.3 Accelerate the planting of large canopy trees to increase tree coverage in Sunnyvale in order to add to the scenic beauty and walkability of the community; provide environmental benefits such as air quality improvements, wildlife habitat,



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### 3.3 Biological Resources

and reduction of heat islands; and enhance the health, safety, and welfare of residents.

Policy LT-2.4 Maintain and regularly review and update regulations and practices for the planting, protection, removal, replacement, and long-term management of large trees on private property and City-owned golf courses and parks.

Action 1: Strictly enforce Chapters 13.16 City Trees and 19.94 Tree Preservation to prevent the unauthorized removal, irreversible damage, and pruning of large, protected trees.

Policy LT-2.5 Recognize the value of protected trees and heritage landmark trees (as defined in City ordinances) to the legacy, character, and livability of the community by expanding the designation and protection of large signature and native trees on private property and in City parks.

Policy LT-9.19 Protect creeks and wetlands as important parts of the community's natural environment and open space and for their contribution to flood control.

LT-9.19a: Work with other agencies to maintain creeks and wetlands in their natural State.

LT-9.19b: Work with appropriate agencies to identify creek channels and wetlands to use as recreational areas.

LT-9.19c: Minimize or divert pollutants from draining into creeks and wetlands by enforcing best management practices during construction, site development, and ongoing operations.

#### *Bird Safe Building Design Guidelines*

The City of Sunnyvale adopted its Bird Safe Building Design Guidelines in January 2014 to address bird safe building and reduce instances of bird strikes. Two design options for bird safety are presented in the City's Design Guidelines. The first option is for projects within 300 feet of a body of water or projects adjacent to a landscaped or open space area larger than one acre in size. The second option is criteria to be used in reviewing new projects located in all other areas of the city. The Bird Safe Building Design Guidelines read as follows:

*OPTION 1: If within 300 feet of a body of water larger than one acre in size or located immediately adjacent to a landscaped area, open space or park larger than one acre in size. If the project meets any of the prior criteria, projects should include specific bird safe design elements into the building and site design and operation. These would include:*

- 1. Avoid the use of multi-floor expanse of reflective or transparent glass in the first 60 feet of the building design, specifically in the area facing the water or open space;*
- 2. Building glass shall be limited to low reflectivity levels such as 25% or less;*



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### 3.3 Biological Resources

3. *Limit the amount of glass on ground level stories, especially in areas adjacent to landscaping;*
4. *Add architectural devices, such as louvers, awnings, sunshades or light shelves to building design to reduce massing of glass;*
5. *Consider use of opaque, fritted or etched glass on ground floor in areas adjacent to landscaped areas;*
6. *If site is near water features, use soil berms, furniture, landscaping or other features to prevent reflection of water in glass building facades;*
7. *Consider using angled glass (20-40 degrees) from vertical to reflect ground instead of adjacent habitat or sky buildings with an expanse of glass near water or landscaping areas*
8. *Avoid placing tall landscaping in front of highly reflective glass and the use of green roofs and water features near glass;*
9. *Avoid the funneling of open space towards a building face;*
10. *Avoid glass skyways or freestanding glass walls;*
11. *No up lighting or spot lights on site;*
12. *Ensure all site lighting uses shielded fixtures;*
13. *Turn building lights off at night or incorporate blinds into window treatment to use when lights are on at night;*
14. *Create smaller zones in internal lighting layouts to discourage wholesale area illumination;*
15. *Place signs at several locations near building with the telephone number an authorized bird conservation organization or museum to aid in species identification and to benefit scientific study;*
16. *Monitoring efforts shall include a bird-safe program developed by the project owner of the methods to ensure necessary steps are taken to reduce bird strikes. These efforts would include how each dead bird will be handled and donated to scientific study, providing a yearly inventory to the City of the number of birds found and locations, and the steps necessary to resolve any consistent location's bird deaths. Options include shades to reduce transparency and night lighting, fritted glass, netting, stickers, etc.*

*OPTION 2: All other locations in city. Efforts should be taken to reduce bird strikes in all locations of the city. The following items should be included regardless of location. These guidelines could be used as part of a project's review. Staff could include a discussion relative to the guidelines in staff reports in order to give decision-makers information necessary to review this aspect of a project's impact.*

1. *Avoid large expanse of glass near open areas, especially when tall landscaping is immediately adjacent to the glass walls;*
2. *Avoid the funneling of open space towards a building face;*
3. *Prohibit glass skyways or freestanding glass walls;*
4. *Avoid transparent glass walls coming together at building corners to avoid birds trying to fly through glass;*
5. *Reduce glass at top of building, especially when incorporating a green roof into the design;*



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### 3.3 Biological Resources

6. *Prohibit up lighting or spotlights;*
7. *Shield lighting to cast light down onto the area to be illuminated;*
8. *Turn commercial building lights off at night or incorporate blinds into window treatment to use when lights are on at night;*
9. *Create smaller zones in internal lighting layouts to discourage wholesale area illumination.*

#### MONITORING EFFORTS

*The following options should be considered by each project owner for all locations in order to learn more about the subject and to avoid further issues:*

1. *Reduce the use of night lighting in the building without incorporating blinds into the window design;*
2. *Donation of discovered dead birds to an authorized bird conservation organization or museum;*
3. *Consider placing signs in several locations around the building with the telephone number an authorized bird conservation organization or museum to aid in species identification and to benefit scientific study.*

#### 3.3.3 Impacts and Mitigation Measures

##### Standards of Significance

This analysis evaluates the project's impacts on biological resources based on the standards identified in California Environmental Quality Act (CEQA) Guidelines Appendix G. An impact to biological resources is considered significant if project implementation would:

- 1) Have a substantial adverse effect, either directly or indirectly through habitat modifications, on any special-status plant or animal species identified, tracked, or listed in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- 2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS. (Refer to Section 4.0, Effects Found Not To Be Significant)
- 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? (Refer to Section 4.0)
- 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. (Refer to Section 4.0)
- 5) Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.



- 6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or approved local, regional, or State habitat conservation plan. (Refer to Section 4.0)

Project Impacts and Mitigation Measures

**SPECIAL-STATUS SPECIES (STANDARD OF SIGNIFICANCE 1)**

**Impact 3.3.1** 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 California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

**Table 3.3-1** above identifies special-status plant and animal species that could occur within and adjacent to the Specific Plan Area. As noted in **Table 3.3-1**, nine special-status plants and two special-status wildlife species occur within the Specific Plan Area vicinity. No special-status vegetation communities were identified. Special-status plant and wildlife species were evaluated for their potential to occur within the project site based on habitat requirements, availability and quality of suitable habitat, and known distributions.

Special-Status Plants

As stated, nine special-status plant species have been recorded in the Specific Plan Area vicinity. Based on a review of specific habitat preferences, distributions, and elevation ranges, it was determined that no special-status plant species are expected to occur within the project site, since the project site is completely developed. As such, no impacts would occur in this regard.

Special-Status Wildlife

Two special-status wildlife species (American peregrine falcon and burrowing owl) have been recorded in the Specific Plan Area vicinity. Based on a review of specific habitat preferences, occurrence records, known distributions, and elevation ranges, it was determined that American peregrine falcon and burrowing owl have a low potential to occur within the Specific Plan Area.

Despite the fact that the Specific Plan Area has been exposed to long-standing anthropogenic disturbances, burrowing owl may occur in less than optimal and/or disturbed conditions (i.e., undeveloped vacant lots); therefore, if active nests would be lost as a result of site-preparation, it could result in a potentially significant impact. Also, although the species has a low potential to occur within the Specific Plan Area, American peregrine falcon have adapted to highly urbanized cityscapes known to attract abundant prey such as pigeons. The Specific Plan Area also provides nesting habitat for American peregrine falcon, since nests typically occur on a depression or ledge in an open site which can occur on buildings, bridges, and other structures. Nesting birds are protected under the MBTA, Bald and Golden Eagle Protection Act, and California Fish and Game Code. Special-status bird species would be further protected through conformance with the City's Bird Safe Building Design Guidelines, which acts to reduce bird mortality events through building

design guidelines; refer to Section 3.3.2, Regulatory Framework. Mitigation Measure BIO-1 would ensure a pre-construction clearance survey is conducted by a qualified biologist for nesting birds and burrowing owl should future construction activities be initiated during the nesting season. Upon implementation of Mitigation Measure BIO-1, impacts to potential special-status wildlife species would be reduced to less than significant levels. As such, this impact would be **less than significant with mitigation incorporated**.

### Mitigation Measures

**BIO-1** Pursuant to the Migratory Bird Treaty Act and the California Fish and Game Code, removal of any trees, shrubs, or any other potential nesting habitat shall be conducted outside the avian nesting season. The nesting season generally extends from early February through August, but it can vary slightly from year to year based on seasonal weather conditions. If ground disturbance and vegetation removal cannot occur outside of the nesting season, a preconstruction clearance survey for nesting birds shall be conducted within 30 days of the start of any vegetation removal or ground-disturbing activities to ensure no nesting birds will be disturbed during construction. The biologist conducting the clearance survey shall document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur.

If an active avian nest is discovered during the preconstruction clearance survey, construction activities shall stay outside of a 300-foot buffer around the active nest. For raptor species, this buffer is expanded to 500 feet. A biological monitor shall be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, normal construction activities can occur.

As part of the nesting bird clearance survey, a preconstruction burrowing owl clearance survey shall be conducted within 30 days of the start of ground-disturbing activities to ensure undeveloped vacant lots within the Specific Plan Area do not support burrowing owl. If no burrowing owl are detected, construction may proceed. If construction is delayed or suspended for more than 30 days, the project site or work area shall be resurveyed. If burrowing owls are detected on the project site, a 300-foot "no work" buffer shall be established around the active burrow and all work within the buffer shall be halted until the qualified biologist has determined through non-intrusive methods that the nesting effort is complete (i.e., all young have fledged). Once the nesting effort is complete or if a burrowing owl burrow is detected on-site during the non-breeding season (September 1 to February 28), passive and/or active relocation of burrowing owls may be implemented by a qualified biologist following consultation and approval from the City of Sunnyvale and the California Department of Fish and Wildlife.

### Level of Significance

Less than significant with mitigation incorporated.

## CONFLICT WITH LOCAL POLICIES OR ORDINANCES PROTECTING BIOLOGICAL RESOURCES (STANDARD OF SIGNIFICANCE 5)

### Impact 3.3.2 Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

It is the City's policy to continue to evaluate and ensure mitigation of potential biological impacts of future development and redevelopment projects in a manner consistent with applicable local, State, and federal laws and regulations (Policy LT-1.10e). In accordance with Policy LT-1.10e, Mitigation Measure BIO-1 would require a pre-construction clearance survey is conducted by a qualified biologist for nesting birds and burrowing owl, if future construction activities are initiated during the nesting season. The proposed project would not conflict with Policy LT-1.10e in this regard.

According to the Sunnyvale Heritage Resources Inventory Map (Sunnyvale 2020), a parcel located at the southwestern corner of El Camino Real and Wolfe Road includes three coast live oak and one valley oak, which are identified as heritage trees. These resources are located on City-owned open space within the Three Points Neighborhood of the Specific Plan Area at 871 East Fremont Avenue. The City strictly enforces SMC Section 13.16, City Trees, and SMC Section 19.94, Tree Preservation, to prevent the unauthorized removal, irreversible damage, and pruning of large, protected trees (Policy LT-2.4, Action 1). As discussed, the purpose of SMC Chapter 19.94 is to "regulate the protection, installation and removal and long term management of significantly sized trees on private property within the City and City owned golf courses and parks; encourage the proper protection and maintenance of significantly sized trees which are located on such property; establish a review and permit procedure to assure the correct planting, maintenance, protection and removal of significant trees on such property; and establish penalties for violation of its provisions." Future development occurring within the Specific Plan Area with the potential to impact the three heritage trees at 871 East Fremont Avenue would be subject to approval by the City's Heritage Preservation Commission. Compliance with existing General Plan policies and SMC Sections 13.16 and 19.94 would ensure impacts to heritage trees are **less than significant**.

### Mitigation Measures

Refer to Mitigation Measure BIO-1.

### Level of Significance

Less than significant with mitigation incorporated.

## CUMULATIVE IMPACTS

### Impact 3.3.3 Would the project potentially result in cumulative impacts to biological resources?



### Special-Status Species

Development of cumulative projects could result in direct take of special-status species, construction and post-construction disturbances, and/or special-status habitat conversion. Like the proposed project, future cumulative development would be subject to compliance with the City's policy to continue to evaluate and ensure mitigation of potential biological impacts of future development and redevelopment projects in a manner consistent with applicable local, State, and federal laws and regulations (Policy LT-1.10e). As such, all future cumulative development would undergo environmental review on a project-by-project basis, to evaluate potential impacts to biological resources and ensure compliance with the established regulatory framework. Cumulative impacts to biological resources within the City and surrounding areas would be mitigated on a project-by-project basis in this regard.

As concluded in Impact 3.3.1, no special-status plants were identified within the Specific Plan Area. However, American peregrine falcon and burrowing owl have a low potential to occur within the Specific Plan Area. Upon implementation of Mitigation Measure BIO-1, which would ensure a pre-construction clearance survey is conducted by a qualified biologist for nesting birds and burrowing owl, impacts to potential special-status wildlife species would be reduced to less than significant levels. Therefore, cumulatively considerable impacts to special-status species or habitat would be **less than significant with mitigation incorporated**.

### Conflict with Local Policies or Ordinances Protecting Biological Resources

As discussed, the City would continue to evaluate and ensure mitigation of potential biological impacts of future development and redevelopment projects in a manner consistent with applicable local, State, and federal laws and regulations (Policy LT-1.10e). In addition, cumulative projects within Sunnyvale would have the potential to impact protected trees as defined under SMC Sections 13.16 and 19.94. However, cumulative impacts to biological resources within the City and surrounding areas would be evaluated on a project-by-project basis and impacts would depend on whether there are any protected trees located on the related project sites.

As concluded in Impact 3.3.2, future development occurring within the Specific Plan Area with the potential to impact the four heritage trees at 871 East Fremont Avenue would have the potential to impact heritage trees. However, compliance with existing General Plan policies and SMC Sections 13.16 and 19.94 would reduce impacts to heritage trees to less than significant levels. Thus, cumulatively considerable impacts concerning the potential to conflict with local policies and ordinances in place to protect biological resources would be **less than significant**.

### Mitigation Measures

Refer to Mitigation Measure BIO-1.

### Level of Significance

Less than cumulatively considerable.



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## 3.4 Cultural and Tribal Cultural Resources

This section considers and evaluates the Specific Plan's potential impacts on cultural resources and tribal cultural resources. Cultural resources include historic buildings and structures, historic districts, historic resource sites, prehistoric and historic archaeological sites, and other prehistoric and historic objects and artifacts. Tribal cultural resources can be a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American tribe.

### 3.4.1 Existing Setting

#### Regional Context: Prehistory and Ethnography

The Specific Plan Area is located near the southern shore of San Francisco Bay. Archaeological investigations around the San Francisco Bay support the hypothesis that the area was a distinct archaeological region with similar temporal changes in artifact assemblages and other cultural practices evident across the region. The region gives the impression that closely related cultures occupied the margins of the San Francisco Bay system for a considerable length of time (Corte Madera 2008).

The archaeological work in the San Francisco Bay Area generated a significant amount of data that was used to correlate archaeological cultures in the Delta with those in the bay. The taxonomic system for Central California, including the San Francisco Bay region, is grouped into adaptive modes or patterns (i.e., specific economic and/or technological characteristics that are restricted in space, but do not imply a temporal sequence). There are five patterns (i.e., Windmill, Berkeley, Borax Lake, Augustine, and Houx) for the North Coast Ranges, the San Francisco Bay, and the lower Sacramento Valley, assigned to six periods: Paleo-Indian (10,000 to 6,000 BC); Lower, Middle, and Upper Archaic (6,000 BC to AD 500); and Upper and Lower Emergent (AD 500 to 1800) (Corte Madera 2008).

The Paleo-Indian Period began with the first entry of people into California. They probably subsisted mainly on big game and minimally processed plant foods and had few or no trade networks.

During the Lower Archaic, milling stones for plant processing were abundant and hunting was less important than obtaining plant foods. Artifacts were predominantly of local materials, suggesting that few if any extensive trade networks were established at this time.

During the Middle Archaic, the subsistence base begins to expand and diversify with a developing acorn economy, as evidenced by the mortar and pestle, and the growing importance of hunting.

Status and wealth distinctions were evidenced in the Upper Archaic archaeological record, and regional trade networks were well established at this time for the exchange of goods and ideas, such as obsidian and Kuksu ceremonial practices involving spirit impersonations.



Increasing social complexity continued during the Lower Emergent. Territorial boundaries were well established by this time with regularized intergroup exchanges involving more and varied goods, people, and ideas. Bow and arrow technology was also introduced.

By the Upper Emergent, a monetary system based on the clamshell disk bead had been established. Native population reached its peak during this time, as evidenced by high site densities and large village sites in the archaeological record (Mountain View 2012).

Sunnyvale is situated in territory once occupied by Costanoan (also commonly referred to as Ohlone) language groups. Eight Ohlone languages were spoken in the area from the southern edge of the Carquinez Strait to portions of the Big Sur and Salinas rivers south of Monterey Bay, to approximately 50 miles inland from the coast (Mountain View 2012).

Ohlone territories comprised one or more land-holding groups that anthropologists refer to as tribelets. The tribelet, a nearly universal characteristic throughout native California, consisted of a principal village occupied year-round and a series of smaller hamlets and resource-gathering and processing locations occupied intermittently or seasonally. Populations of tribelets ranged from 50 to 500 persons and were largely determined by the carrying capacity of a tribelet's territory (Mountain View 2012).

Before arrival of the Spanish, what is today known as El Camino Real was originally a trade route that was extensively used by the indigenous people living in the area. The traditional Ohlone lifeway was severely disrupted by 1810 due to introduced diseases, a declining birth rate, and the impact of the mission system. The Ohlone were transformed from hunters and gatherers into agricultural laborers who lived at the missions and worked with former neighboring groups such as the Esselen, Yokuts, and Miwok. The Native Americans from Mission Santa Clara were apparently involved in the hide and tallow trade along the Guadalupe River between 1820 and 1850. Later, because of Mexico's secularization of the missions in 1834, most of the native population gradually moved to ranchos to work as manual laborers (Mountain View 2012).

#### Historic Context

With the Mexican Revolution of 1821, a portion of the land that is now Sunnyvale was given to Estrada and Inez Castro as part of a Mexican land grant. They formed Rancho Pastoria de las Borregas (Pasture of the Sheep Ranch). Missouri settler Martin Murphy Jr. purchased much of the rancho in 1850 and established a wheat farm, which was soon replaced by fruit orchards (Sunnyvale 2011).

The development of Sunnyvale began in 1864, when the Central Railroad built a line from San Francisco to San Jose. Murphy donated right-of-way for the railroad through his property in exchange for a railroad stop at Murphy Station.

Industry came to Sunnyvale after the 1906 earthquake. The first industries included the Hendy Ironworks and the Libby cannery, located at the center of town, close to the railroad. Housing was



also located downtown and was laid out in a traditional grid pattern, most efficient for the flat terrain. Simple, small bungalows and revival-style homes were predominant. The downtown grew as a mix of uses in proximity and walking distance of each other. When Sunnyvale was incorporated in 1912, the City had 1,800 residents (Sunnyvale 2011).

Transportation routes also played a significant role in the City's development. The earliest transportation facilities were the railroad and El Camino Real. The paving of El Camino Real in 1913 heralded the arrival of the automobile and a profound change in the pattern of development. The automobile allowed businesses and homes to spread out, rather than concentrate in the downtown or along transportation routes.

By the end of World War II, Sunnyvale had made the change from an agricultural community to an industrial center, with its economy focused on defense and aerospace industries. Naval Air Station Sunnyvale (now Moffett Federal Airfield) was built, and Lockheed Martin became the City's largest employer.

By 1950, farms and fields were increasingly replaced with homes, factories, and offices as the population grew to 10,000 (Sunnyvale 2011). This change set the stage for the boom decades of the 1950s and 1960s. Nearly 65 percent of the City's existing housing and 50 percent of the nonresidential buildings were constructed between 1950 and 1969. By 1970, Sunnyvale had a population of 96,000.

The school-age population also dramatically increased during this period. In 1950, there were 803 students in the Jefferson School District and one school building. By 1961, there were 10,000 students and 14 schools. Raynor School was the second school built during the 1950s by the district. The original Jefferson school was a frame building on Kifer Road on the northeast bank of the Saratoga River built circa 1861. The Jefferson Union School District was formed in 1926 by consolidating four smaller districts. It grew over time, especially during the 1950s, and merged with the Santa Clara School District in 1965 (Santa Clara 1965).

Sunnyvale's economy experienced another large shift throughout the last 30 years of the twentieth century, as high-technology companies launched the Silicon Valley era. The federal downsizing of defense development and manufacturing resulted in a loss of defense and aerospace jobs, which were quickly replaced with jobs designing and manufacturing circuits and computers. These in turn gave way to more high-value and knowledge-based jobs in computer programming, administration, and sophisticated research and design functions. The Mid-Peninsula and South Bay areas became known as Silicon Valley, the world center for high-technology innovation. The City attracted successful companies such as AMD, Network Appliance, Juniper Networks, and Yahoo. The population grew by 14 percent in the 1990s, rising to 131,800 by 2000.



The high-tech slowdown in the early years of the new century brought rapid growth to a halt, with jobs declining rather dramatically between 2000 and 2005. The economy has since rebounded, adapting to and developing new industries, jobs, and sources of revenue (Sunnyvale 2011).

#### Known Historic Resources in the Specific Plan Area

The City of Sunnyvale maintains a Heritage Resources Inventory, most recently updated in February 2020, that identifies landmarks, trees, residential and commercial districts, and individual structures of local importance. There are two main types of protected structures in Sunnyvale: "local landmarks" and "heritage resources." A local landmark is the highest level of protection given by the City. Heritage resources have a somewhat lower level of protection. Refer to Section 3.3, Biological Resources, for further discussion of potential impacts on heritage trees.

No individual structures or local landmarks are located within the Specific Plan Area. However, according to the Sunnyvale Heritage Resources Inventory Map (Sunnyvale 2020), a parcel located at the southwestern corner of El Camino Real and Wolfe Road includes three coast live oak and one valley oak, which are identified as heritage trees. These resources are located on City-owned open space within the Three Points Neighborhood of the Specific Plan Area at 871 East Fremont Avenue.

In addition, Sunnyvale contains two historical districts: the Taaffe-Frances Heritage Neighborhood (a residential district) and the Murphy Station Heritage Landmark District (a commercial district). The Taaffe Frances Heritage Neighborhood is located one-block directly north and within 300 feet of the Specific Plan Area. This district is significant because it contains the largest concentration of pre-WWII housing in Sunnyvale, comprised predominantly of one-story bungalows and period revival styles dating from the 1920s to the 1940s.

In addition, although not identified as heritage resources within the City's inventory, there are several buildings that currently meet the minimum age eligibility to be considered historic resources for the purposes of CEQA.

#### Known Archaeological Resources within the Specific Plan Area

No archaeological resources were identified as being located within the Specific Plan Area as part of the California Historical Resources Information System (CHRIS) Northwest Information Center (NWIC) records search completed on October 17, 2017.

#### Tribal Consultation

The City sent formal notification of the pursuant to Assembly Bill 52 (AB 52) and Senate Bill 18 (SB 18) on December 15, 2017. No tribes requested consultation under AB 52. However, one response was received in response to the project's SB 18 notification from the Honorable Valentin Lopez, Chairman of the Amah Mutsun Tribal Band. No California Native American Cultural Places (pursuant to California Public Resources Code Sections 5097.9 and 5097.995) were identified within the Specific Plan Area during the project's SB 18 consultation. A confidential consultation log and appendix were prepared for the project.



### 3.4.2 Regulatory Setting

#### Federal

##### *National Historic Preservation Act of 1966*

Enacted in 1966 and amended in 2000, the National Historic Preservation Act (NHPA) declared a national policy of historic preservation and instituted a multifaceted program, administered by the Secretary of the Interior, to encourage the achievement of preservation goals at the federal, State, and local levels. The NHPA authorized the expansion and maintenance of the NRHP, established the position of SHPO and provided for the designation of State Review Boards, set up a mechanism to certify local governments to carry out the purposes of the NHPA, assisted Native American tribes to preserve their cultural heritage, and created the Advisory Council on Historic Preservation (ACHP).

##### *Section 106 Process*

Through regulations associated with the NHPA, an impact to a cultural resource would be considered significant if government action would affect a resource listed in or eligible for listing in the NRHP. The NHPA codifies a list of cultural resources found to be significant within the context of national history, as determined by a technical process of evaluation. Resources that have not yet been placed on the NRHP, and are yet to be evaluated, are afforded protection under the Act until shown to be not significant.

Section 106 of the NHPA and its implementing regulations (36 Code of Federal Regulations Part 800) note that for a cultural resource to be determined eligible for listing in the NRHP, the resource must meet specific criteria associated with historic significance and possess certain levels of integrity of form, location, and setting. The criteria for listing on the NRHP are applied within an analysis when there is some question as to the significance of a cultural resource. The criteria for evaluation are defined as the quality of significance in American history, architecture, archeology, engineering, and culture. This quality must be present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association. A property is eligible for the NRHP if it is significant under one or more of the following criteria:

- Criterion A: It is associated with events that have made a significant contribution to the broad patterns of our history; or
- Criterion B: It is associated with the lives of persons significant in our past; or
- Criterion C: It embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- Criterion D: It has yielded, or may be likely to yield, information important in prehistory or history.



Criterion D is usually reserved for archaeological resources. Eligible cultural resources must meet at least one of the above criteria and exhibit integrity, measured by the degree to which the resource retains its historical properties and conveys its historical character.

The Section 106 evaluation process does not apply to projects undertaken under City environmental compliance jurisdiction. However, should the undertaking require funding, permits, or other administrative actions issued or overseen by a federal agency, analysis of potential impacts to cultural resources following the Section 106 process would likely be necessary. The Section 106 process typically excludes cultural resources created less than 50 years ago unless the resource is considered highly significant from the local perspective. Finally, the Section 106 process allows local concerns to be voiced and the Section 106 process must consider aspects of local significance before a significance judgment is rendered.

#### *Secretary of the Interior's Standards for the Treatment of Historic Properties*

Evolving from the Secretary of the Interior's Standards for Historic Preservation Projects with Guidelines for Applying the Standards that were developed in 1976, the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings were published in 1995 and codified as 36 CFR 67. Neither technical nor prescriptive, these standards are "intended to promote responsible preservation practices that help protect our Nation's irreplaceable cultural resources." "Preservation" acknowledges a resource as a document of its history over time, and emphasizes stabilization, maintenance, and repair of existing historic fabric. "Rehabilitation" not only incorporates the retention of features that convey historic character, but also accommodates alterations and additions to facilitate continuing or new uses. "Restoration" involves the retention and replacement of features from a specific period of significance. "Reconstruction," the least used treatment, provides a basis for recreating a missing resource. These standards have been adopted, or are used informally, by many agencies at all levels of government to review projects that affect historic resources.

#### State

##### *California Environmental Quality Act*

CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (Public Resources Code Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing in, the CRHR, a resource included in a local register of historical resources, or any object building, structure, site, area, place, record, or manuscript that a lead agency determines to be "historically significant" (CEQA Guidelines Section 15064.5[a][1-3]).

A resource is considered historically significant if it meets any of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;



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### 3.4 Cultural and Tribal Cultural Resources

2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed State. To the extent that resources cannot be left undisturbed, mitigation measures are required (Public Resources Code Section 21083.2[a], [b], and [c]). Public Resources Code Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

#### *California Register of Historical Resources*

Created in 1992 and implemented in 1998, the CRHR is “an authoritative guide in California to be used by State and local agencies, private groups, and citizens to identify the State’s historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change.” Certain properties, including those listed in or formally determined eligible for listing in the NRHP and California Historical Landmarks numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historical resources surveys or designated by local landmarks programs, may be nominated for inclusion in the CRHR. A resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the criteria modeled on the NRHP criteria.

#### *Senate Bill 18*

Signed into law in 2004, SB 18 requires that cities and counties notify and consult with California Native American tribes about proposed local land use planning decisions for the purpose of protecting traditional tribal cultural sites. Cities and counties must provide general plan and specific plan amendment proposals to tribes that have been identified by the NAHC as having traditional lands located within the lead agency’s boundaries. If requested by the tribes, the lead



agency must also conduct consultations with the tribes prior to adopting or amending their general and specific plans.

#### *Assembly Bill 52*

On September 25, 2014, Governor Brown signed AB 52. In recognition of California Native American tribal sovereignty and the unique relationship of California local governments and public agencies with California Native American tribal governments, and respecting the interests and roles of project proponents, it is the intent of AB 52 to accomplish all of the following:

1. Recognize that California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities.
2. Establish a new category of resources in CEQA called “tribal cultural resources” that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation.
3. Establish examples of mitigation measures for tribal cultural resources that uphold the existing mitigation preference for historical and archaeological resources of preservation in place, if feasible.
4. Recognize that California Native American tribes may have expertise regarding their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated. Because CEQA calls for a sufficient degree of analysis, tribal knowledge about the land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources.
5. In recognition of their governmental status, establish a meaningful consultation process between California Native American tribal governments and lead agencies, respecting the interests and roles of all California Native American tribes and project proponents, and the level of required confidentiality concerning tribal cultural resources, at the earliest possible point in CEQA environmental review process, so that tribal cultural resources can be identified, and culturally appropriate mitigation and mitigation monitoring programs can be considered by the decision making body of the lead agency.
6. Recognize the unique history of California Native American tribes and uphold existing rights of all California Native American tribes to participate in, and contribute their knowledge to, the environmental review process pursuant to CEQA.
7. Ensure that local and tribal governments, public agencies, and project proponents have information available, early in CEQA environmental review process, for purposes of identifying and addressing potential adverse impacts to tribal cultural resources, and to reduce the potential for delay and conflicts in the environmental review process.
8. Enable California Native American tribes to manage and accept conveyances of, and act as caretakers of, tribal cultural resources.



9. Establish that a substantial adverse change to a tribal cultural resource has a significant effect on the environment.

#### *California Public Resources Code*

Public Resources Code Sections 5097.9 to 5097.991 provide protection to Native American historical and cultural resources and sacred sites; identify the powers and duties of the NAHC; require descendants to be notified when Native American human remains are discovered; and provide for treatment and disposition of human remains and associated grave goods.

#### *California Health and Safety Code*

The discovery of human remains is regulated in accordance with California Health and Safety Code Section 7050.5, which states:

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation...until the coroner...has determined...that the remains are not subject to...provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible.... The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her authority and...has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

#### Local

#### *City of Sunnyvale Heritage Preservation Guidelines*

The Community Character chapter of the City's General Plan establishes the criteria for identifying cultural resources in Sunnyvale. The City delineates cultural resources by relating them to their heritage value. The City's criteria for evaluation of historic resources are similar to, but broader than, the CRHR (Sunnyvale Municipal Code [SMC] Section 19.96.050):

*Any improvement, building, portion of buildings, structures, signs, features, sites, scenic areas, views, vistas, places, areas, landscapes, trees, or other natural objects or objects of scientific, aesthetic, educational, political, social, cultural, architectural, or historical significance can be designated a heritage resource by the City council and any area within the City may be designated a heritage resource district by the City council pursuant to provisions of this chapter if it meets the Criteria of the National Register of Historic Places, or one or more of the following:*

- (a) *It exemplifies or reflects special elements of the City's cultural, social, economic, political, aesthetic engineering, architectural, or natural history;*



- (b) It is identified with persons or events significant in local, State, or national history;*
- (c) It embodies distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship;*
- (d) It is representative of the work of a notable builder, designer, or architect;*
- (e) It contributes to the significance of an historic area, being a geographically definable area possessing a concentration of historic or scenic properties or thematically related grouping of properties which contribute to each other and are unified aesthetically or by plan or physical development;*
- (f) It has a unique location or singular physical characteristic or is a view or vista representing an established and familiar visual feature of a neighborhood, community, or the City of Sunnyvale;*
- (g) It embodies elements of architectural design, detail, materials, or craftsmanship that represents a significant structural or architectural achievement or innovation;*
- (h) It is similar to other distinctive properties, sites, areas, or objects based on a historic, cultural, or architectural motif;*
- (i) It reflects significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of park or community planning;*
- (j) It is one of the few remaining examples in the City, region, State, or nation possessing distinguishing characteristics of an architectural or historic type or specimen;*
- (k) With respect to a local landmark, it is significant in that the resource materially benefits the historical character of a neighborhood or area, or the resource in its location represents an established and familiar visual feature of the community or City;*
- (l) With respect to a local landmark district, a collective high integrity of the district is essential to the sustained value of the separate individual resources;*
- (m) With respect to a designated landmark and designated landmark district, the heritage resource shall meet Criteria of the National Register of Historical Places, which are incorporated by reference into this chapter.*

Heritage resources are important because they document the cultural history of a particular place and serve to illustrate the relationship between the present and the past. Each heritage resource enriches the history of a place and adds to a complex pattern of growth and development over time. Changes to local landmarks must be reviewed and approved by the City's Heritage Preservation Commission. Specific, stringent reviews must be conducted if a local landmark is to be changed in a way that would significantly alter its historic character.



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### 3.4 Cultural and Tribal Cultural Resources

The Heritage Preservation Commission is a seven-member commission that acts in an advisory capacity to the City Council and has certain decision-making authority on the restoration, maintenance, and operation of heritage resources throughout Sunnyvale.

#### *City of Sunnyvale General Plan*

The following policies address the protection of cultural and tribal cultural resources within the City:

#### *Community Character Element*

- Policy C.C.-3.2     Ensure site design is compatible with the natural and surrounding built environment.
  
- Policy CC-5.1     Preserve existing landmark and cultural resources and their environmental settings.
  
- Policy CC-5.2     Enhance the visual character of the City by preserving diverse as well as harmonious architectural styles, reflecting various phases of the City’s historical development and the cultural traditions of past and present residents.
  
- Policy CC-5.3     Identify and work to resolve conflicts between the preservation of historic resources and alternative land uses.
  
- Policy CC-5.4     Seek out, catalog and evaluate heritage resources which may be significant.
  
- Policy CC-5.5     Archeological resources should be preserved wherever possible.

The following Land Use and Transportation Element (LUTE) policy and action items address protecting Sunnyvale’s cultural resources.

- Policy LT-1.10     Participate in federal, State, and regional programs and processes in order to protect the natural and human environment in Sunnyvale and the region.
  
- Action LT-1.10F   Continue to condition projects to halt all ground-disturbing activities when unusual amounts of shell or bone, isolated artifacts, or other similar features are discovered. Retain an archaeologist or paleontologist to determine the significance of the discovery. Mitigation of discovered significant cultural resources shall be consistent with Public Resources Code Section 21083.2 to ensure protection of the resource.

#### *3.4.3 Impacts and Mitigation Measures*

##### Standards of Significance

Following Public Resources Code Sections 21083.2 and 21084.1, and Section 15064.5 and CEQA Guidelines Appendix G, cultural resource impacts are considered to be significant if Specific Plan implementation would result in any of the following:



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### 3.4 Cultural and Tribal Cultural Resources

- 1) Cause a substantial adverse change in the significance of a historical resource as defined in Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5, respectively.
- 2) Cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5.
- 3) Disturb any human remains, including those interred outside of formal cemeteries.

In addition, recently updated CEQA Guidelines Appendix G includes tribal cultural resources. The analysis must determine whether the Specific Plan would cause a substantial adverse change in the significance of a tribal cultural resource, defined by Public Resource 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 of cultural value to a California Native American tribe, and that is:

- 1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or
- 2) 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.

#### Project Impacts and Mitigation Measures

##### **SIGNIFICANT CHANGES TO KNOWN HISTORIC RESOURCES (STANDARD OF SIGNIFICANCE 1)**

#### **Impact 3.4.1 Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?**

##### Heritage Structures and Historical Districts

According to the Sunnyvale Heritage Resources Inventory Map (Sunnyvale 2020), no City-designated individual structures are located within the Specific Plan Area. However, a historical district known as the Taaffe-Frances Heritage Neighborhood (a residential district) is located one-block directly north and within 300 feet of the Specific Plan Area. This district contains the largest concentration of pre-World War II housing in Sunnyvale; comprised predominantly of one-story bungalows and period revival styles dating from the 1920s to the 1940s. In addition, although not identified as heritage resources within the City's inventory, there are several buildings that currently meet the minimum age eligibility to be considered historic resources for the purposes of CEQA.

It is the City's policy to ensure site design is compatible with the natural and surrounding built environment (Policy C.C.-3.2) and preserve existing landmark and cultural resources and their



environmental settings (Policy CC-5.1). To this end, Chapter 4 (Land Use and Development Standards) of the Specific Plan includes a policy to ensure buildings greater than 50 years undergo a historic resource evaluation prior to undertaking any modifications or demolitions in order to determine their level of historical significance and to inform the appropriate level of discretionary review and applicability of local historic preservation policies (Specific Plan Policy LU-P28, included as Mitigation Measure CUL-1 of this EIR). To address potential impacts to historic districts within 300 feet of the Specific Plan Area, Mitigation Measure CUL-2 would be required. Mitigation Measure CUL-2 would require preparation of a site-specific Construction Protection Plan (CPP) for projects which propose pile driving activities within 50 feet of designated historic resources located within the Taaffe-Frances Heritage Neighborhood. With implementation of Mitigation Measures CUL-1 and CUL-2, impacts to heritage structures and historical districts would be **less than significant with mitigation incorporated**.

#### Local Landmarks

According to the Sunnyvale Heritage Resources Inventory Map (Sunnyvale 2020), no City-designated local landmarks are located within the Specific Plan Area. **No impact** would occur in this regard.

#### Heritage Trees

According to the Sunnyvale Heritage Resources Inventory Map (Sunnyvale 2020), a parcel located at the southwestern corner of El Camino Real and Wolfe Road includes three coast live oak and one valley oak, which are identified as heritage trees. These resources are located on City-owned open space within the Three Points Neighborhood of the Specific Plan Area at 871 East Fremont Avenue. As discussed in Section 3.3, the City strictly enforces SMC Section 13.16, City Trees, and SMC Section 19.94, Tree Preservation, to prevent the unauthorized removal, irreversible damage, and pruning of large, protected trees (Policy LT-2.4, Action 1). As discussed, the purpose of SMC Chapter 19.94 is to “regulate the protection, installation and removal and long term management of significantly sized trees on private property within the City and City owned golf courses and parks; encourage the proper protection and maintenance of significantly sized trees which are located on such property; establish a review and permit procedure to assure the correct planting, maintenance, protection and removal of significant trees on such property; and establish penalties for violation of its provisions.” Future development occurring within the Specific Plan Area with the potential to impact the four heritage trees at 871 East Fremont Avenue would be subject to approval by the City’s Heritage Preservation Commission. Compliance with existing General Plan policies and SMC Sections 13.16 and 19.94 would ensure impacts to heritage trees are **less than significant**.

#### Mitigation Measures

**CUL-1** Prior to demolition, grading, or building permit approval, any site subject to California Environmental Quality Act (CEQA) review with potentially historic buildings over 50 years in age and not subject to previous identification,



recording on Department of Park and Recreation (DPR) 523 Forms, and National Register of Historic Places, California Register of Historic Resources, and/or City eligibility evaluation (as appropriate) within the last five years, shall be evaluated by a Secretary of the Interior Qualified Cultural Resource Professional specializing in Architectural History. Results of the evaluation shall specify site-specific mitigation requirements.

**CUL-2** To avoid impacts to previously recorded historic resources associated with the Taaffe-Frances Heritage Neighborhood, prior to demolition, grading, or building permit approval, a site-specific Construction Protection Plan (CPP) shall be prepared by a qualified Historic Building Architect for projects which propose pile driving activities within 50 feet of designated historic resources. The CPP shall specify mitigation to avoid or reduce impacts to less than significant.

### Level of Significance

Less than significant with mitigation incorporated.

### ARCHAEOLOGICAL RESOURCES (STANDARD OF SIGNIFICANCE 2)

#### Impact 3.4.2 Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

No archaeological resources were identified as being located within the Specific Plan Area as part of the NWIC records search completed on October 17, 2017. Nevertheless, development activities associated with the Specific Plan could potentially result in adverse effects on previously unidentified archaeological resources.

It is the City's policy to preserve archeological resources wherever possible (Policy CC-5.5) and to condition projects to halt all ground-disturbing activities until a qualified archaeologist determines the significance of the discovery in the event that previously unidentified archaeological resources are discovered (Action LT-1.10f). Pursuant to Action LT-1.10f, the City would require significant discoveries to be mitigated consistent with Public Resources Code Section 21083.2 to ensure protection of the resource. Thus, following conformance with existing City policies and actions in place to ensure protection of archaeological resources, as well as Mitigation Measure CUL-3, which would require all subsequent projects in the project area to include information on improvement plans to protect cultural resources discovered during groundwork, impacts would be **less than significant with mitigation incorporated.**

### Mitigation Measures

**CUL-3** All subsequent projects within the project area shall be required to include information on the improvement plans that if, during the course of grading or construction, cultural resources (i.e., prehistoric or historic sites) are discovered, work will stop in that area and within 100 feet of the find until a qualified archaeologist can [assess] the significance of the find and, if necessary, develop



appropriate treatment measures as part of a treatment plan in consultation with the City and all other appropriate agencies. The treatment plan shall include measures to document and protect the discovered resource. Consistent with CEQA Guidelines Section 15126.4(b)(3), preservation in place will be the preferred method of mitigating impacts to the discovered resource. Pursuant to Government Code Section 6254.10, information on the discovered resource shall be confidential.

Level of Significance

Less than significant.

**HUMAN REMAINS (STANDARD OF SIGNIFICANCE 3)**

**Impact 3.4.3      Would the project disturb any human remains, including those interred outside of formal cemeteries?**

Although there are no known human remains within the Specific Plan Area, future development could result in the discovery of human remains and potential impacts to these resources. State of California Public Resources Health and Safety Code Sections 7050.5 to 7055 describe the general provisions for human remains. Specifically, Health and Safety Code Section 7050.5 describes the requirements if any human remains are accidentally discovered during excavation of a site. As required by State law, the requirements and procedures set forth in Section 5097.98 of the California Public Resources Code would be implemented, including notification of the County Coroner, notification of the NAHC and consultation with the individual identified by the NAHC to be the "most likely descendant (MLD)." The MLD would have 48 hours to make recommendations to landowners for the disposition of any Native American human remains and grave goods found.

If human remains are found during excavation, excavation must stop in the vicinity of the find and any area that is reasonably suspected to overlay adjacent remains until the County Coroner has been called out, and the remains have been investigated and appropriate recommendations have been made for the treatment and disposition of the remains. Following compliance with existing regulations, impacts in this regard would be **less than significant**.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant.

**TRIBAL CULTURAL RESOURCES (STANDARDS OF SIGNIFICANCE 4 AND 5)**

**Impact 3.4.4      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:

- i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

As stated above, the City sent formal notification of the pursuant to AB 52 on December 15, 2017. No tribes requested consultation under AB 52. However, one response was received in response to the project's SB 18 notification from the Honorable Valentín Lopez, Chairman of the Amah Mutsun Tribal Band. Nonetheless, project implementation is not anticipated to impact historic tribal cultural resources as defined in Public Resources Code Section 5020.1(k) or tribal cultural resources to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. Notwithstanding, in the event that unknown cultural resources are found and identified as Native American in origin, the City's policy to preserve archeological resources wherever possible (Policy CC-5.5) and condition projects to halt all ground-disturbing activities until a qualified archaeologist determines the significance of the discovery in the event that previously unidentified archaeological resources are discovered (Action LT-1.10f). Pursuant to Action LT-1.10f, the City would require significant discoveries to be mitigated consistent with Public Resources Code Section 21083.2 to ensure protection of the resource. Further, in the event that Native American human remains are discovered, the requirements and procedures set forth in Section 5097.98 of the California Public Resources Code would be implemented, including notification of the County Coroner, notification of the NAHC and consultation with the individual identified by the NAHC to be the "most likely descendant (MLD)." Thus, compliance with existing City policies and actions and State regulations would reduce impacts related to tribal cultural resources to **less than significant**.

#### Mitigation Measures

No mitigation measures are required.

#### Level of Significance

Less than significant.

### CUMULATIVE IMPACTS

**Impact 3.4.5** Would the project result in cumulative impacts related to cultural or tribal cultural resources?



Section 3.0, Introduction to Environmental Analysis, identifies the related projects and other possible development in the area determined as having the potential to interact with the project to the extent that a significant cumulative effect may occur. Future cumulative projects would be evaluated on a project-by-project basis to determine the extent of potential impacts to site-specific historical, archaeological, and/or tribal cultural resources. Related projects would be required to adhere to State and federal regulations, as well as project-specific mitigation measures.

As discussed under Impacts 3.4.1 through 3.4.4, project-related impacts to historical, archeological, and tribal cultural resources have been determined to be less than significant with implementation of Mitigation Measures CUL-1, CUL-2, CUL-3, and existing regulations and policies. Thus, cumulative impacts to historical, archaeological, and tribal cultural resources would be **less than significant with mitigation incorporated**.

#### Mitigation Measures

Refer to Mitigation Measures CUL-1, CUL-2, and CUL-3.

#### Level of Significance

Less than significant with mitigation incorporated.

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## 3.5 Energy

This section considers and evaluates the potential impacts on energy. The purpose of this section is to evaluate potential short- and long-term term energy consumption impacts resulting from implementation of the proposed Specific Plan, located in the City of Sunnyvale (City).

### 3.5.1 Environmental Setting

#### Energy Conservation as a California Issue of Concern

In 1975, largely in response to the oil crisis of the 1970s, the California State legislature adopted Assembly Bill (AB) 1575, which created the California Energy Commission (CEC). The statutory mission of the CEC is to forecast future energy needs, license thermal power plants of 50 megawatts or larger, develop energy technologies and renewable energy resources, plan for and direct State responses to energy emergencies, and promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code Section 21100(b)(3) to require environmental impact reports (EIRs) to consider the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the California Natural Resources Agency created Appendix F, Energy Conservation, of the State's California Environmental Quality Act Guidelines (CEQA Guidelines). CEQA Guidelines Appendix F is an advisory document that assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy.

In December 2018, the California Natural Resources Agency finalized the updates to the CEQA Guidelines. New CEQA Guidelines Section 15126.2(b) treats "wasteful, inefficient, or unnecessary" energy consumption as a significant environmental impact. As a result, energy thresholds have been incorporated into Appendix G of the CEQA Guidelines; refer to the Thresholds of Significance discussion later in this section.

#### Electricity/Natural Gas Services

Silicon Valley Clean Energy (SVCE) and Pacific Gas & Electric (PG&E) provide electrical service to the City through State-regulated public utility contracts. Over the past 15 years, electricity generation in California has undergone a transition. Historically, California has relied heavily on oil- and gas-fired plants to generate electricity. Spurred by regulatory measures and tax incentives, California's electrical system has become more reliant on renewable energy sources, including cogeneration, wind energy, solar energy, geothermal energy, biomass conversion, transformation plants, and small hydroelectric plants. Unlike petroleum production, generation and transmission of electricity is usually not tied to the location of the fuel source and can travel great distances via the electrical grid. In 2018, 38.9 percent of the power delivered to customers by PG&E came from carbon-free resources (renewable energy sources), which met State's 2020 renewable energy goal (PG&E 2019). In 2017, SVCE, a new community choice aggregation agency formed to provide clean electricity to jurisdictions in Santa Clara County. SVCE provides 100% carbon-free electricity



(via PG&E’s distribution grid) to most Sunnyvale residents and businesses, except those who opt-out to receive electricity service from PG&E instead.

Pacific Gas & Electric (PG&E) also provides natural gas services to the City. Natural gas is a hydrocarbon fuel found in reservoirs beneath the earth’s surface and is composed primarily of methane. It is used for space and water heating, process heating and electricity generation, and as transportation fuel. Use of natural gas to generate electricity is expected to increase in coming years because it is a relatively clean alternative to other fossil fuels like oil and coal. In California and throughout the western United States, many new electrical generation plants that are fired by natural gas are being brought online. Thus, there is great interest in importing liquefied natural gas from other parts of the world. Nearly 45 percent of the natural gas burned in California was used for electricity generation (California Energy Commission 2019). While the supply of natural gas in the United States and production has increased greatly, California produces little, and imports 90 percent of its natural gas from basins located in the southwestern United States, Canada, and the Rocky Mountains (California Public Utilities Commission 2019).

Energy Usage

Energy usage is typically quantified using the British thermal unit (Btu). A Btu is the amount of heat required to raise the temperature of one pound of water by one-degree Fahrenheit. The generating capacity of a unit of electricity is expressed in megawatts (MW). Net generation refers to the gross amount of energy produced by a unit, minus the amount of energy the unit consumes. Generation is typically measured in megawatt-hours (MWh), kilowatt-hours (kWh), or gigawatt-hours (GWh). Total energy usage in California was 7,966.6 trillion BTU in 2018 (the most recent year for which this specific data is available), which equates to an average of 202 million BTU per capita (EIA 2018a; EIA 2018b). Of California’s total energy usage, the breakdown by sector is 39.8 percent transportation, 23.2 percent industrial, 18.9 percent commercial, and 18.1 percent residential (EIA 2018c). Electricity and natural gas in California are generally consumed by stationary users such as residences and commercial and industrial facilities, whereas petroleum consumption is generally accounted for by transportation-related energy use. In 2019, taxable gasoline sales (including aviation gasoline) in California accounted for 15,338,758,756 gallons of gasoline (CDTFA 2020).

The electricity consumption attributable to the entirety of Santa Clara County from 2009 to 2019 is shown in **Table 3.5-1**. As indicated in **Table 3.5-1**, energy consumption in the County has remained relatively constant (on an increasing trend) between 2009 and 2019, with a dip in 2010 and a small spike in 2017.

**Table 3.5-1  
Electricity Consumption in Santa Clara County 2009-2019**

Year	Electricity Consumption (in millions of kilowatt hours)
2009	16,557
2010	16,263

Year	Electricity Consumption (in millions of kilowatt hours)
2011	16,545
2012	16,503
2013	16,572
2014	16,662
2015	16,795
2016	16,815
2017	17,017
2018	16,704
2019	16,664

Source: California Energy Commission, *Electricity Consumption by County*, <http://ecdms.energy.ca.gov/elecbycounty.aspx>, accessed January 8, 2021.

The natural gas consumption in the County from 2009 to 2019 is shown in **Table 3.5-2**. Similar to energy consumption, natural gas consumption in the County remained relatively constant between 2009 and 2019, with no substantial increase or decrease over time.

**Table 3.5-2**  
**Natural Gas Consumption in Santa Clara County 2009-2019**

Year	Natural Gas Consumption (in millions of therms)
2009	462
2010	458
2011	472
2012	455
2013	466
2014	404
2015	412
2016	422
2017	445
2018	440
2019	460

Source: California Energy Commission, *Gas Consumption by County*, <http://ecdms.energy.ca.gov/gasbycounty.aspx>, accessed January 8, 2021.

### Gasoline/Diesel Fuels

Automotive fuel consumption in the County from 2011 to 2020 (with 2021 projections) is shown in **Table 3.5-3**. As shown in **Table 3.5-3**, on-road automotive fuel consumption in the County declined from 2011 to 2012, increased from 2013 to 2016, and has been declining since 2016. Heavy-duty vehicle fuel consumption has steadily risen since 2011.

**Table 3.5-3**  
**Automotive Fuel Consumption in Santa Clara County 2011-2021**

Year	On-Road Automotive Fuel Consumption (Gallons)	Heavy-Duty Vehicle/ Diesel Fuel Consumption (Gallons)
2011	626,167,180	79,995,201
2012	625,406,155	80,665,503
2013	627,990,800	83,697,286
2014	636,888,489	82,770,982
2015	652,776,654	80,587,004
2016	664,673,864	85,170,777
2017	650,547,270	85,212,216
2018	639,148,616	85,466,284
2019	627,245,296	85,504,129
2020	616,801,418	84,994,470
2021 (projected)	606,007,057	85,530,228

Source: California Air Resources Board, EMFAC2017 v1.0.2., <https://www.arb.ca.gov/emfac/2017/>, accessed January 11, 2021.

### 3.5.2 Regulatory Setting

The following is a description of State and local regulations and planning programs related to energy consumption that are relevant to the proposed project.

#### State

##### *California's Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24)*

In 1978, the CEC established the Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6), commonly referred to as "Title 24," California's energy efficiency standards for residential and non-residential buildings, in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and provide energy efficiency standards for residential and non-residential buildings. The 2016 Title 24 standards went into effect on January 1, 2017. In general, Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2016 Title 24 standards are 28 percent more efficient than previous standards for residential development (CEC 2016). The standards offer developers better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses. Further, the 2019 Building Energy Efficiency Standards, which took effect on January 1, 2020, promote photovoltaic systems in newly constructed residential buildings. With rooftop solar electricity generation, homes built under the 2019 standards will use about 53 percent less energy than those under the 2016 standards (CEC 2018). Additionally, under 2019 Title 24 Building Energy Efficiency Standards nonresidential buildings will



use about 30 percent less energy, mainly to lighting upgrades, when compared to 2016 standards (CEC 2018).

### *California Green Building Standards*

The California Green Building Standards Code (CALGreen; California Code of Regulations, Title 24, Part 11) is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development; Title 24 Parts 6 and 11 together comprise the Building Energy Efficiency Standards. CALGreen standards require new residential and commercial buildings to comply with mandatory measures under five topical areas: planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt, which encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code was adopted in 2019 and took effect on January 1, 2020. CALGreen requires new buildings to reduce water consumption by 20 percent, divert 50 percent of construction waste from landfills, and install low pollutant-emitting materials.

### *California Public Utilities Commission Energy Efficiency Strategic Plan*

The California Public Utilities Commission (CPUC) prepared an Energy Efficiency Strategic Plan (Strategic Plan) in September 2008 with the goal of promoting energy efficiency and a reduction in greenhouse gases. In January 2011, a lighting chapter was adopted and added to the Strategic Plan. The Strategic Plan is California's single roadmap to achieving maximum energy savings in the State between 2009 and 2020, and beyond 2020. The Strategic Plan contains the practical strategies and actions to attain significant statewide energy savings, as a result of a year-long collaboration by energy experts, utilities, businesses, consumer groups, and governmental organizations in California, throughout the West, nationally and internationally. The plan includes the following four strategies:

- 1) All new residential construction in California will be zero net energy by 2020.
- 2) All new commercial construction in California will be zero net energy by 2030.
- 3) Heating, ventilation and air condition (HVAC) will be transformed to ensure that its energy performance is optimal for California's climate.
- 4) All eligible low-income customers will be given the opportunity to participate in the low-income energy efficiency program by 2020.

### *California Energy Commission Integrated Energy Policy Report*

In 2002, the California State legislature adopted Senate Bill (SB) 1389, which requires the CEC to develop an Integrated Energy Policy Report (IEPR) every two years. SB 1389 requires the CEC to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices, and use these assessments and



forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the State's economy, and protect public health and safety.

The CEC adopted the 2019 IEPR on February 20, 2020. The 2019 IEPR provides the results of the CEC's assessments of various energy issues facing California and covers a broad range of topics, including implementation of SB 100 (statewide greenhouse gas reduction targets), integrated resource planning, distributed energy resources, transportation electrification, solutions to increase resiliency in the electricity sector, energy efficiency, transportation electrification, barriers faced by disadvantaged communities, demand response, transmission, landscape-scale planning, electricity and natural gas demand forecast, transportation energy demand forecast, renewable gas, updates on Southern California's electricity reliability, natural gas outlook, and climate adaptation and resiliency.

### Local

#### *City of Sunnyvale Climate Action Playbook*

The Climate Action Playbook, adopted August 2019, sets a vision for the City to reduce greenhouse gas emissions by 2050. Specifically, the Playbook identifies how the City will achieve an interim target of a 56 percent reduction below 1990 levels by 2030, exceeding the State's target. Focused efforts are placed on addressing the two largest emissions sources: transportation (54 percent) and energy (37 percent), along with putting in place the policies that will affect infrastructure in the coming decades.

#### *City of Sunnyvale General Plan*

The Land Use and Transportation Element chapter of the General Plan contain the following policies that are relevant to the analysis of energy-related impacts:

#### *Land Use and Transportation*

- Policy LT-1.7      Emphasize efforts to reduce regional vehicle miles traveled by supporting active modes of transportation including walking, biking, and public transit.
  
- Policy LT-2.1      Enhance the public's health and welfare by promoting the city's environmental and economic health through sustainable practices for the design, construction, maintenance, operation, and deconstruction of buildings, including measures in the climate action plan.
  
- Policy LT-2.7      Provide Sunnyvale residents and businesses with opportunities to develop private, renewable energy facilities.
  
- Policy LT-3.1      Use land use planning, including mixed and higher-intensity uses, to support alternatives to the single-occupant automobile such as walking and bicycling and to attract and support high investment transit such as light rail, buses, and commuter rail.



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### 3.5 Energy

- Policy LT-3.7 Provide parking and lane priority to environmentally friendly motorized vehicles (e.g. carpools, low emission, zero emission).
- Policy LT-3.15 Prioritize transportation subsidies and project financing over time to the most environmentally friendly modes and services. Support bicycling through planning, engineering, education, encouragement, and enforcement.
- Policy LT-8.4 Promote compact, mixed-use, and transit-oriented development in appropriate neighborhoods to provide opportunities for walking and biking as an alternative to auto trips.

#### *City of Sunnyvale Reach Code Ordinance*

The CEC approved the City's reach code ordinance that became effective on January 26, 2021. The reach code ordinance requires residential and nonresidential new construction to use electric appliances only, install solar panels, and include electric vehicle charging stations. However, the energy consumption modeling in this section did not consider the reach code ordinance, because at the time of initial preparation of this section, the reach code ordinance has not taken effect yet. Therefore, energy consumption modeled in this section represents conservative analysis.

#### *3.5.3 Impacts and Mitigation Measures*

##### Threshold of Significance

Following Public Resources Code Sections 21083.2 and 21084.1, and Section 15064.5 and CEQA Guidelines Appendix G, energy impacts are considered to be significant if project implementation would result in any of the following:

- 1) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
- 2) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Based on these standards/criteria, the effects of the proposed project have been categorized as either a "less than significant impact" or a "potentially significant impact." If a potentially significant impact cannot be reduced to a less than significant level through the application of goals, policies, standards, or mitigation, it is categorized as a significant and unavoidable impact. The standards used to evaluate the significance of impacts are often qualitative rather than quantitative because appropriate quantitative standards are either not available for many types of impacts or are not applicable for some types of projects.

Appendix F of the CEQA Guidelines is an advisory document that assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. The analysis in Impact 3.5.1 relies upon Appendix F of the CEQA Guidelines, which includes the following criteria to determine whether this threshold of significance is met:



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### 3.5 Energy

- Criterion 1: The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
- Criterion 2: The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- Criterion 3: The effects of the project on peak and base period demands for electricity and other forms of energy.
- Criterion 4: The degree to which the project complies with existing energy standards.
- Criterion 5: The effects of the project on energy resources.
- Criterion 6: The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Quantification of the project's energy usage is presented and addresses Criterion 1. The discussion on construction-related energy use focuses on Criteria 4 and 5. The discussion on operational energy use is divided into transportation energy demand and building energy demand. The transportation energy demand analysis discusses Criteria 2, 4, and 6, and the building energy demand analysis discusses Criteria 2, 3, 4, and 5.

#### Project Impacts and Mitigation Measures

#### **WASTEFUL, INEFFICIENT, OR UNNECESSARY CONSUMPTION OF ENERGY RESOURCES DURING PROJECT CONSTRUCTION OR OPERATION (STANDARD OF SIGNIFICANCE 1)**

**Impact 3.5.1**      **Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

#### Discussion

Electricity, natural gas, and fuel consumption associated with the proposed project has been prepared utilizing the California Emissions Estimator Model Version 2016.3.2 (CalEEMod) and the 2017 California Air Resources Board (CARB) Emission FACTor (EMFAC2017) model. The Specific Plan would accommodate an additional 6,900 residential units and 730,000 square feet of commercial floor area above existing conditions. Therefore, project energy consumption presented in **Table 3.5-4** represents the net increase in land uses above existing conditions. As shown in **Table 3.5-4**, the project's energy usage would constitute an approximate 0.23 percent increase over the County's typical annual electricity consumption, and an approximate 0.21 percent increase over the County's typical annual natural gas consumption. Additionally, the project's operational vehicle fuel consumption would increase the County's consumption by 0.0033 percent. (**CEQA Appendix F - Criterion 1**).

**Table 3.5-4  
Project and Countywide Energy Consumption**

Energy Type	Project Annual Energy Consumption <sup>1</sup>	Santa Clara County Annual Energy Consumption <sup>2</sup>	Percentage Increase Countywide
Electricity Consumption <sup>3</sup>	38,766 MWh	16,664,000 MWh	0.23%
Natural Gas Consumption <sup>3</sup>	943,501 therms	460,000,000 therms	0.21%
Operational Automotive Fuel Consumption <sup>6</sup>	20,600 gallons	616,801,418 gallons	0.0033%

*Notes:*

1. As modeled in CalEEMod version 2016.3.2.

2. The project's electricity and natural gas consumption are compared to the total consumption in Santa Clara County in 2019. The project's automotive fuel consumption is compared with the projected Countywide fuel consumption in 2020. Santa Clara County electricity consumption data source: California Energy Commission, Electricity Consumption by County, <http://www.ecdms.energy.ca.gov/elecbycounty.aspx>, accessed January 8, 2021.

Santa Clara County natural gas consumption data source: California Energy Commission, Gas Consumption by County, <http://www.ecdms.energy.ca.gov/gasbycounty.aspx>, accessed January 8, 2021.

3. The project's electricity and natural gas consumption represents the net increase above existing conditions.

6. Operational fuel consumption is calculated based on CalEEMod results for the proposed project. Trip generation and vehicle miles traveled modeled under proposed project are based on the net increase above existing conditions. Countywide fuel consumption is from the California Air Resources Board's EMFAC2017 model.

Refer to **Appendix D** for assumptions used in this analysis.

### Construction-Related Energy

During construction, the project would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Implementation of the proposed project would not directly result in new development. Therefore, construction-related energy consumption that may occur at any one time is speculative and cannot be accurately determined at this stage of the planning process. Development projects would be subject to environmental review, and specific mitigation measures would be implemented to reduce construction-related energy consumption impacts during construction.

Notwithstanding, some incidental energy conservation would occur during construction through compliance with State requirements that equipment not in use for more than five minutes be turned off. Project construction equipment would also be required to comply with the latest U.S. Environmental Protection Agency and CARB engine emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. In addition, because the cost of fuel and transportation is a significant aspect of construction budgets, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction (**CEQA Appendix F - Criterion 4**).



Significant reductions in energy inputs for construction materials can be achieved by selecting green building materials composed of recycled materials that require less energy to produce than non-recycled materials.<sup>1</sup> The integration of green building materials can help reduce environmental impacts associated with the extraction, transport, processing, fabrication, installation, reuse, recycling, and disposal of these building industry source materials.<sup>2</sup> It is noted that construction fuel use is temporary and would cease upon completion of construction activities. There are no unusual project characteristics that would necessitate the use of construction equipment, building materials, or methods that would be less energy efficient than at comparable construction sites in the region or State. Therefore, fuel energy and construction materials consumed during construction would not represent a significant demand on energy resources (**CEQA Appendix F - Criterion 5**).

Therefore, construction energy use would not be any more inefficient, wasteful, or unnecessary than other similar projects of this nature. A **less than significant impact** would occur in this regard.

### Operational Energy

#### *Transportation Energy Demand*

Pursuant to the Federal Energy Policy and Conservation Act of 1975, the National Highway Traffic and Safety Administration is responsible for establishing additional vehicle standards and for revising existing standards. Compliance with federal fuel economy standards is not determined for each individual vehicle model. Rather, compliance is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the United States. **Table 3.5-4** estimates the annual fuel consumed by vehicles traveling to and from the Specific Plan area. As indicated in **Table 3.5-4**, project operations are estimated to consume a net increase of approximately 20,600 gallons of fuel per year, which would increase Countywide automotive fuel consumption by 0.0033 percent. The project does not propose any unusual features that would result in excessive long-term operational fuel consumption (**CEQA Appendix F – Criterion 2**).

The key drivers of transportation-related fuel consumption are job locations/commuting distance and many personal choices on when and where to drive for various purposes. Those factors are outside of the scope of the design of the proposed project. However, the project would include on-site electric vehicle charging stations in parking lots in compliance with the CALGreen Code and the City's reach code ordinance. This project design feature would encourage and support the use of electric vehicles by residents, workers, and visitors of the proposed project and thus reduce the petroleum fuel consumption. In addition, consistent with General Plan Policies LT-1.7,

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<sup>1</sup> California Department of Resources Recycling and Recovery, Green Building Materials, <https://www.calrecycle.ca.gov/greenbuilding/materials#Material>, accessed January 11, 2021.

<sup>2</sup> Ibid.



LT-3.1, LT-3.15, and LT-8.4, the project would reduce vehicle miles traveled (VMT) through high density mixed-use nature of the project and support active modes of transportation (i.e. walking, biking, and public transit) (**CEQA Appendix F - Criterion 4** and **Criterion 6**).

Therefore, fuel consumption associated with vehicle trips generated by the project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. A **less than significant impact** would occur.

### Building Energy Demand

The CEC developed 2018–2030 forecasts for energy consumption and peak demand in support of the 2017 IEPR for each of the major electricity and natural gas planning areas and the State based on the economic and demographic growth projections. CEC forecasts that the statewide annual average growth rates of energy demand between 2016 and 2030 would be 0.99 percent to 1.59 percent for electricity and 0.25 percent to 0.77 percent for natural gas.<sup>3</sup> As shown in **Table 3.5-4**, operational energy consumption of the project would represent approximately 0.23 percent increase in electricity consumption and 0.21 percent increase in natural gas consumption over the current Countywide usage. Although the project would be fully operational in 2035, the project's electricity increase of 0.23 percent and natural gas increase of 0.21 percent would be significantly lower than the CEC's energy demand forecasts. The commercial component of the project would consume energy during the same time periods as other commercial developments. Additionally, the residential component of the project would consume energy evenly throughout the day. As a result, the project would not result in unique or more intensive peak or base period electricity demand (**CEQA Appendix F - Criterion 2** and **Criterion 3**).

The proposed project would be required to comply with the most current version of the Title 24 Building Energy Efficiency Standards, which provide minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Implementation of the current 2019 Title 24 standards significantly reduces energy usage (30 percent compared to the 2016 standards). The Title 24 Building Energy Efficiency Standards are updated every three years and become more stringent between each update; therefore, complying with the latest 2019 Title 24 standards would make the proposed project more energy efficient than existing buildings built under the earlier versions of the Title 24 standards. In addition, although not reflected in the energy consumption modeling, the project would comply with the City's reach code ordinance, which requires new construction to only use electric appliances. Compliance with this requirement would increase the project's energy efficiency. Compliance with 2019 Title 24 standards would also ensure the project would be consistent with General Plan Policies LT-2.1, LT-2.7, and LT-3.7 by incorporating sustainable building design features (**CEQA Appendix F - Criterion 4**).

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<sup>3</sup> California Energy Commission, *California Energy Demand 2018-2030 Revised Forecast*, February 2018. Annual average growth rates of electricity demand and natural gas per capita demand are shown in Table 1 and Table 3, respectively.



Furthermore, the electricity provider, PG&E, is subject to California's Renewables Portfolio Standard (RPS). The RPS requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 60 percent of total procurement by 2030 and 100 percent of total procurement by 2045. In addition, in compliance with the City's reach code ordinance, the project would install solar panels and generate renewable energy on-site. Renewable energy is generally defined as energy that comes from resources which are naturally replenished within a human timescale such as sunlight, wind, tides, waves, and geothermal heat. The increase in reliance of such energy resources further ensures that new development projects would not result in the waste of the finite energy resources (**CEQA Appendix F - Criterion 5**).

Therefore, the project would not cause wasteful, inefficient, and unnecessary consumption of building energy during project operation, or preempt future energy development or future energy conservation. A **less than significant impact** would occur.

#### Mitigation Measures

None required.

#### Level of Significance

Less than Significant.

### CONFLICT WITH OR OBSTRUCT A STATE OR LOCAL PLAN FOR RENEWABLE ENERGY OR ENERGY EFFICIENCY (STANDARD OF SIGNIFICANCE 2)

**Impact 3.5.2** Would the project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

#### Discussion

The project would comply with the applicable goals identified in the City's Climate Action Playbook, as detailed in Section 3.7, *Greenhouse Gases*, **Table 3.7-6**, of this EIR. The Climate Action Playbook contains energy efficient goals and policies that would help implement energy efficient measures and would subsequently reduce energy consumption within the City. Compliance with Title 24 and CALGreen standards and the City's reach code ordinance would ensure the project incorporates energy efficient windows, insulation, lighting, ventilation systems, as well as water efficient fixtures and electric vehicles charging infrastructure, which is consistent with the goals and policies of the General Plan. Additionally, per the RPS, the project would utilize electricity provided by PG&E that would achieve 60 percent renewable energy by 2030 and 100 percent renewable energy by 2045. Therefore, the proposed project would result in **less than significant** impacts associated with renewable energy or energy efficiency plans.

#### Mitigation Measures

None required.



### Level of Significance

Less than significant.

#### CUMULATIVE IMPACTS

##### Impact 3.5.4 Would future development under the project contribute to the cumulative disturbance of energy consumption?

The cumulative setting associated with the project includes proposed, planned, reasonably foreseeable, and approved projects in the Specific Plan area.

The geographic context for cumulative energy consumption impacts for electricity and natural gas is Countywide and relative to the PG&E service area. While the geographic context for the transportation-related energy use is more difficult to define, it is meaningful to consider the project in the context of Countywide consumption. Future growth within the County is anticipated to increase the demand for electricity, natural gas, and transportation energy, as well as the need for energy infrastructure. As shown above, the project would nominally increase the County's electricity, natural gas, and operational fuel consumption by 0.23, 0.21, and 0.0033 percent, respectively; refer to **Table 3.5-4**. Additionally, per the RPS, the project and cumulative projects would utilize electricity provided by PG&E that would be comprised of 60 percent renewable energy by 2030 and 100 percent renewable energy by 2045. Furthermore, the project and other cumulative projects in the site vicinity would be subject to Title 24 and CALGreen standards, as well as goals and policies of the Climate Action Playbook and General Plan. Thus, the project and related projects would comply with energy conservation plans and efficiency standards required to ensure that energy is used efficiently. As such, implementation of the project and other cumulative projects would not result in wasteful, inefficient, or unnecessary consumption of energy resources.

### Mitigation Measures

None required.

### Level of Significance

Less than significant.

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## 3.6 Geology and Soils

This section describes the geology, seismicity, and soil conditions as they relate to the project. The section also discusses regional seismic hazards, which includes geological provinces on a larger scale. Potential geologic and seismic hazards, such as ground shaking and liquefaction, and soil-related hazards, such as expansive soils, are analyzed.

### 3.6.1 Existing Setting

#### Regional Geologic Setting

The San Francisco Bay region is located along the boundary between the Pacific and North American plates, two large crustal plates that are separated by the north–northwest-trending San Andreas fault. The geomorphology of the region includes parts of three prominent, northwest-trending geologic/geomorphic features, which are, from west to east, the Santa Cruz Mountains, the Santa Clara Valley, and the Diablo Range.

The Specific Plan Area is located in the City of Sunnyvale, in the Santa Clara Valley. The Santa Clara Valley forms part of an elongated structural block (the San Francisco Bay block) in the central Coast Ranges that contains San Francisco Bay and its surrounding alluvial margins. This structural block is bounded by the San Andreas fault to the southwest and by the Hayward-Calaveras Fault Zone to the northeast.

#### Local Geology and Topography

The Specific Plan Area is located on the alluvial plain of the Santa Clara Valley, in the Coast Ranges geomorphic province. The shallow subsurface soils consist of layered, fine-grained silt and clay soils mixed with coarser sands and gravels, described as alluvial fan deposits. The Specific Plan Area is at a surface elevation of approximately 130 feet above mean sea level and is essentially flat, with northeast slopes of 5 to 15 percent toward San Francisco Bay (USDA-NRCS 2016).

#### Faults and Seismicity

Sunnyvale is located between two major earthquake faults: the San Andreas and the Hayward. Sunnyvale has no geographically defined borders, except for the small portion of the City that touches the southern tip of San Francisco Bay.

Earthquakes can cause strong ground shaking that may damage property and infrastructure. The strength of an earthquake is generally expressed in two ways: magnitude and intensity. Magnitude is a measure that depends on the seismic energy radiated by the earthquake as recorded on seismographs. Intensity is the measure of earthquake effects (shaking felt, damage, etc.).

The most commonly used scale to measure earthquake intensities (ground shaking and damage) is the Modified Mercalli Intensity (MMI) Scale, which measures the intensity of an earthquake's effects in a given locality and is based on observations of earthquake effects at specific places. On the MMI Scale, values range from I to XII (see **Table 3.6-1**). While an earthquake has only one

magnitude, it can have various intensities, which decreases with distance from the epicenter and varies by underlying soil conditions (CGS 2002).

**Table 3.6-1** describes the effects of ground shaking intensities and lists a general range of moment magnitudes that are often associated with those intensities.

**Table 3.6-1**  
**Effects of Richter Magnitude and Modified Mercalli Intensity**

<b>Mw</b>	<b>Modified Mercalli Scale</b>	<b>Effects of Intensity</b>
1.0–3.0	I	I. Not felt except by a very few under especially favorable conditions.
3.0–3.9	II–III	II. Felt only by a few persons at rest, especially on upper floors of buildings. Delicately suspended objects may swing. III. Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
4.0–4.9	IV–V	IV. Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rock noticeably. V. Felt by nearly everyone, many awakened. Some dishes, windows, etc., broken; a few instances of cracked plaster; unstable objects overturned. Disturbances of trees, poles, and other tall objects sometimes noticed. Pendulum clocks may stop.
5.0–5.9	VI–VII	VI. Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight. VII. Everybody runs outdoors. Damage negligible in building of good design and construction; slight to moderate in well-built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motor cars.

Table 3.6-1, continued

Mw	Modified Mercalli Scale	Effects of Intensity
6.0–6.9	VIII–IX	<p>VIII. Damage slight in specially designed structures; considerable in ordinary substantial buildings, with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Persons driving motor cars disturbed.</p> <p>IX. Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken.</p>
7.0 and Greater	X or Greater	<p>X. Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations; ground badly cracked. Rails bent. Landslides considerable from riverbanks and steep slopes. Shifted sand and mud. Water splashed (slopped) over banks.</p> <p>XI. Few, if any, (masonry) structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipelines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.</p> <p>XII. Damage total. Practically all works of construction are damaged greatly or destroyed. Waves seen on ground surface. Lines of sight and level are distorted. Objects are thrown upward into the air.</p>

Source: CGS 2002

Note: Mw = moment magnitude, based on displacement at the fault.

Faults are classified as “active” and “potentially active.” An active fault is one that has had surface displacement within Holocene time (about the last 11,000 years), while a potentially active fault is one that has been active during Quaternary time (last 1.6 million years). These definitions are used in delineating Special Studies Zones as mandated by the Alquist-Priolo Earthquake Fault Zoning Act (1972).

While the Specific Plan Area is not located in a designated Alquist-Priolo Study Zone and contains no active fault traces, it is situated in the San Francisco Bay region, which is the most seismically active zone in the United States (Cal OES 2015). Three active faults and three potentially active faults are located in seismically significant proximity to the planning area—the Stanford fault (approximately 1 mile southwest), the Cascade fault (1.5 miles southwest), the San Jose fault (2.5 miles northeast), the Monte Vista–Shannon fault (4.3 miles west), the San Andreas fault (7.5 miles



west), and the Hayward fault (11.7 miles east) (CGS 2010). The US Geological Survey (USGS) predicts there is a 63 percent chance that one of these faults will produce an earthquake of magnitude 6.7 or higher by the year 2037 (Sunnyvale 2011).

### *Ground Shaking*

Ground shaking is the most widespread effect of an earthquake. The sudden release of energy in an earthquake causes waves to travel through the earth. These waves not only shake structures to the breaking point but can trigger secondary effects such as landslides or other types of ground failure. Strong ground shaking is expected to occur within the Specific Plan Area during moderate to severe earthquakes (Sunnyvale 2011).

### Soils

Little native soil is exposed at the surface in Sunnyvale. Nearly all lands in the City are developed; approximately 0.5 percent remain vacant. Some small pockets of remaining orchards are present; however, the City is almost entirely built out, with very few vacant parcels of land.

### *Erosion*

Soil erosion is a process whereby soil materials are worn away and transported to another area by either wind or water. Rates of erosion can vary depending on the soil material and structure, placement, and human activity. Soil with high amounts of silt can be easily eroded, while sandy soils are less susceptible to erosion. Erosion is most prevalent on sloped areas with exposed soil, especially where unnatural slopes are created by cut-and-fill activities. Typically, soil erosion potential is reduced once the soil is graded and covered with concrete, structures, or asphalt. The Specific Plan Area is highly developed and is generally covered with impervious surfaces; therefore, erosion potential is low.

### *Settlement*

Surface settlement can occur due to immediate settlement of coarse-grained soils or consolidation of fine-grained soils under increased loading. Immediate settlement occurs when a load from a structure or placement of new fill material is applied, causing distortion in the underlying materials. This settlement occurs relatively quickly and is typically substantially complete within several hours or days after placement of the final load. Consolidation settlement occurs in saturated or near-saturated fine-grained (clay) soil due to volume change caused by load-induced squeezing of water from the pore spaces. Consolidation occurs over a relatively long period of time (often years or even decades) and is followed by secondary compression, which is a continued change in void ratio (the volume of voids, i.e., air or fluid, compared to volume of solids) under the continued application of the load from the pore water to the soil grains. Total settlements can vary over an area, referred to as differential settlement, because of variations in loading, soil characteristics, and thickness of compressible layers. Lands are generally susceptible to differential settlement if underlain by compressible sediments, such as poorly engineered artificial fill or young unconsolidated sediments. Sunnyvale is underlain by young alluvial sediments that can be susceptible to settlement.

### *Subsidence*

Land subsidence results in a slow-to-rapid downward movement of the ground surface as a result of the vertical displacement of the ground surface, usually resulting from groundwater withdrawal. Periodic surveys of land elevation have been conducted in Santa Clara County since 1934. The lowest historical water levels were generally observed in the 1960s and 1970s. Since then, groundwater levels have recovered, primarily due to the Santa Clara Valley Water District's (SCVWD) managed recharge and in-lieu recharge programs. The SCVWD measures water levels at ten subsidence index wells on a regular basis (daily to quarterly) to ensure they remain above established thresholds. Measured groundwater levels were consistently above subsidence thresholds from 2003 to 2013 at all index wells. Although human-caused subsidence has been minimal since 1967, a certain amount of subsidence continues to occur naturally because of regional tectonic movements, peat decay, and a 3-inch rise in the sea level during the last 50 years (Sunnyvale 2011).

### *Expansive Soils*

Expansive soils are soils that tend to shrink or swell depending on their moisture content. As expansive soils get wet, the clay minerals absorb water molecules and expand; conversely, as they dry, they shrink. When structures are located on expansive soils, foundations have the tendency to rise during the wet season and shrink during the dry season. This movement can create new stresses on various sections of the foundation and connected utilities and can lead to structural failure and damage to infrastructure. Cracked foundations, floors, and basement walls are typical types of damage created by expansive soils. Damage to the upper floors of the building can occur when differential movement of the structure is significant. Surficial soils in Sunnyvale are largely composed of expansive clays. However, locally expansive soils may occur wherever clayey soils exist (Sunnyvale 2011).

### *Liquefaction*

Liquefaction occurs when loose sand and silt that is saturated with water behaves like a liquid when shaken by an earthquake. The soil can lose its ability to support structures, flow down even very gentle slopes, and erupt to the ground surface to form sand boils. Many of these phenomena are accompanied by settlement of the ground surface, usually in uneven patterns, that can damage buildings, roads, and pipelines. These effects usually occur in soft, fine-grained, water-saturated alluvium, as generally found in the Santa Clara Valley. The Specific Plan Area is not designated as a liquefaction hazard area (Sunnyvale 2006; Cal OES 2015).

### *Landslides*

The Specific Plan Area is not identified as being located within a landslide hazard zone (ABAG 2016).



### Known Paleontological Resources In The Specific Plan Area

The Specific Plan Area spans Holocene-age alluvium and older Pleistocene-age (2.6 million to 11,700 years ago) alluvium (DOC 2018). The University of California Museum of Paleontology (UCMP) collections database contains no records for Holocene-age fossils and 26 records for Pleistocene-age vertebrate fossils in Santa Clara County (UCMP 2018). The specific locations are not identified, but the specimens include *Equus*, *Paramylodon harlani*, *Capromeryx*, *Camelops*, and bison.

Known fossils from the Holocene in the greater Bay Area are sparse and represent common taxa. The Holocene-age sediments have low potential to yield fossil resources or to contain significant nonrenewable paleontological resources. However, remains of a Rancholabrean Columbian mammoth (*Mammuthus columbi*) were found along the Guadalupe River in San Jose in strata identified as Holocene on published geologic maps. Either the mammoth remains were reworked from older deposits or some strata identified as Holocene in the Santa Clara Valley are actually of Pleistocene age. In either case, Holocene materials in the valley may have some level of sensitivity for paleontological resources. The younger Holocene-age deposits may also overlie older Pleistocene sediments, depending on location. These older sediments, often found at depths of greater than 10 feet below the ground surface, have yielded the fossil remains of plants and extinct terrestrial Pleistocene vertebrates. Because of their vertebrate content, Pleistocene alluvial strata are considered highly sensitive for paleontological resources (Sunnyvale 2017).

While there are no known paleontological resources in the Specific Plan Area, there are known paleontological resources located within Santa Clara County. The Specific Plan Area is therefore considered to be sensitive due to the Holocene- and Pleistocene-age alluvium located throughout.

#### *3.6.2 Regulatory Setting*

##### Federal

##### *Earthquake Hazards Reduction Act*

Congress passed the Earthquake Hazards Reduction Act in 1977 to reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards reduction program. To accomplish this goal, the act established the National Earthquake Hazards Reduction Program. This program was substantially amended in November 1990 by the National Earthquake Hazards Reduction Program Act, which refined the description of agency responsibilities, program goals, and objectives.

##### *Soil and Water Resources Conservation Act*

The purpose of the Soil and Water Resources Conservation Act of 1977 is to protect or restore the functions of the soil on a permanent sustainable basis. Protection and restoration activities include prevention of harmful soil changes, rehabilitation of the soil of contaminated sites and of water



contaminated by such sites, and precautions against negative soil impacts. If impacts are made on the soil, disruptions of its natural functions and of its function as an archive of natural and cultural history should be avoided, as far as practicable. In addition, the requirements of the Federal Water Pollution Control Act (also referred to as the Clean Water Act [CWA]) through the National Pollution Discharge Elimination System [NPDES] permit) provide guidance for protection of geologic and soil resources.

## State

### *Alquist-Priolo Earthquake Fault Zoning Act*

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. This State law was a direct result of the 1971 San Fernando Earthquake, which was associated with extensive surface fault ruptures that damaged numerous homes, commercial buildings, and other structures. The Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards.

The Act requires the State Geologist to establish regulatory zones, known as "Earthquake Fault Zones," around the surface traces of active faults and to issue appropriate maps. Local agencies must regulate most development projects within these zones. Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed buildings would not be constructed across active faults. An evaluation and written report of a specific site must be prepared by a licensed geologist. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (typically 50 feet setbacks are required).

Effective June 1, 1998, the Natural Hazards Disclosure Act requires that sellers of real property and their agents provide prospective buyers with a "Natural Hazard Disclosure Statement" when the property being sold lies within one or more State-mapped hazard areas, including Earthquake Fault Zones. The Specific Plan Area is not affected by a State-designated Alquist-Priolo Earthquake Fault Zone.

### *Seismic Hazards Mapping Act*

The Seismic Hazards Mapping Act (SHMA) of 1990 provides a statewide seismic hazard mapping and technical advisory program to assist cities and counties in fulfilling their responsibilities for protecting the public health and safety from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and other seismic hazards caused by earthquakes. Mapping and other information generated pursuant to the SHMA is to be made available to local governments for planning and development purposes. The State requires: (1) local governments to incorporate site-specific geotechnical hazard investigations and associated hazard mitigation, as part of the local construction permit approval process; and (2) the agent for a property seller



or the seller if acting without an agent, must disclose to any prospective buyer if the property is located within a Seismic Hazard Zone. The State Geologist is responsible for compiling seismic hazard zone maps. The SHMA specifies that the lead agency of a project may withhold development permits until geologic or soils investigations are conducted for specific sites and mitigation measures are incorporated into plans to reduce hazards associated with seismicity and unstable soils.

#### *California Building Code*

The State of California establishes minimum standards for building design and construction through the California Building Code (CBC) (California Code of Regulations, Title 24). The CBC is based on the International Building Code, which is used widely throughout the United States (generally adopted on a State-by-State or district-by-district basis) and has been modified for conditions in California. State regulations and engineering standards related to geology, soils, and seismic activity in the Uniform Building Code are reflected in the CBC requirements.

The CBC contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition. It also regulates grading activities, including drainage and erosion control. The 2019 CBC was published July 1, 2019, with an effective date of January 1, 2020.

#### Local

#### *Sunnyvale Municipal Code*

The City of Sunnyvale adopted the CBC as its building code in Section 16.16.020 of the Sunnyvale Municipal Code (SMC). In addition, the City's grading standards (SMC 18.12.110) specify that when grading will create a nuisance or hazard to other properties, public way, or public facilities due to erosion from storm runoff or rainfall, no grading shall commence or continue without specific consent in writing from the Director of Public Works or the Director of Community Development. The grading standards also regulate gradients for cut-and-fill slopes.

In addition, SMC 12.60.230 requires all construction sites to implement effective erosion control, run-on and runoff control, sediment control, active treatment systems (as appropriate), good site management, and non-stormwater management through all phases of construction (including, but not limited to, site grading, building, and finishing of lots) until the site is fully stabilized by landscaping or through the installation of permanent erosion control measures.

Finally, SMC 18.20.100 requires preparation of a preliminary soil report for review by the City Engineer prior to filing of the final tentative tract map or parcel map. If the preliminary soils report indicates the presence of critically expansive soils or other soil problems which, if not corrected, would lead to structural defects, SMC 18.20.100 requires preparation of a soil investigation of each lot in the subdivision to be prepared and submitted to the Director of Community Development by the civil engineer which includes recommended corrective actions to prevent structural damage to each building proposed to be constructed on the expansive or other problem soil. The



approved recommended action would be incorporated in the construction of the building and made a condition of the issuance of a building permit.

#### *City of Sunnyvale General Plan*

The City has taken steps to reduce the risk of seismic hazards. To improve the seismic safety of buildings in less stable soil areas, geotechnical reports are required for all developments in the City of Sunnyvale (Sunnyvale 2011). New building code requirements and the City's continuing modernization have greatly reduced the number of structures most vulnerable to seismic events. The City actively participates in the California Seismic Hazard Zonation Program (DOC 2016). The City has identified the following policies related to geology and soils.

#### *Safety Element*

Policy SN-1.1 Evaluate and consider existing and potential hazards in developing land use policies. Make land use decisions based on the awareness of the hazards and potential hazards for the specific parcel of land.

Policy SN-2.1 Construct or maintain City facilities utilized for emergency response to essential service buildings so that they remain operable after a major seismic event.

#### *Environmental Management*

Policy EM-8.5 Prevent accelerated soil erosion. Continue implementation of construction site inspection and control program to prevent discharges of sediment from erosion and discharges of other pollutants from new and redevelopment projects.

Additionally, the following Land Use and Transportation Element (LUTE) policy addresses protection of Sunnyvale's paleontological resources.

#### *Land Use and Transportation*

Policy LT-1.10 Participate in federal, State, and regional programs and processes in order to protect the natural and human environment in Sunnyvale and the region.

Action LT-1.10f Continue to condition projects to halt all ground-disturbing activities when unusual amounts of shell or bone, isolated artifacts, or other similar features are discovered. Retain an archaeologist or paleontologist to determine the significance of the discovery. Mitigation of discovered significant cultural resources shall be consistent with Public Resources Code Section 21083.2 to ensure protection of the resource.

#### *Hazard Mitigation Plans*

In March 2005, the Association of Bay Area Governments (ABAG) adopted a Multi-Jurisdictional Local Hazard Mitigation Plan for the San Francisco Bay Area. Participating local county and city governments in the Bay Area prepare an annex to this plan to explain how the plan specifically applies to that jurisdiction. The City of Sunnyvale has established a Local Hazard Mitigation Plan



as an annex to ABAG's regional plan (refer to Section 3.8, Hazards and Hazardous Materials, for further discussion of these plans).

### *3.6.3 Impacts and Mitigation Measures*

#### Standards of Significance

This analysis evaluates potential impacts relative to geology and soils based on the standards identified in California Environmental Quality Act (CEQA) Guidelines Appendix G. The Specific Plan would have a significant impact if implementation of the project would:

- 1) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence or other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42. (Refer to Section 4.0, Effects Found Not To Be Significant)
  - ii) Strong seismic ground shaking.
  - iii) Seismic-related ground failure, including liquefaction. (Refer to Section 4.0)
  - iv) Landslides. (Refer to Section 4.0)
- 2) Result in substantial soil erosion or the loss of topsoil.
- 3) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.
- 4) Be located on expansive soil, as defined in **Table 18-1-B** of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.
- 5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. (Refer to Section 4.0)
- 6) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature.

## Project Impacts And Mitigation Measures

### *SEISMIC HAZARDS (STANDARD OF SIGNIFICANCE 1)*

#### **Impact 3.6.1 Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?**

Development associated with the Specific Plan could expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. As discussed in Section 3.6.1, three active faults and three potentially active faults are located in seismically significant proximity to the planning area—the Stanford fault (approximately 1 mile southwest), the Cascade fault (1.5 miles southwest), the San Jose fault (2.5 miles northeast), the Monte Vista–Shannon fault (4.3 miles west), the San Andreas fault (7.5 miles west), and the Hayward fault (11.7 miles east) (CGS 2010). The US Geological Survey (USGS) predicts there is a 63 percent chance that one of these faults will produce an earthquake of magnitude 6.7 or higher by the year 2037 (Sunnyvale 2011). Thus, strong ground shaking is expected to occur within the Specific Plan Area.

Future development associated with the Specific Plan could expose persons or structures to the effects of strong seismic ground shaking. The intensity of ground shaking and the degree of impact would depend upon the magnitude of the earthquake, distance to the epicenter, and the geology of the area between the epicenter to the Specific Plan Area. Additionally, the soil and geologic structure underlying the development site would influence the amount of damage that the site may experience. Impacts concerning strong seismic ground shaking would be addressed by compliance with the seismic design requirements identified in the 2019 CBC. Pursuant to the 2019 CBC and SMC Section 16.16.020, structures built for human occupancy must be designed to meet or exceed the 2019 CBC standards for earthquake resistance. The 2019 CBC includes earthquake safety standards based on a variety of factors including occupancy type, types of soils and rocks on-site, and strength of probable ground motion at the project site. To further improve the seismic safety of buildings in less stable soil areas, geotechnical reports are required for all developments in the City of Sunnyvale (Sunnyvale 2011). Compliance with the 2019 CBC, as adopted by reference in SMC Section 16.16.020, and preparation of a site-specific geotechnical report would reduce impacts related to strong seismic ground shaking to **less than significant**.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

### *EROSION AND LOSS OF TOPSOIL (STANDARD OF SIGNIFICANCE 2)*

#### **Impact 3.6.2 Would the project result in substantial soil erosion or the loss of topsoil?**



### *Construction*

Soil erosion typically occurs within unconsolidated alluvium and surficial soils in sloping topographies. Construction activities associated with future development would include clearing, excavation, and grading, which would displace soils and temporarily increase the potential for soils to be subject to wind and water erosion.

Short-term construction activities within the Specific Plan Area could increase soil exposure and result in limited soil erosion, depending on the extent of clearing, grading, or excavation and the length of time that disturbed soils are left exposed. However, construction activities would be required to comply with SMC Sections 12.60.230 and 18.12.110, which would ensure implementation of appropriate measures during soil-disturbing activities to reduce erosion. In compliance with the National Pollutant Discharge Elimination System (NPDES) program, individual projects involving one or more acres of site disturbance would be required to prepare and implement a stormwater pollution prevention plan (SWPPP) and associated best management practices (BMPs) in compliance with the Construction General Permit during grading and construction. Potential BMPs could include installing vegetated swales and sediment barriers; stabilizing soils with hydroseeding; regular dust control; implementing desilting basins and storm drain inlet protectors; and providing public education/outreach materials. Adherence to the BMPs in the SWPPP would reduce, prevent, or minimize soil erosion from grading and construction activities.

Following compliance with the established regulatory framework (i.e., SMC Sections 12.60.230 and 18.12.110 and NPDES requirements), construction of the Specific Plan would result in **less than significant** impacts involving soil erosion and loss of topsoil.

### *Operations*

As discussed in Section 3.9, Hydrology and Water Quality, the Specific Plan Area is largely built out in terms of available land development, and the plan itself would not be expected to significantly increase impervious surface areas and thus result in soil erosion or the loss of topsoil. Nonetheless, each future development within the Specific Plan Area would be subject to the regulatory requirements designed to minimize potential erosion and flooding that may result during construction and operational conditions. Following compliance with NPDES, SMC, and Stormwater Quality BMP Guidance Manual requirements, the project's operational impacts related to erosion or loss of topsoil would be **less than significant**.

### *Mitigation Measures*

None required.

### *Level of Significance*

Less than significant.

***UNSTABLE OR EXPANSIVE SOILS (STANDARDS OF SIGNIFICANCE 3 AND 4)***

**Impact 3.6.3** 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?

**Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?**

Refer to Section 4.0 for a discussion concerning liquefaction and landslides.

Future projects occurring within the Specific Plan Area could be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in subsidence, liquefaction, or collapse. In addition, locally expansive soils may occur wherever clayey soils exist (Sunnyvale 2011). However, numerous controls would be implemented on future development projects through the City's development review process. In accordance with SMC Chapter 18.20.100, the City requires preparation of a preliminary soil report for review by the City Engineer prior to filing of the final tentative tract map or parcel map. These reports are used to identify site-specific conditions and to develop appropriate engineering design and construction recommendations for infrastructure improvements and commercial and residential development projects. Geotechnical reports generally contain a summary of subsurface exploration data, including a subsurface soil profile, exploration logs, laboratory or on-site test results, and groundwater information. The reports also interpret and analyze the subsurface data, recommend specific engineering design elements, discuss conditions for the solution of anticipated geotechnical problems, and recommend geotechnical special provisions. The studies would, as appropriate, recommend mitigation techniques for any site-specific subsidence hazards for future development within the Specific Plan Area.

The CBC and other related construction standards apply seismic requirements and address certain grading activities. The CBC includes common engineering practices requiring special design and construction methods that reduce the potential for impacts related to expansive soils. Compliance of future development projects with applicable CBC regulations would ensure the adequate design and construction of building foundations to resist soil movement.

Compliance with the 2019 CBC, as adopted by reference in SMC Section 16.16.020, and SMC Chapter 18.20.100 would reduce impacts related to unstable geologic/soils units to **less than significant**.

### Mitigation Measures

None required.



### Level of Significance

Less than significant.

#### *PALEONTOLOGICAL RESOURCES (STANDARD OF SIGNIFICANCE 6)*

#### **Impact 3.6.4 Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

As indicated above, the Specific Plan Area is considered sensitive for paleontological resources (Sunnyvale 2017). Past projects throughout the region have encountered fossilized Rancholabrean-age remains, including mammoth. Future development may therefore have the potential to inadvertently destroy or remove such resources through grading, excavation, and/or construction activities. Similarly, construction could affect undiscovered paleontological resources that may be associated with the paleontologically sensitive Pleistocene-age alluvium.

In accordance with General Plan Action LT-1.10f, the City would continue to condition projects to halt all ground-disturbing activities when unusual amounts of shell or bone, isolated artifacts, or other similar features are discovered. If paleontological resources are identified during site-specific ground disturbance, General Plan Action LT-1.10f would require retention of a paleontologist to determine the significance of the discovery and recommend a course of action. Implementation of General Plan Action LT-1.10f would reduce impacts to paleontological resources to **less than significant with mitigation incorporated**.

### Mitigation Measures

**GEO-1** All subsequent projects within the project area shall be required to include information on the improvement plans that if, during the course of grading or construction fossils are discovered, work shall be halted immediately within 50 feet of the discovery, the Sunnyvale Community Development Department shall be notified, and the significance of the find and recommended actions must be determined by a qualified paleontologist. In addition, prior to the commencement of project site preparation, all construction personnel shall be informed of the potential to discover fossils and the procedures to follow.

### Level of Significance

Less than significant with mitigation incorporated.

#### *CUMULATIVE IMPACTS*

#### **Impact 3.6.5 Would the project result in cumulative geology and soils impacts?**

The cumulative projects identified in Section 3.0, Introduction to Environmental Analysis, would likely have similar regional geologic setting and seismicity as the proposed project, however, the local geologic setting, surficial geology, and subsurface soil conditions would vary site to site. Additionally, impacts related to paleontological resources would be specific to each site. Cumulative projects would be required to comply with existing federal, State, and local regulations



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### 3.6 Geology and Soils

and project-specific mitigation measures related to geologic hazards and paleontological resources on a project-by-project basis.

As discussed in Impact 3.6.1 through 3.6.4, geologic and seismic hazards associated with the proposed project would be reduced to less than significant levels following conformance with the established regulatory framework (i.e., CBC, SMC, NPDES requirements). Conformance with General Plan Action LT-1.10f would ensure project impacts related to paleontological resources are reduced to less than significant levels. As such, the proposed project would not result in cumulatively considerable impacts related to geology, soils, and paleontological resources. Impacts would be **less than significant** in this regard.

#### Mitigation Measures

No mitigation measures are required.

#### Level of Significance

Less than significant.



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## 3.7 Greenhouse Gases

This section provides a discussion of the project's effect on greenhouse gas (GHG) emissions and the associated effects of climate change. The reader is referred to Section 3.2, Air Quality, for a discussion of project impacts associated with air quality. Refer also to **Appendix B, Air Quality/Greenhouse Gas Emissions/Energy Data** for assumptions used in this analysis.

### 3.7.1 Existing Setting

Since the early 1990s, scientific consensus holds that the world's population is releasing GHGs faster than the earth's natural systems can absorb them. These gases are released as byproducts of fossil fuel combustion, waste disposal, energy use, land use changes, and other human activities. This release of gases, such as carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O), creates a blanket around the earth that allows light to pass through but traps heat at the surface, preventing its escape into space. While this is a naturally occurring process known as the greenhouse effect, human activities have accelerated the generation of GHGs beyond natural levels. The overabundance of GHGs in the atmosphere has led to a warming of the earth and has the potential to severely impact the earth's climate system.

While often used interchangeably, there is a difference between the terms *climate change* and *global warming*. According to the National Academy of Sciences, climate change refers to any significant, measurable change of climate lasting for an extended period of time that can be caused by both natural factors and human activities. Global warming, on the other hand, is an average increase in the temperature of the atmosphere caused by increased GHG emissions. Use of the term *climate change* is becoming more prevalent because it encompasses all changes to the climate, not just temperature.

To fully understand global climate change, it is important to recognize the naturally occurring greenhouse effect and to define the GHGs that contribute to this phenomenon. Various gases in the earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space and a portion of the radiation is absorbed by the earth's surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O).

**Table 3.7-1** provides descriptions of the primary GHGs attributed to global climate change, including a description of their physical properties, primary sources, and contribution to the greenhouse effect.

**Table 3.7-1  
Greenhouse Gases**

Greenhouse Gas	Description
Carbon Dioxide (CO <sub>2</sub> )	Carbon dioxide is a colorless, odorless gas. CO <sub>2</sub> is emitted in a number of ways, both naturally and through human activities. The largest source of CO <sub>2</sub> emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. Several specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO <sub>2</sub> emissions. The atmospheric lifetime of CO <sub>2</sub> is variable because it is so readily exchanged in the atmosphere
Methane (CH <sub>4</sub> )	Methane is a colorless, odorless gas and is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. Methane is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (intestinal fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of CH <sub>4</sub> to the atmosphere. Natural sources of CH <sub>4</sub> include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. The atmospheric lifetime of CH <sub>4</sub> is about 12 years.
Nitrous Oxide (N <sub>2</sub> O)	Nitrous oxide is a clear, colorless gas with a slightly sweet odor. Nitrous oxide is produced by both natural and human-related sources. Primary human-related sources of N <sub>2</sub> O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. Nitrous oxide is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N <sub>2</sub> O is approximately 120 years.

Sources: EPA 2020.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. Methane traps over 21 times more heat per molecule than CO<sub>2</sub>, and N<sub>2</sub>O absorbs 298 times more heat per molecule than CO<sub>2</sub>. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO<sub>2</sub>e), which weigh each gas by its global warming potential (GWP). Expressing GHG emissions in CO<sub>2</sub>e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO<sub>2</sub> were being emitted. **Table 3.7-2** shows the global warming potentials for different GHGs for a 100-year time horizon.

**Table 3.7-2**  
**Global Warming Potential for Greenhouse Gases**

Greenhouse Gas	Global Warming Potential for 100-year time horizon
Carbon Dioxide (CO <sub>2</sub> )	1
Methane (CH <sub>4</sub> )	28
Nitrous Oxide (N <sub>2</sub> O)	265

*Source: IPCC 2014.*

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern, respectively. California is a significant emitter of GHGs in the world and produced 418 million gross metric tons of CO<sub>2</sub>e in 2019 (CARB 2021). Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2019, accounting for almost 40 percent of total GHG emissions in the State (CARB 2021). This category was followed by the electric power sector (including both in-State and out-of-State sources) (14 percent) and the industrial sector (21 percent) (CARB 2021).

### Effects of Global Climate Change

California can draw on substantial scientific research conducted by experts at various universities and research institutions. With more than a decade of concerted research, scientists have established that the early signs of climate change are already evident in the State—as shown, for example, in increased average temperatures, changes in temperature extremes, reduced snowpack in the Sierra Nevada, sea level rise, and ecological shifts.

Many of these changes are accelerating locally, across the country, and around the globe. As a result of emissions already released into the atmosphere, California will face intensifying climate change in coming decades (CNRA 2009). Generally, research indicates that California should expect overall hotter and drier conditions, with a continued reduction in winter snow (with concurrent increases in winter rains), as well as increased average temperatures and accelerating sea-level rise. In addition to changes in average temperatures, sea level, and precipitation patterns, the intensity of extreme weather events is also changing (CNRA 2009).

Climate change temperature projections identified in the 2009 California Climate Adaptation Strategy suggest the following:

- Average temperature increase is expected to be more pronounced in the summer than in the winter season.
- Inland areas are likely to experience more pronounced warming than coastal regions.
- Heat waves are expected to increase in frequency, with individual heat waves also showing a tendency toward becoming longer and extending over a larger area, thus more likely to encompass multiple population centers in California at the same time.



3.7 Greenhouse Gases

- Because GHGs remain in the atmosphere for decades, temperature changes over the next 30 to 40 years are already largely determined by past emissions. By 2050, temperatures are projected to increase by an additional 1.8 to 5.4°F (an increase one to three times as large as that which occurred over the entire twentieth century).
- By 2100, the models project temperature increases between 3.6 and 9°F. (CNRA 2009)

According to the 2009 California Climate Adaptation Strategy, the impacts of climate change in California have the potential to include but are not limited to the areas discussed in **Table 3.7-3**.

**Table 3.7-3  
Potential Statewide Impacts from Climate Change**

Potential Statewide Impact	Description
Public Health	Climate change is expected to lead to an increase in ambient (i.e., outdoor) average air temperature, with greater increases expected in summer. Larger temperature increases are anticipated in inland communities as compared to the California coast. The potential health impacts from sustained and significantly higher than average temperatures include heat stroke, heat exhaustion, and the exacerbation of existing medical conditions such as cardiovascular and respiratory diseases, diabetes, nervous system disorders, emphysema, and epilepsy. Numerous studies have indicated that there are generally more deaths during periods of sustained higher temperatures. The elderly, infants, and socially isolated people with pre-existing illnesses who lack access to air conditioning or cooling spaces are among the most at risk during heat waves.
Floods and Droughts	The impacts of flooding may include population displacement, severe psychosocial stress with resulting mental health impacts, exacerbation of pre-existing chronic conditions, and infectious disease. Additionally, impacts can range from a loss of personal belongings, and the emotional ramifications from such loss, to direct injury and/or mortality.  Drinking water contamination outbreaks in the United States are associated with extreme precipitation events. Runoff from rainfall is also associated with coastal contamination that can lead to contamination of shellfish and contribute to food-borne illness. Floodwaters may contain household, industrial, and agricultural chemicals, as well as sewage and animal waste. Flooding and heavy rainfall events can wash pathogens and chemicals from contaminated soils, farms, and streets into drinking water supplies. Flooding may also overload storm and wastewater systems, or flood septic systems, also leading to possible contamination of drinking water systems.

Potential Statewide Impact	Description
	<p>Drought impacts develop more slowly over time. Risks to public health that Californians may face from drought include impacts on water supply and quality, food production (both agricultural and commercial fisheries), and risks of waterborne illness. As surface water supplies are reduced as a result of drought conditions, the amount of groundwater pumping is expected to increase to make up for the water shortfall. The increase in groundwater pumping has the potential to lower the water tables and cause land subsidence. Communities that utilize well water will be adversely affected by drops in water tables or through changes in water quality. Groundwater supplies have higher levels of total dissolved solids compared to surface waters. This introduces a set of effects for consumers, such as repair and maintenance costs associated with mineral deposits in water heaters and other plumbing fixtures, and on public water system infrastructure designed for lower salinity surface water supplies. Drought may also lead to increased concentration of contaminants in drinking water supplies.</p>
Water Resources	<p>The State's water supply system already faces challenges to provide water for California's growing population. Climate change is expected to exacerbate these challenges through increased temperatures and possible changes in precipitation patterns. The trends of the last century, especially increases in hydrologic variability, will likely intensify in this century. The State can expect to experience more frequent and larger floods and deeper droughts. Rising sea level will threaten the Delta water conveyance system and increase salinity in near-coastal groundwater supplies.</p>
Forests and Landscapes	<p>Global climate change has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, wildfire occurrence statewide could increase from 57% to 169% by 2085. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the State.</p>

Source: CNRA 2009

### 3.7.2 Regulatory Setting

The adoption of recent legislation has provided a clear mandate that climate change must be included in an environmental review for a project subject to the California Environmental Quality Act (CEQA). A discussion of several GHG emissions-related laws and regulations follows.

## State

California has adopted various administrative initiatives and enacted a variety of legislation relating to climate change, much of which sets aggressive goals for GHG emissions reductions within the State. However, none of this legislation provides definitive direction regarding the treatment of climate change in environmental review documents prepared under CEQA. In particular, the CEQA Guidelines do not require or suggest specific methodologies for performing an assessment or specific thresholds of significance and do not specify GHG reduction mitigation measures. Instead, the guidelines allow lead agencies to choose methodologies and make significance determinations based on substantial evidence, as discussed in further detail below. In addition, no State agency has promulgated binding regulations for analyzing GHG emissions, determining their significance, or mitigating significant effects in CEQA documents. Thus, lead agencies exercise their discretion in determining how to analyze GHGs.

The discussion below provides a brief overview of the primary legislation relating to climate change that may affect the emissions associated with the proposed project. It begins with an overview of the primary regulatory acts that have driven GHG regulation and analysis in California.

### *Executive Order B-55-18*

California Executive Order B-55-18 was signed in September 2018 and set a target of statewide carbon neutrality no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. Executive Order B-55-18 calls on CARB to address this goal in future Scoping Plans, which affect other major sectors of California's economy, including transportation, agriculture, development, industrial, and others.

### *Senate Bill 32 (SB 32)*

Signed into law on September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

### *Executive Order S-3-05 (Statewide GHG Targets)*

California Executive Order S-03-05 (2005) mandates a reduction of GHG emissions to 2000 levels by 2010, to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. Although the 2020 target has been incorporated into legislation (AB 32), the 2050 target remains only a goal of the Executive Order.

### *Executive Order S-14-08*

Executive Order S-14-08 expands the State's Renewable Energy Standard to 33 percent renewable power by 2020. Additionally, Executive Order S-21-09 (signed on September 15, 2009) directs CARB to adopt regulations requiring 33 percent of electricity sold in the State come from renewable energy by 2020. CARB adopted the "Renewable Electricity Standard" on September 23,

2010, which requires 33 percent renewable energy by 2020 for most publicly owned electricity retailers.

#### *Assembly Bill 1493 and Advanced Clean Cars Program*

AB 1493 (also known as the Pavley Bill) requires that CARB develop and adopt, by January 1, 2005, regulations that achieve “the maximum feasible reduction of GHG emitted by passenger vehicles and light-duty trucks and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the State.” To meet the requirements of AB 1493, CARB approved amendments to the California Code of Regulations (CCR) in 2004 by adding GHG emissions standards to California’s existing standards for motor vehicle emissions. Amendments to CCR Title 13, Sections 1900 and 1961 and adoption of 13 CCR Section 1961.1 require automobile manufacturers to meet fleet-average GHG emissions limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty weight classes for passenger vehicles (i.e., any medium-duty vehicle with a gross vehicle weight rating less than 10,000 pounds that is designed primarily to transport people), beginning with the 2009 model year. Emissions limits are reduced further in each model year through 2016. The near-term standards were intended to achieve a reduction of about 22 percent in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term standards were intended to achieve a reduction of about 30 percent.

#### *Assembly Bill 32, the California Global Warming Solutions Act of 2006*

California passed the California Global Warming Solutions Act of 2006 (AB 32; *California Health and Safety Code* Division 25.5, Sections 38500 - 38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

#### *Senate Bill 100 (SB 100)*

SB 100 (Chapter 312, Statutes of 2018) requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt-hours (kWh) of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, 60 percent by December 31, 2030, and 100 percent by December 31, 2045. The bill would require the California Public Utilities Commission (CPUC), California Energy Commission (CEC), CARB, and all other State agencies to incorporate that policy into all relevant planning. In addition, SB 100 would require the CPUC, CEC, and CARB to utilize programs authorized under existing statutes to achieve that policy and, as part of a public process, issue a joint report to the Legislature

by January 1, 2021, and every 4 years thereafter, that includes specified information relating to the implementation of the policy.

### *CARB Scoping Plan*

On December 11, 2008, CARB adopted its Scoping Plan, which functions as a roadmap to achieve the California GHG reductions required by AB 32 through subsequently enacted regulations. CARB's Scoping Plan contains the main strategies California would implement to reduce the projected 2020 "Business-as-Usual" (BAU) emissions to 1990 levels, as required by AB 32. These strategies are intended to reduce CO<sub>2</sub>e emissions by 174 million metric tons. This reduction of 42 million metric tons carbon dioxide equivalent (MTCO<sub>2</sub>e), or almost ten percent from 2002 to 2004 average emissions, would be required despite the population and economic growth forecasted through 2020.

CARB's Scoping Plan calculates 2020 BAU emissions as those expected to occur in the absence of any GHG reduction measures. The 2020 BAU emissions estimate was derived by projecting emissions from a past baseline year using growth factors specific to each of the different economic sectors (e.g., transportation, commercial and residential, industrial, etc.). CARB used three-year average emissions, by sector, for 2002 to 2004 to forecast emissions to 2020. When CARB's Scoping Plan process was initiated, 2004 was the most recent year for which actual data was available. The measures described in CARB's Scoping Plan are intended to reduce the projected 2020 BAU to 1990 levels, as required by AB 32.

AB 32 requires CARB to update the Scoping Plan at least once every five years. CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes recent science related to climate change, including anticipated impacts to California and the levels of GHG reduction necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32. The Scoping Plan update also looks beyond 2020 toward the 2050 goal, established in Executive Order S-3-05, and observes that "a mid-term statewide emission limit will ensure that the State stays on course to meet our long-term goal." The Scoping Plan update did not establish or propose any specific post-2020 goals, but identified such goals in water, waste, natural resources, clean energy, transportation, and land use.

On January 20, 2017, CARB released the proposed Second Update to the Scoping Plan, which identifies the State's post-2020 reduction strategy. The Second Update was finalized in November 2017 and approved on December 14, 2017 and reflects the 2030 target of a 40 percent reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. The 2017 Scoping Plan Update establishes a new statewide emissions limit of 260 million MTCO<sub>2</sub>e for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030. The 2017 Scoping Plan Update contains the following goals:

1. SB 350
  - Increases renewable electricity procurement goal from 33 percent to 50 percent by 2030.

- Doubling of energy efficiency savings by 2030.
2. Low Carbon Fuel Standard (LCFS)
    - Increased stringency (reducing carbon intensity 18 percent by 2030, up from 10 percent in 2020).
  3. Mobile Source Strategy (Cleaner Technology and Fuels Scenario)
    - Maintaining existing GHG standards for light- and heavy-duty vehicles.
    - Put 4.2 million zero-emission vehicles (ZEVs) on the roads.
    - Increase ZEV buses, delivery and other trucks.
  4. Sustainable Freight Action Plan
    - Improve freight system efficiency.
    - Maximize use of near-zero emission vehicles and equipment powered by renewable energy.
    - Deploy over 100,000 zero-emission trucks and equipment by 2030.
  5. Short-Lived Climate Pollutant (SLCP) Reduction Strategy
    - Reduce emissions of methane and hydrofluorocarbons 40 percent below 2013 levels by 2030.
    - Reduce emissions of black carbon 50 percent below 2013 levels by 2030.
  6. SB 375 Sustainable Communities Strategies
    - Increased stringency of 2035 targets.
  7. Post-2020 Cap-and-Trade Program
    - Declining caps, continued linkage with Québec, and linkage to Ontario, Canada.
    - CARB will look for opportunities to strengthen the program to support more air quality co-benefits, including specific program design elements.
  8. 20 percent reduction in GHG emissions from the refinery sector.
  9. By 2018, develop Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

### *Senate Bill 375*

Acknowledging the relationship between land use planning and transportation sector GHG emissions, SB 375 was passed by the State Assembly on August 25, 2008 and signed by the Governor on September 30, 2008. The legislation links regional planning for housing and transportation with the GHG reduction goals outlined in AB 32. Reductions in GHG emissions can be achieved by, for example, locating employment opportunities close to transit. Under SB 375,



each Metropolitan Planning Organization (MPO) is required to adopt a Sustainable Communities Strategy (SCS) to encourage compact development that reduces passenger vehicle miles traveled (VMT) and trips so the region can meet a target, created by CARB, for reducing GHG emissions. If the SCS is unable to achieve the regional GHG emissions reduction targets, then the MPO is required to prepare an alternative planning strategy that shows how the GHG emissions reduction target can be achieved through alternative development patterns, infrastructure, and/or transportation measures.

### *California Green Building Standards*

The California Green Building (CALGreen) Code (California Code of Regulations, Title 24, Part 11), is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development. CALGreen standards require new residential and commercial buildings to comply with mandatory measures under five topical areas: planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt which encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code was adopted in 2019 and went into effect on January 1, 2020. CALGreen requires new buildings to reduce water consumption by 20 percent, divert 50 percent of construction waste from landfills, and install low pollutant-emitting materials.

### Regional

#### *2017 Bay Area Air Quality Management District (BAAQMD) Clean Air Plan*

To protect the climate, the 2017 Clean Air Plan (prepared by BAAQMD; BAAQMD 2017a) includes control measures designed to reduce emissions of methane and other super-GHGs (i.e., N<sub>2</sub>O, HFCs, PFCs, and SF<sub>6</sub>) that are potent climate pollutants in the near-term, and to decrease emissions of CO<sub>2</sub> by reducing fossil fuel combustion.

#### *BAAQMD CEQA Air Quality Guidelines*

The BAAQMD CEQA Air Quality Guidelines (BAAQMD 2017b) are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. The jurisdictions in the San Francisco Bay Area Air Basin, including the City of Sunnyvale, utilize the thresholds and methodology for assessing GHG impacts developed by BAAQMD within the CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

#### *Plan Bay Area 2040*

Consistent with the requirements of SB 375, the Metropolitan Transportation Commission (MTC) partnered with the Association of Bay Area Governments (ABAG), BAAQMD, and the Bay Conservation and Development Commission to prepare the region's Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan process. The SCS is referred to as Plan

Bay Area 2040 (MTC 2017). Plan Bay Area 2040 establishes a course for reducing per-capita GHG emissions through the promotion of compact, high-density, mixed-use neighborhoods near transit, particularly within identified Priority Development Areas (PDAs).

## Local

### *City of Sunnyvale General Plan*

The City's General Plan includes policies for the purpose of avoiding or mitigating environmental impacts resulting from planned development projects within the City. The following policies are specific to GHG reduction and are applicable to the proposed project.

### Land Use and Transportation Element

- Policy LT-1.2 Minimize regional sprawl by endorsing strategically placed development density in Sunnyvale and by utilizing a regional approach to providing and preserving open space for the broader community.
- Policy LT-1.7 Emphasize efforts to reduce regional vehicle miles traveled by supporting active modes of transportation including walking, biking, and public transit.
- Policy LT-1.10 Participate in Federal, State, and regional programs and processes in order to protect the natural human environment in Sunnyvale and the region.
- Policy LT-2.1 Enhance the public's health and welfare by promoting the city's environmental and economic health through sustainable practices for the design, construction, maintenance, operation, and deconstruction of buildings, including measures in the Climate Action Plan.
- Policy LT-2.2 Reduce greenhouse gas emissions that affect climate and the environment through land use and transportation planning and development.
- Policy LT-2.3 Accelerate the planting of large canopy trees to increase tree coverage in Sunnyvale in order to add to the scenic beauty and walkability of the community; provide environmental benefits such as air quality improvements, wildlife habitat, and reduction of heat islands; and enhance the health, safety, and welfare of residents.
- Policy LT-3.1 Use land use planning, including mixed and higher-intensity uses, to support alternatives to the single-occupant automobile such as walking and bicycling and to attract and support high investment transit such as light rail, buses, and commuter rail.
- Policy LT-3.5 Follow California Environmental Quality Act requirements, congestion management program requirements, and additional city requirements when analyzing the transportation impacts of proposed projects and assessing the



need for offsetting transportation system improvements or limiting transportation demand.

Policy LT-3.6 Promote modes of travel and actions that provide safe access to city streets and reduce single-occupant vehicle trips and trip lengths locally and regionally.

Policy LT-3.7 Provide parking and lane priority to environmentally friendly motorized vehicles (e.g. carpools, low emission, zero emission).

Policy LT-8.4 Promote compact, mixed-use, and transit-oriented development in appropriate neighborhoods to provide opportunities for walking and biking as an alternative to auto trips.

### Environmental Management

Policy EM-2.1 Lower overall water demand through the effective use of water conservation programs in the residential, commercial, industrial and landscaping arena.

### *City of Sunnyvale Climate Action Playbook*

The Climate Action Playbook, adopted in August 2019, sets a vision for the City to reduce GHG emissions by 2050. The Climate Action Playbook contains six core strategies to reduce GHG emissions by 56 percent by 2030 and 80 percent by 2050. Each strategy includes “plays” that identify areas for action to reduce GHG emissions. The following strategies and plays are most directly applicable to the proposed project.

#### *Strategy 1: Promoting Clean Electricity*

*Play 1.2: Increase local solar photovoltaics*

*Play 1.3: Increase distributed electricity storage*

#### *Strategy 2: Decarbonizing Buildings*

*Play 2.3: Achieve all-electric new construction*

#### *Strategy 3: Decarbonizing Transportation & Sustainable Land Use*

*Play 3.1: Increase opportunities for and encourage development of mixed-use sites to reduce vehicle miles per person*

*Play 3.2: Increase transportation options and support shared mobility*

*Play 3.3: Increase zero-emission vehicles*

#### *Strategy 4: Managing Resources Sustainability*

*Play 4.1: Achieve zero waste goals for solid waste*

*Play 4.2: Ensure resilience of water supply*

*Play 4.3: Enhance natural carbon sequestration capacity*

*City of Sunnyvale Reach Code Ordinance*

The CEC approved the City's reach code ordinance that became effective on January 26, 2021. The reach code ordinance requires residential and nonresidential new construction to use electric appliances only, install solar panels, and include electric vehicle charging stations. However, the GHG emissions modeling in this section did not consider the reach code ordinance, because at the time of initial preparation of this section, the reach code ordinance has not taken effect yet. Therefore, GHG emissions modeled in this section represents conservative analysis.

*3.7.3 Impacts and Mitigation Measures*

The impact analysis provided below is based on the application of the following CEQA Guidelines Appendix G thresholds of significance. Climate change impacts are considered significant if implementation of the proposed project would:

- 1) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- 2) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

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

BAAQMD adopted GHG thresholds of significance to assist in the review of projects under CEQA. These thresholds were designed to establish the level at which BAAQMD has determined that GHG emissions would cause significant environmental impacts. The GHG emission thresholds identified by BAAQMD are 1,100 net MTCO<sub>2</sub>e per year or 4.6 MTCO<sub>2</sub>e per service population per year. The numeric thresholds set by BAAQMD were calculated to achieve a 56 percent reduction in GHG emissions levels below 1990 levels, surpassing the SB 32 specified 2030 target of 40 percent below the 1990 GHG emissions level. The project would not be fully constructed and occupied until 2035; therefore, a threshold that addresses a future (2035) target is appropriate.

For projects that would be implemented beyond year 2030, the GHG emissions reduction target is extrapolated based on the 2050 climate stabilization goals. The Plan-Level GHG threshold is based on the trajectory needed as shown in **Table 3.7-4** to achieve the year 2030 GHG reduction target under SB 32 (40 percent below 1990 levels by 2030) and Executive Order S-03-05 (80 percent below 1990 levels by 2050) for the horizon year of the project (2035). As shown in **Table 3.7-4**, the 2035 GHG estimated project-level efficiency target would be 2.5 MTCO<sub>2</sub>e per service population per year. The proposed Specific Plan would be deemed to have a significant GHG emissions impact if it does not meet this efficiency target. If the proposed Specific Plan does not meet the forecasted 2035 efficiency target of 2.5 MTCO<sub>2</sub>e per service population per year, it would

be deemed to also not be on trajectory to meet the 2050 efficiency target and would be considered to result in a significant GHG emissions impact.

**Table 3.7-4**  
**Post-2030 Project Level GHG Reduction Targets**

Scenario Year	GHG Reduction Targets
<b>Year 2030</b>	
2030 Project-Level Target	190.7 MMTCO <sub>2</sub> e
2030 Population	42,263,654
2030 Employment	18,552,040
2030 Service Population (SP)	60,815,694
2030 Efficiency Target	3.1 MTCO <sub>2</sub> e/SP/yr
<b>Year 2035</b>	
2035 Project-Level Target <sup>1</sup>	157 MMTCO <sub>2</sub> e
2035 Population	43,195,083
2035 Employment	19,025,938
2035 Service Population (SP)	62,221,021
2035 Efficiency Target	2.5 MTCO <sub>2</sub> e/SP/yr
<b>Year 2050</b>	
2050 Project-Level Target	57 MMTCO <sub>2</sub> e
2050 Population	20,480,501
2050 Employment	44,856,461
2050 Service Population (SP)	65,336,962
2050 Efficiency Target	0.9 MTCO <sub>2</sub> e/SP/yr

Notes: MTCO<sub>2</sub>e/SP/yr = metric tons carbon dioxide equivalent per service population per year

1. The 2035 Efficiency target is based on interpolating the 2030 land use emissions target (40 percent below 1990 levels by 2030) and the 2050 land use emissions target (80 percent below 1990 levels by 2050), which equates to approximately 50 percent below 1990 levels by 2035.

Sources: CARB 2017; California Department of Finance 2021; Caltrans 2019.

In terms of project conformance with an applicable plan to reduce GHG emissions (Threshold of Significance 2), the project was analyzed for compliance with all the applicable reduction measures contained in the City's Climate Action Playbook.

**GENERATE GREENHOUSE GAS EMISSIONS THAT MAY HAVE A SIGNIFICANT IMPACT ON THE ENVIRONMENT  
(STANDARD OF SIGNIFICANCE 1)**

**Impact 3.7.1 Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

GHG emissions would be generated from short-term construction and long-term operational activities within the Specific Plan area. The following is a discussion of construction and operational GHG emissions generated as a result of the Specific Plan.

### Construction GHG Emissions

The project estimates that total buildout of the Specific Plan area through the year 2035 would accommodate approximately 8,500 residential units and 3,980,000 square feet of commercial floor area, which would be equivalent to net increases of approximately 6,900 residential units and 730,000 square feet of commercial floor area above existing conditions. Quantifying GHG emissions from future, short-term, temporary construction activities allowed under the proposed Specific Plan area is not possible due to project-level variability and uncertainties related to future individual projects in terms of detailed site plans, construction schedules, equipment requirements, etc., which are not currently determined. Therefore, construction GHG emissions are not quantified in this EIR. However, future project-level analyses of GHG impacts may be conducted on a case-by-case basis as individual, future development projects allowed under the Specific Plan are constructed.

### Operational GHG Emissions

The proposed project-related GHG emissions would include emissions from direct and indirect sources. The proposed project would result in direct and indirect emissions of CO<sub>2</sub>, N<sub>2</sub>O, and CH<sub>4</sub>, and would not result in other GHGs that would facilitate a meaningful analysis. Therefore, this analysis focuses on these three forms of GHG emissions. Direct project-related GHG emissions include emissions from area sources and mobile sources, while indirect sources include emissions from electricity and natural gas consumption, water demand, and solid waste generation. CalEEMod was used to calculate project-related GHG emissions. CalEEMod relies upon project trip data, the CARB Emission FACtor 2017 (EMFAC2017) model, and project-specific land use data to calculate emissions.

As previously discussed, the Specific Plan would accommodate 6,900 residential units and 730,000 square feet of commercial floor area above existing conditions. Therefore, land uses modeled in CalEEMod represent the net increase above existing conditions. **Table 3.7-5** presents the estimated net increase in CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions as a result of the proposed project. CalEEMod outputs are contained within **Appendix B**.

The proposed project would include operational GHG emission reductions in part due to mandatory compliance with Senate Bill 100 (100 percent renewable energy by 2045) and Assembly Bill 341 (75 percent of solid waste generated to be reduced, recycled, or composted by 2020). In addition, BAAQMD Regulation 6, Rule 3 (prohibits installation of wood-burning devices in new building construction) and the most current building energy efficiency standards (i.e. Title 24 and CALGreen) were applied to the proposed project CalEEMod run. In addition, the project would comply with the City's reach code ordinance, which requires new construction to only use electric appliances, install solar panels, and include electric vehicle charging stations. Compliance with the reach code ordinance would reduce the project's GHG emissions, however it was not accounted for in the GHG emissions modeling as it has not taken effect yet at the time of initial preparation of this section. Therefore, GHG emissions shown in **Table 3.7-5** represent conservative analysis.

**Table 3.7-5  
Project Greenhouse Gas Emissions**

Source	CO <sub>2</sub>	CH <sub>4</sub>		N <sub>2</sub> O		Total Metric Tons of CO <sub>2</sub> e
	Metric Tons/year <sup>1</sup>	Metric Tons/year <sup>1</sup>	Metric Tons of CO <sub>2</sub> e <sup>2</sup>	Metric Tons/year <sup>1</sup>	Metric Tons of CO <sub>2</sub> e <sup>2</sup>	
<b>Direct Emissions</b>						
• Area Source	359.35	0.09	2.13	0.01	1.50	362.98
• Mobile	6,740.78	0.29	7.30	0.00	0.00	6,748.08
<i>Total Direct Emissions<sup>3,5,6</sup></i>	<i>7,100.13</i>	<i>0.38</i>	<i>9.42</i>	<i>0.01</i>	<i>1.50</i>	<i>7,111.06</i>
<b>Indirect Emissions</b>						
• Energy <sup>4</sup>	8,662.29	0.61	15.16	0.20	58.94	8,736.40
• Solid Waste	485.90	28.72	717.89	0.00	0.00	1,203.79
• Water Demand	470.46	14.58	364.45	0.35	105.10	940.02
<i>Total Indirect Emissions<sup>3,5,6</sup></i>	<i>9,618.65</i>	<i>43.90</i>	<i>1,097.50</i>	<i>0.55</i>	<i>164.05</i>	<i>10,880.20</i>
<b>Total Project-Related Emissions</b>	<b>17,991.26 MTCO<sub>2</sub>e/year</b>					
Service Population <sup>7</sup>	19,064					
Project GHG Efficiency (MTCO <sub>2</sub> e/SP/Yr)	0.9 MTCO <sub>2</sub> e/SP/yr					
2035 Efficiency Threshold	2.5 MTCO <sub>2</sub> e/SP/yr					
<b>Exceed 2035 Efficiency Threshold?</b>	<b>No</b>					

Notes: MTCO<sub>2</sub>e/SP/yr = metric tons carbon dioxide equivalent per service population per year

1. Emissions calculated using California Emissions Estimator Model Version 2016.3.2 (CalEEMod) computer model.
2. CO<sub>2</sub> Equivalent values calculated using the EPA Website, Greenhouse Gas Equivalencies Calculator, <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>, accessed September 2020.
3. Totals may be slightly off due to rounding.
4. Emissions projections account for PG&E's most current (2018) CO<sub>2</sub> emission intensity factor of 206.29 pounds of CO<sub>2</sub> per megawatt of energy generated (The Climate Registry 2019).
5. The Total Project-Related Emissions represents the net increase in GHG emissions from existing conditions within the Specific Plan area.
6. Emission reductions applied in the CalEEMod model, or 'mitigated emissions', include regulatory requirements such as compliance with the 2019 Title 24 Building Standards Code, the 2019 CALGreen Code, and AB 341. These mandatory regulatory requirements would include high efficiency lighting, low flow plumbing fixtures, solid waste diversion, and electricity from renewable energy sources.
7. EIA 2012; DOF 2020.

Source: Refer to **Appendix B** for detailed model input/output.

## Direct Project-Related Sources of Greenhouse Gases

### Area Source

Area source emissions were calculated using CalEEMod and project-specific land use data. Project-related area sources include exhaust emissions from landscape maintenance equipment, such as lawnmowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to

maintain the landscaping of the site. As noted in **Table 3.7-5**, the proposed project would result in a net increase of 362.98 MTCO<sub>2</sub>e/year of area source GHG emissions above existing conditions.

#### Mobile Source

As previously discussed, the Specific Plan would accommodate 6,900 residential units and 730,000 square feet of commercial floor area above existing conditions. Based on project generated daily trip data provided by Hexagon Transportation Consultants, Inc., via email on December 14, 2020, the project would generate a net increase of 13,845 daily trips when compared to existing conditions. As shown in **Table 3.7-5**, the project would cause an increase of approximately 6,748.08 MTCO<sub>2</sub>e/year from mobile emissions.

### **Indirect Project-Related Sources of Greenhouse Gases**

#### Energy Consumption

Energy Consumption emissions were calculated using the CalEEMod model and project specific land use data. On-site electricity would be provided by Pacific Gas and Electric (PG&E). As noted above project would not be fully constructed and occupied until 2035. Based off the regulatory requirements in SB 100, 60 percent of the electricity provided by December 31, 2030 would be from eligible renewable energy resources. Notwithstanding, to provide a conservative analysis, PG&E's most current (i.e. 2018) CO<sub>2</sub> emission intensity factor of 206.29 pounds of CO<sub>2</sub> per megawatt of electricity generated was utilized in CalEEMod. As shown in **Table 3.7-5**, the project would result in a net increase of 8,736.40 MTCO<sub>2</sub>e/year when compared to existing conditions.

#### Solid Waste

Solid waste emissions associated with operations of the project were calculated using the CalEEMod model and project-specific land use data. Per AB 341, the project would be required to reduce, recycle, or compost 75 percent of the solid waste generated as of the year 2020. Therefore, a 75 percent reduction in solid waste was modeled in the CalEEMod. **Table 3.7-5** shows the project's net increase of 1,203.79 MTCO<sub>2</sub>e/year in operational solid waste emissions when compared to existing conditions.

#### Water Demand

The project would be required to comply with the CALGreen Code, which requires newer developments to be fitted with low flow plumbing fixtures and fittings, as well as water-efficient landscaping. As shown in **Table 3.7-5**, the project would result in a water consumption net increase of 940.02 MTCO<sub>2</sub>e/year, when compared to existing conditions.

### **Total Project-Related Sources of Greenhouse Gases**

As shown in **Table 3.7-5**, implementation of the proposed Specific Plan would result in a net increase of 17,991.26 MTCO<sub>2</sub>e per year. As the Specific Plan would result in a net increase of 6,900

residential units and 730,000 square feet of commercial floor area when compared to existing conditions, the population increase would be approximately 18,561 persons and the employment increase would be approximately 503 persons (EIA 2012; DOF 2020). Therefore, the project would result in 0.9 MTCO<sub>2</sub>e per service population per year when compared to existing conditions in the Specific Plan area. The 2035 efficiency threshold is based on achieving a trajectory toward the State's long-term climate stabilizations goals under Executive Order S-03-05. As identified in **Table 3.7-5**, the proposed Specific Plan would generate 0.9 MTCO<sub>2</sub> per service population per year and would not exceed the 2035 efficiency target of 2.5 MTCO<sub>2</sub>e per service population per year. Therefore, impacts would be **less than significant** in this regard.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

### COMPLIANCE WITH SUNNYVALE CLIMATE ACTION PLAN (STANDARD OF SIGNIFICANCE 2)

#### **Impact 3.7.2 Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

The GHG plan consistency for the project is based on the project's consistency with the Plan Bay Area 2040, the Climate Action Playbook, and the State's long-term climate stabilization goals under Executive Order S-03-05. The Specific Plan is primarily located within a Priority Development Area (PDA) established by Plan Bay Area 2040. The project would support the Plan Bay Area 2040 goal of building compact, high-density, mixed-use near transit, which reduces GHG emissions. In addition, the project would comply with Title 24 and CALGreen building standards, which require high efficiency lighting, low flow plumbing fixtures, and electricity from renewable energy sources. Further, as discussed under Impact 3.7.1, project-generated GHG emissions would not conflict with the State's long-term climate stabilization goals under Executive Order S-03-05.

In regard to the Climate Action Playbook, the project's consistency with relevant plays is shown in **Table 3.7-6**. For each play, "moves" are identified to achieve the play. The moves are primarily to be implemented by the City through policy decisions, and are not intended to be implemented by private development. The plays, therefore, are not directly applicable to the proposed project. However, as summarized in **Table 3.7-6**, the project does not prohibit the implementation of plays established in the Climate Action Playbook.

**Table 3.7-6**  
**Project Consistency with Applicable Climate Action Playbook Plays**

<b>Play</b>	<b>Description</b>	<b>Consistency</b>
1.2	Increase local solar photovoltaics	Per the Playbook, the City is to research a mandatory solar roof ordinance for new commercial developments (Move 1.C). The City's reach code ordinance requiring new construction to install solar panels became effect on January 26, 2021. The City has also adopted an expedite plan review process for solar panel plan checks and permits. Therefore, the project is consistent with this Play.
2.3	Achieve all-electric new construction	<p>Per the Playbook, the City would achieve this play by evaluating code and permit processes to streamline building electrification (Move 2.E), investigating the use of a differential Utility Use Tax where local taxes on electricity are lower than on natural gas (Move 2.F), and incentivizing energy efficient and high-performance buildings through updates to the Green Building Program.</p> <p>The City's reach code ordinance requiring new construction to only use electric appliances and prohibiting the use of natural gas became effect on January 26, 2021. The City has also adopted an expedite plan review process for permits in compliance with the reach code ordinance. Therefore, the project is consistent with this Play.</p>
3.1	Increase opportunities for and encourage development of mixed-use sites to reduce vehicle miles per person	<p>Per the Playbook, the City would achieve this play by planning for additional diverse housing to reduce long-distance commutes (Move 3.A) and implementing parking strategies to discourage vehicle use (Move 3.B).</p> <p>The project proposes a mixed-use corridor consisting of commercial and high-density residential uses in a PDA. Therefore, the project would facilitate lower VMT given its proximity to transit and other destinations. As such, the project would be consistent with the intent of this play.</p>
3.2	Increase transportation options and support shared mobility	<p>Per the Playbook, the City would achieve this play by enhancing the implementation of TDM programs (Move 3.C), advocating for regional service providers for high quality transit service (Move 3.D), updating the Active Transportation Plan (Move 3.E), piloting shared bicycle and scooter programs (Move 3.F), piloting shuttle service in Peery Park and other areas (Move 3.G), developing design standards for streets and parking lots to accommodate for rideshare services (Move 3.H), and monitoring autonomous vehicle testing and deployment (Move 3.I).</p> <p>Potential development within the project area would be required to comply with all applicable Title 24 and CALGreen building codes at the time of construction. The current Title 24 and CALGreen building codes</p>

Play	Description	Consistency
		require electric vehicle (EV) charging stations, designated EV parking, as well as bicycle parking and storage. Therefore, the project would support this play.
4.1	Achieve zero waste goals for solid waste	<p>Per the Playbook, the City would achieve this play by implementing and expanding the food scraps diversion programs (Move 4.A), considering improvements to solid waste collection and processing to increase waste diversion (Move 4.B), and implementing campaigns for waste prevention (Move 4.C).</p> <p>The project would comply with AB 341 which requires 75 percent of solid waste generated to be reduced, recycled, or composted. Further, the project would comply with applicable City waste reduction programs; refer to Section 3.16, <i>Utilities and Service Systems</i>, of this EIR. Therefore, the project would be consistent with the intent of this play.</p>
4.2	Ensure resilience of water supply	<p>Per the Playbook, the City would achieve this play by promoting and seeking incentives for making water conservation a way of life (Move 4.D) and partnering with Valley Water to expand water reuse (Move 4.E).</p> <p>Future development within the Specific Plan area would be required to be consistent with General Plan policy EM-2.1 of lowering overall water demand through water conservation programs and subject to the water-efficiency design, planting, and irrigation requirements in Sunnyvale Municipal Code (SMC) Chapter 19.37. Additionally, the project would incorporate green building measures, including water conservation measures, through compliance with Title 24 and CALGreen. Therefore, the project would be consistent with the intent of this play.</p>
4.3	Enhance natural carbon sequestration capacity	<p>Per the Playbook, the City would achieve this play by implementing the City's Urban Forest Management Plan and continuing to protect and expand the tree canopy (Move 4.F), as well as implementing the City's Green Stormwater Infrastructure Plan and other regulations to prevent stormwater pollution (Move 4.G).</p> <p>As discussed in Section 3.3, <i>Biological Resources</i>, of this EIR, the project would be consistent with SMC Sections 13.16 and 19.94 to protect trees. Additionally, the Specific Plan area would include large-canopied trees along sidewalks. Therefore, the project would be consistent with the intent of this play.</p>

Source: Sunnyvale 2019.

Based on the discussion above, the project would not conflict with Plan Bay Area 2040, CALGreen, Title 24, and the City's Climate Action Playbook. In addition, as discussed under Impact 3.7.1, project-generated GHG emissions would be in-line with the State's long-term climate stabilization goals under Executive Order S-03-05. Therefore, impacts would be **less than significant** in this regard.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

### CUMULATIVELY CONSIDERABLE NET INCREASE IN GHG EMISSIONS (THRESHOLD OF SIGNIFICANCE 2)

#### Impact 3.7.3 Would GHGs generated by the project and other related cumulative projects have a significant impact on global climate change?

Project-related GHG emissions are not confined to a particular air basin; instead, GHG emissions are dispersed worldwide. No single project is large enough to result in a measurable increase in global concentrations of GHG emissions. Therefore, project-generated GHG emissions identified under Impact 3.7.1 are not project-specific impacts to global climate change, but rather the proposed project's contribution to this cumulative impact. Notwithstanding, as discussed under Impact 3.7.1, project-generated GHG emissions would be in-line with the State's long-term climate stabilization goals identified under Executive Order S-03-05.

GHG impacts are recognized as exclusively cumulative impacts, and there are no non-cumulative GHG emission impacts from a climate change perspective. As such, significant direct impacts associated with the proposed project also serve as the project's cumulative impact. Impact 3.7.2 concludes that the proposed project would be consistent with the Plan Bay Area 2040 and the Climate Action Playbook. Thus, the project would not cumulatively contribute to GHG impacts and impacts in this regard would be **less than significant**.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

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## 3.8 Hazards and Hazardous Materials

This section provides information on safety hazards in the Specific Plan Area, analyzes the potential for the proposed Specific Plan to create hazards to public health or the environment related to hazardous materials, airport operations, emergency access, and wildland fire, and proposes feasible mitigation measures where appropriate.

### 3.8.1 Existing Setting

#### Hazardous Materials and Waste Defined

Under Title 22 of the California Code of Regulations (CCR), the term “hazardous substance” refers to both hazardous materials and hazardous wastes; both are classified according to four properties: toxicity, ignitability, corrosiveness, and reactivity (CCR Title 22, Chapter 11, Article 3). A hazardous material is defined as a substance or combination of substances that may cause (or significantly contribute to) an increase in serious, irreversible, or incapacitating illness or may pose a substantial presence or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

Public health is potentially at risk whenever hazardous materials are or will be used. It is necessary to differentiate between the hazard of these materials and the acceptability of the risk they pose to human health and the environment. A hazard is any situation that has the potential to cause damage to human health and the environment. Health and safety risks are determined by the probability of exposure, in addition to the inherent toxicity of a material.

Hazardous wastes are hazardous substances that no longer have practical use, such as materials that have been discarded, discharged, spilled, or contaminated or are being stored until they can be disposed of properly (CCR Title 22, Chapter 11, Article 2, Section 66261.10). Soil that is excavated from a site containing hazardous materials is a hazardous waste if it exceeds specific CCR Title 22 criteria. While hazardous substances are regulated by multiple agencies, as described in Section 3.8.2, Regulatory Framework, cleanup requirements for hazardous wastes are determined on a case-by-case basis according to the agency with lead jurisdiction over the Specific Plan.

#### Hazardous Materials Conditions in Sunnyvale

For decades, Sunnyvale has been home to many innovative high-tech companies. New and emerging technology companies (e.g., solar cell companies and LED light manufacturers), whose presence contributes to a thriving and diverse business community, have employed the use of a large variety of hazardous materials, including highly toxic compressed gases. Facilities in the city that use the highest quantities of hazardous materials and toxicity levels are located in the industrial area in the northern part of the city, approximately 1.5 miles to the northeast of the Specific Plan Area’s eastern terminus. (Sunnyvale 2011a).

## Contaminated Sites

### *National Priorities List (Superfund)*

Also known as Superfund, the National Priorities List (NPL) database is a subset of the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) and identifies facilities for priority cleanup. The source of this database is the US Environmental Protection Agency (EPA). To appear on the NPL, sites must have met or surpassed a predetermined hazard ranking system score, been chosen as a state's top priority site, pose a significant health or environmental threat, or be a site where the EPA has determined that remedial action is more cost effective than removal action. Six NPL facilities have been identified in Sunnyvale (EDR 2012). Information on these NPL facilities was supplemented by reviewing a current status update on the EPA's website (2018). There are no NPL sites in the plan area.

### *CERCLIS List*

The EPA's Comprehensive Environmental Response, Compensation, and Liability Information System listings identify hazardous waste sites that require investigation and possible remedial action to mitigate potential negative impacts on human health or the environment. CERCLIS contains facilities that are either proposed for or on the NPL and facilities that are in the screening and assessment phase for possible inclusion on the NPL. There are 20 CERCLIS facilities in Sunnyvale. Three facilities listed in the EDR database report are outside the city. However, none of the remaining facilities are in the plan area.

### *CERCLIS – No Further Remedial Action Planned (CERCLIS-NFRAP) List*

Sites designated as NFRAP have been removed from CERCLIS. NFRAP sites may be located where, following an initial investigation, no contamination was found, contamination was removed quickly and not on the NPL list, or the contamination was not serious enough to require federal Superfund action or NPL consideration. The CERCLIS website lists 13 archived Superfund sites in Sunnyvale (EPA 2018). The archive designation indicates the site has no further interest under the federal Superfund program based on available information. The EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. The designation is removed and the site is returned to the CERCLIS inventory if more assessment and/or any cleanup work is necessary under the federal Superfund program.

### *Hazardous Sites*

Government Code Section 65962.5 requires compilation of a list of hazardous waste and substances sites to be used as a planning document by State and local agencies and developers to comply with the California Environmental Quality Act (CEQA) requirements in providing information about the location of hazardous materials release sites. This list is commonly known as the Cortese List. A search was conducted of the EnviroStor database, maintained by the California Department of Toxic Substances Control (DTSC), and the GeoTracker database, maintained by the State Water Resources Control Board (SWRCB).



A search of the EnviroStor database finds 100 facilities within a half mile of the plan area that generate toxic waste as the result of hazardous materials use in their operations. These facilities include research and development, laboratory, and retail uses (DTSC 2017). None of the sites is located on El Camino Real. However, the Geotracker search revealed one active site (eligible for closure), 41 closed leaking underground storage tank (LUST) cleanup sites, and 1 active and 3 closed cleanup programs (SWRCB 2017).

#### *California Solid Waste Facilities/Landfill Site List*

The Solid Waste Facilities, Landfill Site (SWF/LF) database records typically contain an inventory of solid waste disposal facilities or landfills. The information is obtained from the Solid Waste Information System database of the California Department of Resources Recycling and Recovery (CalRecycle). Two SWF/LF facilities were identified in the city (EDR 2012):

- Sunnyvale Materials Recovery and Transfer Station (SMaRT Station), 301 Carl Road – a large-volume transfer/processing facility that accepts construction/demolition, industrial, and mixed municipal waste
- City of Sunnyvale Landfill, north side of Caribbean Drive – a solid waste disposal site; certified closed in 1994

#### Schools

The Specific Plan Area is in the boundaries of three school districts: Sunnyvale School District, Santa Clara Unified School District, and Fremont Union High School District. There is one school within 0.25 mile of the plan area: Sunnyvale Christian School is 0.1 mile north of El Camino Real at 445 S. Mary Avenue.

#### Airport Operations Hazards

Airport-related hazards are generally associated with aircraft accidents, particularly during takeoffs and landings. Other airport operation hazards include incompatible land uses, power transmission lines, wildlife hazards (e.g., bird strikes), and tall structures that penetrate the imaginary surfaces surrounding an airport. The nearest airport to the Specific Plan Area is Moffett Federal Airfield located approximately 2.5 miles to the north. The Specific Plan Area is not located within the noise, safety, or height restriction zones delineated in the Comprehensive Land Use Plan (CLUP) for Moffett Federal Airfield and has no heliports listed by the Federal Aviation Administration (FAA) (Santa Clara County Airport Land Use Commission 2012). However, a short segment of the western portion of El Camino Real is included in the Moffett Federal Airfield Airport Influence Area (AIA), and as such, future development projects that fall within the AIA boundaries are subject to review by the Santa Clara County Airport Land Use Commission (ALUC).

#### Transportation of Hazardous Materials

In general, transporters of hazardous waste must comply with the regulations and statutory requirements in Health and Safety Code, Division 20, Chapter 6.5, Articles 6 and 6.5, as well as the



specific US Department of Transportation (DOT) requirements referenced throughout the transporter regulations. Transporters of hazardous materials must comply with the regulations in Chapter 12 (Standards Applicable to Generators of Hazardous Waste) required for transporting hazardous waste in the United States. In addition to the DTSC, registered transporters are regulated by the local Certified Unified Program Agency. Requirements for transportation routes are managed by the California Highway Patrol (CHP).

### Wildland Fires

A wildfire is an uncontrolled fire spreading through vegetative fuels, posing danger, and causing destruction to life and property. Wildfires can occur in undeveloped areas and spread to urban areas where structures and other human development are more concentrated.

The Specific Plan Area is developed and is surrounded by further urban development. As an urbanized area, the General Plan does not include any policies related to wildland fires. Further, the City of Sunnyvale has a facilities inspection and fire education program; therefore, the incidence of fire is low. Inspections are conducted at prescribed intervals consistent with State of California regulations and National Fire Protection Association industry standards for commercial facilities, apartments, hotels, and schools, with an emphasis on prevention (Sunnyvale 2014). According to the California Department of Forestry and Fire Protection (Cal Fire) (2015), there are no Fire Hazard Severity Zones, State Responsibility Areas, or Very High Fire Hazard Severity Zones within or adjacent to Sunnyvale. The Specific Plan Area is approximately 4 miles to the closest Fire Hazard Severity Zone, which is located in the foothills to the west of I-280.

### Emergency Response

By serving as a Certified Unified Program Agency (CUPA), the City's Department of Public Safety conducts inspections of identified facilities that use hazardous materials, and it reviews and certifies associated risk management plans to prevent accidental releases of hazardous materials. The City also maintains a hazardous materials response team, which is specially trained and equipped to mitigate emergencies that may result in hazardous materials spills, releases, and discharges. This team is relied upon to maintain safety when confronted with an emergency involving hazardous materials. The City has also improved hazardous materials response by maintaining a Type II HazMat Response Unit. In the event of an emergency such as a wildfire, flood, or dam failure, the City would coordinate evacuation efforts outlined in the Santa Clara Operational Hazard Mitigation Plan. Evacuation routes and public notification would be coordinated by the Santa Clara County Fire Department (Santa Clara County 2017).

### *3.8.2 Regulatory Setting*

#### Federal

Several federal agencies regulate hazardous substances. These agencies include the EPA, the Occupational Safety and Health Administration (OSHA), and the DOT. Applicable federal



regulations and guidelines for regulating hazardous materials are contained primarily in the Code of Federal Regulations (CFR) as described below.

The key federal EPA laws governing the use, storage, and disposal of hazardous materials that are relevant to the plan are the Resources Conservation and Recovery Act (RCRA), the Hazardous and Solid Waste Amendments Act, and the Toxic Substances Control Act, which address hazardous materials and wastes; the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); and the Superfund Amendments and Reauthorization Act, which address cleanup of contamination. Specific regulations for implementation of these statutes are codified in Title 40 of the CFR, which also regulates the removal and disposal of asbestos-containing materials and items containing polychlorinated biphenyl (PCB).

CFR Title 29, Part 1910 describes the federal Hazard Communication Standard, which requires that workers be informed of the hazards associated with the materials they handle, which includes workers at construction sites. Training in chemical work practices must include methods in the safe handling of hazardous substances, use of emergency response equipment, and an explanation of the building emergency response plan and procedures.

CFR Title 49, Part 5101 regulates the transportation of hazardous materials on roadways and by rail and air as regulated by the DOT and EPA. These two agencies coordinate their efforts, especially at the regional level, to ensure compliance with both RCRA and Hazardous Materials Transportation Act (HMTA) regulations.

#### *Resource Conservation and Recovery Act (42 USC Section 6901 et seq.)*

The Resource Conservation and Recovery Act gives the EPA the authority to control hazardous waste from “cradle to grave,” including the generation, transportation, treatment, storage, and disposal of hazardous waste. The act also sets forth a framework for the management of nonhazardous solid wastes.

The 1984 federal Hazardous and Solid Waste Amendments to the RCRA focus on waste minimization and phasing out land disposal of hazardous waste, as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for the EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program (EPA 2015).

#### *Comprehensive Environmental Response, Compensation, and Liability Act (42 USC Section 9601 et seq.)*

CERCLA provides a federal “superfund” to clean uncontrolled or abandoned hazardous waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through the act, the EPA identifies parties responsible for any release and ensures their participation in the cleanup.



The EPA is authorized to implement CERCLA in all 50 states and in U.S. territories, though Superfund site identification, monitoring, and response activities are coordinated through the state environmental protection or waste management agencies. The Superfund Amendments and Reauthorization Act of 1986 reauthorizes CERCLA to continue cleanup activities around the country and includes several site-specific amendments, definition clarifications, and technical requirements (EPA 2015).

#### *Occupational and Safety Health Act (29 USC Section 651 et seq.)*

The Occupational and Safety Health Act is intended to ensure worker and workplace safety by requiring that employers provide their workers a place of employment free from recognized health hazards, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, and unsanitary conditions. The Occupational Safety and Health Administration (OSHA) is a division of the US Department of Labor that oversees the administration of the act and enforces standards in all 50 states.

#### *Toxic Substances Control Act (15 USC Section 2601 et seq.)*

The Toxic Substances Control Act provides the EPA with authority to require reporting, record-keeping, testing requirements, and restrictions relating to chemical substances and mixtures. The TSCA addresses the production, importation, use, and disposal of specific chemicals, including PCBs, asbestos, radon, and lead-based paint (EPA 2015).

#### *Federal Hazardous Materials Transportation Law and Hazardous Materials Regulations (49 USC Section 5101 et seq.)*

The federal hazardous materials (hazmat) transportation law is the basic statute regulating hazardous materials transportation in the United States. Section 5101 of the federal hazmat law states that the purpose of the law is to protect against the risks to life, property, and the environment which are inherent in the transportation of hazardous material in intrastate, interstate, and foreign commerce.

The Hazardous Materials Regulations are administered by the Pipeline and Hazardous Material Safety Administration (PHMSA) (2015) and implement the federal hazmat laws. Through the PHMSA, the regulations govern the transportation of hazardous materials via highway, rail, vessel, and air by addressing hazardous materials classification, packaging, hazard communication, emergency response information, and training. The PHMSA also issues procedural regulations, including provisions on registration and public-sector training and planning grants (49 CFR Parts 105, 106, 107, and 110).

The Federal Motor Carrier Safety Administration (FMCSA) issues regulations concerning highway routing of hazardous materials, hazardous materials endorsements for a commercial driver's license, highway hazardous material safety permits, and fiscal responsibility requirements for motor carriers of hazardous materials.



### *Federal Aviation Regulations*

Sunnyvale lies in the landing pattern of Moffett Federal Airfield. During south winds, planes take off over heavily-developed areas. Development near airports and heliports can pose a potential hazard to people and property on the ground, as well as create obstructions and other hazards to flight. The Federal Aviation Regulations (FAR) provide criteria for evaluating the potential effects of obstructions on the safe and efficient use of navigable airspace within approximately 1 mile of a heliport, approximately 2 to 3 miles of airport runways, and approximately 9.5 miles from the end of high-traffic runways that have a precision instrument approach. According to the obstruction criteria provided in FAR Part 77, the FAA requires notification of any proposed construction or alteration projects of:

- More than 200 feet in height above ground level.
- Greater height than an imaginary surface extending outward 100 feet and upward one foot for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of a public-use or military airport with at least one runway more than 3,200 feet in actual length.
- Greater height than an imaginary surface extending outward 50 feet and upward one foot for a horizontal distance of 10,000 feet from the nearest point of the nearest runway of a public-use or military airport with its longest runway no more than 3,200 feet in actual length.
- Greater height than an imaginary surface extending outward 25 feet and upward one foot for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area of a public-use heliport.

Other airspace protection concerns identified by the FAA include avoiding land uses in the airport vicinity that would create hazards to flight such as electrical interference, lighting, glare, smoke, and bird strikes. Under the California State Aeronautics Act, local governments have the authority to protect airspace as defined by the criteria in FAR Part 77.

The FAA requires notification of proposed construction or alteration projects that exceed the FAR Part 77 criteria at least 30 days prior to beginning construction (FAA Form 7460-1). Following notification of proposed construction or alteration, the FAA may conduct an aeronautical study to determine if proposed structures and construction equipment would create an airspace hazard. The FAA commonly requires proposed structures and construction equipment affecting navigable airspace to be marked and/or lighted for increased visibility.

### State

#### *California Environmental Protection Agency*

The California Environmental Protection Agency (CalEPA) was created in 1991 by Governor's Executive Order. The six boards and departments were placed under the CalEPA "umbrella" to create a cabinet-level voice for the protection of human health and the environment and to assure the coordinated deployment of State resources. The agency's mission is to restore, protect, and



enhance the environment to ensure public health, environmental quality, and economic vitality (CalEPA 2018).

### *Certified Unified Program Agency*

The Sunnyvale Department of Public Safety is the designated CUPA for the City. As the City's designated CUPA, the Sunnyvale Department of Public Safety is tasked with local level implementation of regulations published by California Department of Toxic Substance Control, Enforcement and Emergency Response Division Unified Program, which includes a consolidation of six environmental program. The purpose of the agencies designated as Certified Unified Program Agencies is to ensure consistency throughout the State regarding administrative requirements, permits, inspections, and enforcement of hazardous materials and hazardous wastes through the following State-regulated environmental programs:

- Hazardous Materials Reporting
- Hazardous Waste Generator
- Hazardous Waste Treatment
- Underground Storage Tank (UST) Program
- Aboveground Petroleum Storage Tanks
- California Accidental Release Prevention

The Secretary of CalEPA is directly responsible for coordinating the administration of the Unified Program. The Unified Program requires all counties to apply to the CalEPA Secretary for the certification of a local unified program agency. Qualified cities are also permitted to apply for certification.

The State agencies responsible for these programs set the standards, while local governments implement the standards. CalEPA oversees implementation of the Unified Program, and the local CUPA is required to consolidate, coordinate, and make consistent the administrative requirements, permits, fee structures, and inspection and enforcement activities for these six program elements. Most CUPAs have been established as a function of a local environmental health or fire department.

### *Assembly Bill 2286*

The State of California recognized and responded to the need for increased sharing of hazardous materials information by passing Assembly Bill (AB) 2286, which required all businesses handling regulated quantities of hazardous material to electronically report inventories and site maps to the jurisdiction by 2013. Similarly, the City of Sunnyvale is required to report hazardous materials inventories and compliance inspection data in compliance with AB 2286.



### *Hazardous Materials and Waste Management*

At the State level, CalEPA is the “umbrella” agency under which a number of the State’s environmental agencies operate. These subordinate agencies include the California Air Resources Board (CARB), the Department of Pesticide Regulation, the DTSC, CalRecycle, the Office of Environmental Health Hazard Assessment, and the SWRCB.

Within CalEPA, the DTSC has primary regulatory responsibility for hazardous waste management. CalEPA has adopted regulations implementing a Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program). The program is implemented at the local level by the City of Sunnyvale Department of Public Safety acting as the CUPA. AB 2286 requires all businesses handling regulated quantities of hazardous materials to electronically report inventories and site maps to the local jurisdiction. The City is required to report hazardous materials inventories and compliance inspection data to the State.

The CHP, the California Department of Transportation (Caltrans), and the DTSC implement and enforce State and federal laws regarding hazardous materials transportation.

Certain projects are required to comply with the National Pollutant Discharge Elimination System (NPDES) general construction permit to manage stormwater runoff (see Section 3.8, Hydrology and Water Quality, of this Draft EIR). This permit requires a stormwater pollution prevention plan (SWPPP) that identifies best management practices (BMPs) for the handling of fuels and oils, including measures to minimize the potential for spills. Implementation of these BMPs is intended to minimize the potential for accidental spills on construction sites by requiring the designation of safe, covered storage areas for such materials as well as safe handling practices.

### *Contaminated Sites Remediation*

The DTSC and the applicable Regional Water Quality Control Board (RWQCB) are the two primary agencies for issues pertaining to sites where hazardous materials have resulted in environmental contamination (e.g., soil and groundwater). The San Francisco Bay RWQCB is the regional authority for water quality in the Sunnyvale area. Local jurisdictions, such as the City of Sunnyvale and Santa Clara County, may also be involved in site remediation projects, such as leaking underground storage tanks. These agencies implement a regulatory process to address the release of hazardous materials that could be harmful to public health and the environment.

### *Asbestos-Containing Materials, Lead-Based Paint, PCB, and Mercury*

Federal and State asbestos regulations prohibit emissions of asbestos from demolition or construction activities, among others; specify precautions and safe work practices that must be followed to minimize the potential for release of asbestos fibers; and require notice to federal and local government agencies prior to beginning renovation or demolition that could disturb asbestos-containing building materials. The Bay Area Air Quality Management District (BAAQMD) Regulation 11, Rule 2, Asbestos Demolition, Renovation and Manufacturing, establishes emissions



control of asbestos in the atmosphere during demolition, renovation, and manufacturing, as well as appropriate waste disposal procedures.

The BAAQMD and Cal/OSHA are the agencies with primary responsibility for enforcement of asbestos regulations. Per Cal/OSHA, any material containing more than 0.1 percent asbestos by weight must be handled by a qualified contractor licensed to handle asbestos materials.

Among its numerous uses and sources, lead can be found in paint, water pipes, solder in plumbing systems, and soils around buildings and structures painted with lead-based paint. In 1978, the federal government required the reduction of lead in house paint to less than 0.06 percent. However, some paints manufactured after 1978 for industrial or marine uses legally contain more than 0.06 percent lead. Cal/OSHA standards establish a maximum safe exposure level for types of construction work where lead exposure may occur, including demolition of structures where lead-based paint is present; removal or encapsulation of materials containing lead; and new construction, alteration, repair, or renovation of structures with materials containing lead. Inspection, testing, and removal of lead-containing building materials must be performed by State-certified contractors who are required to comply with applicable health and safety and hazardous waste regulations.

The DTSC has classified polychlorinated biphenyl as a hazardous waste at certain concentrations. Electrical transformers and fluorescent light ballasts may contain PCB, and if so, they are regulated as hazardous waste. Most ballasts manufactured since 1978 do not contain PCB and are required to have a label indicating that PCB is not present. Pre-1978 ballasts, switches, and thermostats may also contain elemental mercury, which is considered a hazardous waste when disposed. The federal Toxic Substance Control Act establishes procedures and standards for cleanup of PCB releases.

Spent fluorescent light tubes, thermostats, and other electrical equipment contain heavy metals that, if disposed of in landfills, can leach into soil or groundwater. Fluorescent light tubes typically contain concentrations of mercury that may exceed regulatory thresholds for hazardous waste and therefore must be managed in accordance with hazardous waste regulations. Elemental mercury can be found in many electrical switches, and when disposed of, such mercury is considered hazardous waste.

### Local

#### *City of Sunnyvale Municipal Code*

Title 20 of the Sunnyvale Municipal Code (SMC) contains hazardous material regulations adopted to safeguard life and property arising from the storage, handling, and use of hazardous substances, materials, and devices, and from conditions hazardous to life or property in the use or occupancy of buildings or structures. The SMC requires permits for certain hazardous activities and operations and inspections to determine whether such activities or operations can be conducted in a manner that complies with the State's hazardous materials regulation standards.



### *City of Sunnyvale General Plan*

The Safety and Noise chapter of the City's General Plan contains the following goals and policies that are relevant to the analysis of the hazards and hazardous materials impacts:

Policy SN-1.5a Maintain the City's status as a Unified Program Agency as certified by the Environmental Protection Agency.

Policy SN-1.6a Provide a specially trained and equipped response team capable of mitigating emergencies resulting from hazardous materials leaks, spills and discharges and conduct related inspections and permit activities.

Policy SN-1.6b Consider electronic technology to provide Hazardous Materials Management Plan (HMMP) information "on-line" at emergency scenes.

Policy SN-1.6c Consider a regional hazardous materials response system.

Policy SN-1.6d Study potential impacts of emerging bio-technology on response capabilities and related inspection and permit activities.

### *City of Sunnyvale Department of Public Safety*

The City's Department of Public Safety conducts inspections of identified hazardous materials facilities and reviews and reviews risk management plans for compliance with applicable regulations to prevent and mitigate accidental releases of hazardous materials. The City also maintains a hazardous materials response team, which is specially trained and equipped to mitigate emergencies that result in hazardous materials spills, releases, and discharges.

### *City of Sunnyvale Local Hazard Mitigation Annex*

Sunnyvale's Local Hazard Mitigation Plan is an annex to the ABAG (2010) plan and focuses on the nine likely hazards to occur in the Bay Area. The nine hazards comprise five earthquake-related hazards—faulting, shaking, landslides, liquefaction, and tsunamis—and four weather-related hazards—flooding, landslides, wildfires, and drought. The plan annex is continually examined and analyzed for future needed changes that may develop in the area of recovery.

### *Local Hazard Mitigation Plan*

The City participates in a multi-jurisdictional effort that fulfills the requirements of the Federal Emergency Management Agency (FEMA) Disaster Mitigation Act of 2000 requiring all local governments to develop similar, cooperative plans designed to maintain and enhance a disaster-resistant region by reducing the potential loss of life, property damage, environmental degradation from natural disasters. The local plan is entitled Taming Natural Disasters: Multi-Jurisdictional Local Hazard Mitigation Plan for the San Francisco Bay Area (ABAG 2010). The mitigation plan's territory is administered by the Association of Bay Area Governments.



### *Santa Clara County Hazard Mitigation Plan*

The Santa Clara County Hazard Mitigation Plan (2012) serves as a supplement to the Association of Bay Area Governments (ABAG) Local Hazard Mitigation Plan. The County's plan addresses regional response to natural and man-made disasters, including earthquake related hazards, weather-related hazards, floods, landslides, and wildfires. The plan includes mitigation to protect infrastructure damage and information on disaster prevention and recovery, as well as ensures the health and safety of county residents.

### *Santa Clara County Airport Land Use Commission Comprehensive Land Use Plan for Moffett Federal Airfield*

A small portion of the project site is within the AIA for the Moffett Federal Airfield. The Moffett Federal Airfield CLUP, adopted by the Santa Clara County ALUC, is intended to safeguard the general welfare of the inhabitants within the vicinity of the airport, as well as aircraft occupants. The CLUP is also intended to ensure that surrounding new land uses do not affect airfield operations. The CLUP identifies the AIA, which is a composite of areas surrounding the Airfield that are affected by noise, height, and safety considerations. Within the AIA, the CLUP establishes a (1) noise restriction area, (2) height restriction area, and (3) safety restriction area.

### *3.8.3 Impacts and Mitigation Measures*

#### Standards of Significance

This analysis evaluates the Specific Plan's impacts from hazards and hazardous materials based on the standards identified in CEQA Guidelines Appendix G. The City has determined that a hazards and hazardous materials impact is considered significant if the Specific Plan would:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.
5. For a Specific Plan located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the Specific Plan Area.



- 6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- 7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

**TRANSPORTATION, USE, AND DISPOSAL OF HAZARDOUS MATERIALS  
(STANDARD OF SIGNIFICANCE 1)**

**Impact 3.8.1      Would the Specific Plan create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

The Specific Plan, in concert with the City’s General Plan policies, would guide future development and redevelopment in Sunnyvale. New development could result in increased transport, use, storage, and disposal of hazardous materials in the plan area. Since the plan area is along a highway business corridor with commercial and light industrial development, it would be expected that some existing businesses, such as dry-cleaning businesses and gas stations, would pose potential hazards to people and the environment as the result of development activities allowed under the Specific Plan. New development under the Specific Plan would be primarily residential and commercial/retail. The plan area would not be zoned for industrial development.

The transport, use, storage, and disposal of hazardous materials by future development would be required to comply with applicable local, State, and federal regulations relating to construction and operations. Facilities that use hazardous materials would be required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases. Federally, the RCRA gives the EPA the authority to control the generation, transportation, treatment, storage, and disposal of hazardous waste.

Future projects under the Specific Plan would comply with CalEPA activities to reduce public exposure to air and water pollution. They would also comply with CalEPA’s health risk assessment policies for toxic substance management. The SMC and General Plan policies listed in Section 3.8.2, Regulatory Framework, would minimize potential risks to the public and the environment through inspections and permitting activities.

Compliance with federal, State, and local regulations related to the transport, use, and disposal of hazardous materials would reduce this impact to **less than significant**.

**Mitigation Measures**

None required.

**Level of Significance**

Less than significant.

**ACCIDENTAL RELEASE AND EXPOSURE TO HAZARDOUS MATERIALS  
(STANDARD OF SIGNIFICANCE 2)**

**Impact 3.8.2** Would the Specific Plan 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?

Release of toxic materials could occur through reasonably foreseeable events including floods, earthquakes, fires, floodwaters, or pipeline or tank ruptures. Asbestos, lead, radon, petroleum, and volatile gases could be released through Specific Plan construction activities, including building demolition, paving, and grading activities, as well as accidents involving construction equipment. Future projects could involve the transportation, use, and disposal of hazardous materials in the plan area. These activities could result in the accidental release of hazardous materials into the environment and expose the public to those materials. Future projects could result in exposure to hazardous materials that may be contained in hazardous materials cleanup sites or in existing buildings in the plan area. There is the potential for soil and/or groundwater contamination in the plan area where land uses have been dominated by industrial activities involving gasoline and toxic cleaning products.

As discussed in Section 3.8.1, Existing Setting, a search of the DTSC and SWRCB websites determined that no properties in the plan area are located on the Cortese List of hazardous materials release sites.

As stated in Goal SN-1, the City would ensure that natural and human-caused hazards are recognized and considered in decisions affecting the community. Therefore, future projects would require site-specific testing for hazardous materials, along with a certified Phase I Environmental Site Assessment (ESA), to determine the presence of toxic substances. A Phase II ESA may also be required depending on the results of the Phase I ESA. Additionally, future projects would be required to comply with federal, State, and local policies regarding the handling and disposal of hazardous materials.

In addition, future projects would comply with AB 2286, which regulates hazardous materials inventories for all California businesses. Certain projects would be required to comply with NPDES general construction permit best management practices to minimize impacts from potential spills. The City, along with the San Francisco Bay RWQCB and the DTSC, would implement actions to address site remediation and cleanup measures prior to development. Future projects would comply with City policies discussed in Section 3.8.2, Regulatory Framework. The City and County Local Hazard Mitigation Plans address regional response to large-scale exposure to hazardous substances resulting from earthquakes, floods, and wildfires as they relate to the public's health and safety.

Demolition activities within the plan area would be required to comply with BAAQMD Regulation 11, Rule 2, Asbestos Demolition, Renovation and Manufacturing, which requires removal of



asbestos-containing materials prior to demolition in accordance with safety standards to ensure worker and public safety and compliance with Cal/OSHA regulations. In addition, the removal or renovation of structures with lead-based paint or those that may have PCB-containing equipment would also be required to comply with applicable laws and regulations to minimize the potential for accidental release to the environment or improper disposal or transport.

New or expanded industrial or commercial uses in the plan area that involve the use of hazardous materials would be required to obtain a permit, which would include a Hazardous Materials Business Plan with a material inventory list and emergency response plan. This would minimize the potential for accidental releases from those new or expanded uses.

Implementation of the above hazardous materials standard measures would minimize the accidental release of hazardous materials in the plan area. With these measures and compliance with other applicable hazardous material regulations at the federal, State, and local levels, this impact would be **less than significant**.

### Mitigation Measures

None required.

### Level of Significance

Less than significant.

## RELEASE AND EXPOSURE TO HAZARDOUS MATERIALS IN THE VICINITY OF A SCHOOL SITE (STANDARD OF SIGNIFICANCE 3)

**Impact 3.8.3** Would the Specific Plan emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The Specific Plan Area contains commercial and light industrial facilities, including automobile dealers and service businesses. The plan area also includes several shopping centers, hotels, and restaurants. Future development under the Specific Plan would include a mixture of residential and nonresidential structures. Existing residential structures built before 1972 would potentially have been constructed with asbestos-containing materials and lead paint. These materials, if present, would be removed as part of any Specific Plan-level construction. During the materials removal process, there would be potential for asbestos to become airborne and impact sensitive receptors, including the schools located within 0.25 mile of the plan area. As discussed in Section 3.8.1, Existing Setting, the closest school to the plan area is Sunnyvale Christian School, 0.1 mile north of El Camino Real.

Existing regulations related to demolition of buildings containing hazardous emissions and acutely hazardous materials would reduce this impact to **less than significant**.

Prior to construction, future projects would include soil and air quality testing and implement any necessary remediation actions as required by City code. Any remaining hazardous materials would



be properly disposed of and transported in accordance with applicable regulatory guidelines. Projects would also comply with necessary construction and demolition activities outlined by Cal/OSHA designated by California Code of Regulations (CCR) Title 8, Section 1532.1 for employee training, air monitoring, and dust control.

The City’s Department of Public Safety would require a permit to stabilize reactive hazardous materials, and other permits for additional construction, operation, and storage of hazardous materials. Section 5.2.5 of the BAAQMD’s (2017) CEQA Air Quality Guidelines recommends that projects identify toxic air contaminants within 1,000 feet of sensitive receptors and conduct air dispersion modeling, risk assessment, and appropriate mitigation measures as needed. Compliance with State and local program guidance and City regulations would reduce impacts on schools within one-quarter mile of the plan area to **less than significant**.

### Mitigation Measures

None required.

### Level of Significance

Less than significant.

**LOCATED ON A HAZARDOUS MATERIALS SITE COMPILED PURSUANT TO GOVERNMENT CODE SECTION 65962.5 (STANDARD OF SIGNIFICANCE 4)**

**Impact 3.8.4**      **Would the Specific Plan 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?**

As discussed in Section 3.8.1, Existing Setting, a search of the DTSC and SWRCB websites determined that the no properties in the plan area are located on the Cortese List of hazardous materials release sites. Future implementing projects would require site-specific testing for hazardous materials, along with a certified Phase I Environmental Site Assessment (ESA), to determine the presence of toxic substances. A Phase II ESA may also be required depending on the results of the Phase I ESA. Additionally, future implementing projects would be required to comply with federal, State, and local policies regarding the handling and disposal of hazardous materials.

Since there are no active and inactive hazardous cleanup sites in the plan area, disturbance of land containing hazardous materials due to excavation would be unlikely. With compliance with all applicable hazardous material regulations at the federal, State, and local levels, impacts would be **less than significant with mitigation incorporated**.

### Mitigation Measures

**HAZ-1**      The City shall require that a Phase I ESA is prepared and submitted with any application for new development or redevelopment within the adopted project



boundary. The Phase I ESA shall be prepared by a qualified professional registered in California and in accordance with ASTM E1527-13 (or the most current version at the time a development application is submitted for the project).

If determined necessary by the Phase I ESA, a Phase II ESA shall be conducted to determine the lateral and vertical extent of soil, groundwater, and/or soil vapor contamination, as recommended by the Phase I ESA.

The City shall not issue a building permit for a site where contamination has been identified until remediation or effective site management controls appropriate for the use of the site have been completed, consistent with applicable regulations and to the satisfaction of the City of Sunnyvale, DTSC, or San Francisco Bay RWQCB (as appropriate) before initiation of construction activities. Deed restrictions, if appropriate, shall be recorded. If temporary dewatering is required during construction or if permanent dewatering is required for subterranean features, the City shall not issue an improvement permit or building permit until documentation has been provided to the City that the San Francisco Bay RWQCB has approved the discharge to the sewer. Discharge of any groundwater removed from a construction site within the adopted project and to the El Camino Storm Drain Channel, Calabazas Creek, or storm drain shall be subject to Water Pollution Control Permit requirements.

If the Phase I ESA determines there are no RECs, no further action is required. However, the City shall ensure any grading or improvement plan or building permit includes a statement if hazardous materials contamination is discovered or suspected during construction activity, all work shall stop immediately until a qualified professional has determined an appropriate course of action.

### Level of Significance

Less than significant.

#### LOCATED WITHIN 2 MILES OF A PUBLIC OR PUBLIC USE AIRPORT (STANDARD OF SIGNIFICANCE 5)

**Impact 3.8.5** For a Specific Plan 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 Specific Plan result in a safety hazard or excessive noise for people residing or working in the Specific Plan Area?

The Specific Plan Area is not within 2 miles of a public or private airport. The nearest airport to the Specific Plan Area is Moffett Federal Airfield located approximately 2.5 miles to the north. While a short segment of the western portion of El Camino Real is included in the Moffett Federal Airfield AIA, the plan area is not located within the noise, safety, or height restriction zones delineated in the CLUP for Moffett Federal Airfield and has no heliports listed by the Federal



Aviation Administration (FAA) (Santa Clara County Airport Land Use Commission 2012). However, future development projects in the Specific Plan Area that fall within the AIA boundaries would require review by FAA and the ALUC.

As discussed in Section 3.8.2 above, the CLUP focuses on the three areas of ALUC's responsibility: (1) aircraft noise, (2) the safety of persons on the ground and in aircraft, and (3) the control of objects in navigable airspace. FAR Part 77 of the FAA establishes imaginary surfaces for Moffett Federal Airfield and its runways as a means to identify objects that are obstructions to air navigation (see **Table 3.9-1**). Future development under the proposed project can introduce potential sources of hazards to airfield operations with equipment or structures that exceed FAR Part 77 surfaces. FAA issuance of a "Determination of No Hazard" for future development exceeding FAR Part 77 surfaces, and compliance with any conditions set forth by the FAA in its determinations, would ensure the future development would not be a potential aviation hazard.

With the implementation of Mitigation Measures HAZ-2 and HAZ-3, future development projects in the Specific Plan Area that are within the AIA boundaries would not result in a significant safety hazard to airport operations by obtaining a "Determination of No Hazard" or "Determination of No Hazard with Conditions" (and complying with any conditions set forth by the FAA in its determination) to ensure the development (including construction equipment) would not result in an aviation hazard. Impacts would be reduced to a **less than significant** level.

### Mitigation Measures

**HAZ-2** Prior to the issuance of a building permit for above ground construction of future projects in the Specific Plan Area, if proposed structures exceed the FAA Part 77 Surface, the project applicant shall submit an FAA Form 7460-1 for the permanent structure prior to submittal for the temporary construction equipment (outlined in Mitigation Measure HAZ-3 below). A "Determination of No Hazard" or "Determination of No Hazard with Conditions" shall be obtained prior to permit issuance for any above ground improvements. If a "Determination of No Hazard with Conditions" is issued, the conditions shall be included on the approved plan set and implemented.

**HAZ-3** Prior to the issuance of a building permit, if construction equipment has the potential to exceed the FAA Part 77 Surface, the project applicant shall submit an FAA Form 7460-1, "Notice of Proposed Construction or Alteration" to the FAA at least 45 days (60 to 90 days recommended) prior to construction of the project, which shall specify the equipment type (e.g., crane) and duration to be used. An Aeronautical Study Number for the permanent structure shall be included in the submittal form. A "Determination of No Hazard" or "Determination of No Hazard with Conditions" shall be obtained prior to permit issuance for above ground activities. If a "Determination of No Hazard with Conditions" is issued, all conditions shall be included on the approved plan set and implemented.

### Level of Significance

Less than significant with mitigation.

#### EMERGENCY RESPONSE AND EVACUATION PLANS (STANDARD OF SIGNIFICANCE 6)

##### Impact 3.8.6 Would the Specific Plan impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Future construction within the Specific Plan area could temporarily affect operating conditions on emergency access and evacuation routes from movement of heavy equipment, worker vehicle parking, and materials delivery and storage, depending on project locations. The Specific Plan also proposes roadway improvements such as bike lanes, crosswalks, and secondary street improvements along existing roadways. These activities may result in the need for temporary traffic lane closures or narrowing, which could affect emergency response or evacuation routes. Implementation of the Specific Plan could generate additional peak traffic conditions that could interfere with emergency response and evacuation plans, while projects within the Specific Plan area could create new hazards in the City that would require emergency response personnel in case of a man-made or natural disaster.

The City's Local Hazard Mitigation Plan includes measures to ensure coordinated activities between municipalities in the event of an emergency. For example, the hazard mitigation plan includes measures to continually assess emergency response operations, gather data regarding hazards in the city to enhance emergency response plans, and continue local mutual aid agreements for emergency response with other jurisdictions. Additionally, the City maintains an Emergency Preparedness Advisory Commission and operates a Community Emergency Response Team to educate and prepare the public to respond and survive in case of natural or man-made disasters. The Sunnyvale Hazard Mitigation Plan summarizes emergency response functions in the City's Emergency Management Organization (EMO).

The Specific Plan does not propose any physical changes that would affect the City's main evacuation routes (Central Expressway and US 101) or other major roadways such as Lawrence Expressway. The Specific Plan would not conflict with any federal, State, and local enforcement of emergency response plans. Future projects in the Specific Plan Area would comply with countywide emergency response programs and continued cooperation with emergency response service providers. Therefore, impacts would be **less than significant**.

### Mitigation Measures

None required.

### Level of Significance

Less than significant.

**WILDFIRES (STANDARD OF SIGNIFICANCE 7)**

**Impact 3.8.7** Would the Specific Plan expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

The Specific Plan covers a highly developed urban area that is not adjacent to large open spaces that may be susceptible to the risk of wildfire.

According to the Santa Clara County Fire Hazard Severity Zones Map, Sunnyvale is not located within a State Responsibility Area (SRA) for wildfires because the risk of wildfires is deemed low due to the urbanized setting of the City. The Specific Plan site lies approximately 4 miles from the nearest Fire Hazard Severity Zone, which is located in the foothills to the west of I-280.

For the reasons above, the Specific Plan would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. A **less than significant** impact would occur.

**Mitigation Measures**

None required.

**Level of Significance**

Less than significant.

**CUMULATIVE IMPACTS**

**Impact 3.8.8** Would the Specific Plan result in cumulative impacts to hazards and hazardous materials?

The cumulative setting for hazards and hazardous materials includes the plan area, the cities of Sunnyvale and Santa Clara, and the surrounding areas in Santa Clara County. Most hazardous materials, human health, and safety impacts as described in CEQA Appendix G are mostly site-specific, except where there is groundwater contamination, and are not cumulative by nature, as impacts generally vary by land use, site characteristics, and site history.

All projects undertaken in the city require compliance with local, State, and federal hazardous materials regulations. Therefore, compliance with existing federal, State, and local regulations regarding the handling, transport, and disposal of hazardous materials, in addition to site-specific hazardous materials analysis by future development projects in the Specific Plan Area, would minimize potential risks associated with accidental exposure to hazardous materials and reduce impacts to schools within one-quarter mile of future project sites, as well as on emergency response or evacuation routes during construction of future projects.

As discussed in Impact 3.8.5 above, future development projects that fall within the AIA boundaries would require review by FAA and the ALUC. With the implementation of Mitigation Measures HAZ-1, HAZ-2 and HAZ-3, future development projects in the Specific Plan Area that are within the AIA boundaries would not result in a significant safety hazard to airport operations



by obtaining a “Determination of No Hazard” or “Determination of No Hazard with Conditions” (and complying with any conditions set forth by the FAA in its determination) to ensure the development (including construction equipment) would not result in an aviation hazard. Other future development projects would be held to similar requirements to reduce potentially significant impacts relative to airport hazards.

Therefore, this impact would be reduced to a **less than cumulatively considerable level**.

#### Mitigation Measures

Refer to Mitigation Measures HAZ-1 through HAZ-3.

#### Level of Significance

Less than cumulatively considerable with mitigation.

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## 3.9 Hydrology and Water Quality

This section identifies existing drainage conditions and surface water and groundwater quality affecting hydrological resources in the Specific Plan Area and the surrounding vicinity. The section also evaluates the potential impacts of the proposed project with respect to flooding, drainage, erosion, and water quality, and identifies feasible mitigation measures to lessen significant impacts where necessary. Refer to Section 3.16, Utilities and Service Systems, for a discussion of water supply impacts.

### 3.9.1 Existing Setting

#### Hydrology and Drainage

Sunnyvale is located approximately three miles south of the southern shoreline of San Francisco Bay. The entire bay comprises a group of interconnecting bays and rivers including the Sacramento River, San Joaquin River, and Napa River; Suisun Bay, San Pablo Bay, and the main San Francisco Bay; and the Carquinez Strait. The main part of San Francisco Bay measures between 3 and 12 miles wide from east to west and between 48 and 60 miles long north to south. However, San Francisco Bay has been deliberately filled in since the mid-1800s by as much as a third, making the actual size difficult to accurately measure. The areas that were filled were primarily wetlands, which once consisted of many thousands of acres that formed the edges of the bay.

#### Regional Drainage

The Santa Clara Subbasin encompasses the extreme South Bay and those areas of Santa Clara County that drain to the South Bay, including the eastern slope of the Santa Cruz Mountains, the Santa Clara Valley, and the western slope of the Diablo Range. There are 11 watersheds in Santa Clara County, including the Coyote Creek watershed to the east, the Guadalupe River watershed to the south, and the southern half of the San Francisquito Creek watershed to the west of the basin. A series of small, relatively urbanized watersheds drain into the western side of the valley and baylands. The Specific Plan Area is located within the Sunnyvale East Channel and Sunnyvale West Channel watersheds.

#### Local Drainage

Natural regional drainage courses convey rainfall runoff from the southwest portion of Sunnyvale to Stevens Creek and from eastern areas to Calabazas Creek. The regional flood control agency is the Santa Clara Valley Water District (SCVWD). The SCVWD provides flood control protection throughout Santa Clara County, including Sunnyvale. To provide flood protection of urbanized areas, the SCVWD constructed three open channels (Sunnyvale West, Sunnyvale East, and El Camino) to increase drainage capacity to San Francisco Bay.

#### Stormwater Drainage System

Local storm drainage facilities in Sunnyvale are owned by the City of Sunnyvale and maintained by the City's Environmental Services Department. The system consists of approximately 4,200



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### 3.9 Hydrology

storm drain inlets, two pump stations, and approximately 300 miles of storm drains (Sunnyvale 2015). The local system discharges into a regional system managed by the SCVWD. In lower-elevation areas, pump stations collect runoff from low-lying urban areas and discharge to creeks and sloughs in higher elevations. The local system then conveys storm runoff to San Francisco Bay.

SCVWD facilities in the Specific Plan Area include the East El Camino Storm Drain Channel (East Channel). The East Channel is approximately six miles long and stretches from Interstate 280 to Guadalupe Slough (SCVWD 2016).

#### Groundwater

Santa Clara County includes portions of two groundwater basins as defined by the California Department of Water Resources (DWR): the Santa Clara Valley Basin (Basin 2-9) and the Gilroy-Hollister Valley Basin (Basin 3-3) (SCVWD 2016). The SCVWD manages two groundwater subbasins: the Santa Clara Subbasin and the Llagas Subbasin. These subbasins cover approximately 325 square miles and are bordered by the Santa Cruz Mountains to the west and the Diablo Range to the east. The aquifers that comprise the subbasins are made up gravel, sand, and silty sand deposits. In the Santa Clara and Llagas subbasins, aquifers extend to depths of over 1,000 feet in places. The Coyote Valley region of the Santa Clara Subbasin is fairly shallow, extending to a maximum depth of approximately 500 feet. Groundwater in the Santa Clara Subbasin generally flows to the northwest toward San Francisco Bay, while groundwater in the Llagas Subbasin generally flows to the southeast toward San Benito County (SCVWD 2016).

The Specific Plan Area is in the Santa Clara Subbasin area. The direction of groundwater flow beneath the Specific Plan Area is considered to be to the north-northeast. Groundwater levels are presumed to be at a depth ranging from 48 to 54 feet below ground surface (AEI Consultants 2014).

Sunnyvale's groundwater comes from the Santa Clara Plain subarea of the Santa Clara Subbasin. The City has six groundwater wells, which are used as a supplemental source to the imported surface water. Local groundwater from the Santa Clara Subbasin supplies about half of the county's water supply during typical years. Between 2010 and 2014, the City's groundwater pumping varied between 1,629 and 2,064 acre-feet per year (AFY). Groundwater production is not expected to increase beyond 1,000 AFY except in multiple dry year conditions per the City's 2015 Urban Water Management Plan (UWMP). SCVWD also provides the City with groundwater. The SCVWD estimates carryover storage in April of each year. Based on the calculated carryover capacity and anticipated customer demand, the SCVWD reviews and modifies its groundwater management strategy in order to maintain adequate water in the basin and avoid subsidence (SCVWD 2015a).



### Water Quality

The water quality of streams, creeks, ponds, and other surface water bodies can be greatly affected by pollution carried in contaminated surface water runoff. Pollutants from unidentified sources, known as non-point source pollutants, are washed from streets, construction sites, parking lots, and other exposed impervious surfaces into storm drains. Stormwater runoff from these surfaces is collected by storm drains and discharged into the East Channel and West Channel, which ultimately discharges into San Francisco Bay. Runoff often contains contaminants such as oil and grease, plant and animal debris (leaves, dust, animal waste, etc.), pesticides, litter, and heavy metals. In sufficient concentration, these pollutants have been found to adversely affect the aquatic habitats to which they drain.

### Impaired Water Bodies

The lower San Francisco Bay is listed for multiple pollutants. Chlordane, DDT, and dieldrin, all from non-point sources, require total maximum daily loads (TMDLs). Dioxin and furan compounds, due to atmospheric deposition, require TMDLs with completion dates of 2019, as do exotic species pollutants from ballast water and PCBs (dioxin-like) from unknown point sources. Polychlorinated biphenyls (PCBs) from unknown point sources and mercury from atmospheric deposition, industrial and municipal point sources, natural sources, non-point sources, and resource extraction require TMDLs, which are addressed through the implementation of National Pollutant Discharge Elimination System (NPDES) permits for stormwater and wastewater (SWRCB 2015).

### Flood Hazards and Flood Control

The Santa Clara Valley is essentially an active floodplain that has been severely altered by human activity and is subject to periodic flooding from storm events. Flooding has plagued Santa Clara County since the earliest settlement of the valley floor. Approximately 60 out of 300 square miles of the valley is susceptible to flooding. Despite efforts to provide adequate flood control, many of the streams, rivers, and creeks that flow through the area are still incapable of carrying flows from a 100-year storm event, with flooding issues involving the East Channel and Calabazas Creek, which is located east of the Specific Plan Area. Further, the increased amount of impervious area as a result of urban development has amplified the volume of stormwater runoff, thereby increasing the flooding potential in the valley.

The SCVWD provides flood control protection throughout Santa Clara County, including the planning area. To provide flood protection of urbanized areas, the SCVWD constructed three open channels (Sunnyvale West Channel, Sunnyvale East Channel, and El Camino Channel) to increase drainage capacity to San Francisco Bay. Currently, the SCVWD is updating the flood control abilities to the Sunnyvale East and West channels.

A system of levees protects Sunnyvale and Santa Clara at their northern borders from encroachment of San Francisco Bay waters. Stormwater runoff in low-lying areas is pumped out over the levees for discharge into San Francisco Bay by pump stations.



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### 3.9 Hydrology

The Specific Plan Area contains three areas in the 100-year flood, Zone AO,<sup>1</sup> designated by the Federal Emergency Management Agency (FEMA) (2009). The three areas total 0.75 square mile and are at risk for an estimated 1.5 feet of flooding in each area. The Specific Plan Area is largely built out with impervious surfaces.

#### Tsunami

Tsunamis are long period water waves caused by underwater seismic events, volcanic eruptions, or undersea landslides. Tsunamis affecting the San Francisco Bay Area would originate west of San Francisco Bay in the Pacific Ocean. Areas that are highly susceptible to tsunami inundation tend to be low-lying coastal areas, such as tidal flats, marshlands, and former bay margins that have been artificially filled.

A tsunami entering the bay through the relatively narrow Golden Gate Bridge would tend to dissipate as the wave energy spreads out as the bay becomes wider and shallower. A tsunami inundation map prepared as part of a statewide multi-agency effort shows that the bay shoreline and areas along sloughs up to approximately one mile inland could be affected in the region during an extreme but realistic tsunami. Mapped potential inundation areas are limited to marshy, undeveloped areas along the bayshore and portions of salt evaporation ponds adjacent to sloughs; these areas do not include the Specific Plan Area (Cal EMA, CGS, and USC 2009).

#### Seiche

A seiche is a rhythmic motion of water in a partially or completely landlocked water body caused by landslides, earthquake-induced ground accelerations, or ground offset. Seiches occur most frequently in enclosed or semi-enclosed basins such as lakes, bays, or harbors and may be triggered by strong winds, changes in atmospheric pressure, earthquakes, tsunamis, or tides. Forces that trigger a seiche are most severe if they operate at specific frequencies relative to the size of an enclosed basin.

Coastal measurements of sea level often show seiches with amplitudes of about an inch and periods of a few minutes due to oscillations of the local harbor, estuary, or bay, superimposed on the normal tidal changes. Tidal records for San Francisco Bay have been maintained for over 100 years and during that time, a damaging seiche has not occurred. A seiche of about 4 inches occurred during the 1906 earthquake, with a magnitude 8.3 on the Richter scale. It is probable that an earthquake similar to the 1906 earthquake would be the largest to occur in the Bay Area; consequently, seiches with an increase in water elevation of more than 4 inches would be considered unlikely. The Specific Plan Area is located over three miles inland of the San Francisco Bay, thus, impacts involving seiche as a result of the San Francisco Bay are considered negligible.

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<sup>1</sup> Zone AO are areas subject to inundation by 1 percent annual chance shallow flooding where average depths are between 1 and 3 feet.



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However, there is a large pond located southwest of the Specific Plan Area at East Remington Drive and Michelangelo Drive.

#### Levee Failure

Dike and levee systems in Santa Clara County have been constructed along San Francisco Bay, not as a barrier to prevent flooding but to protect salt evaporators and concentrators in the southernmost arm of the bay (Sunnyvale 2011a). Dikes are constructed of weak, locally derived bay materials that are constantly undergoing settlement, erosion by elements, and damage caused by burrowing animals. Without the present systems of dikes and levees, parts of Sunnyvale would normally be subjected to tidal flooding. To allow use of land subject to tidal flooding and subsidence, the levee systems would have to be extended and strengthened to protect low-lying areas. The Specific Plan Area is located over three miles inland from the San Francisco Bay. As a result, the Specific Plan Area is not considered at risk to levee failure.

#### *3.9.2 Regulatory Setting*

##### Federal

##### *Clean Water Act*

The principal law governing pollution of the nation's surface waters is the Federal Water Pollution Control Act (Clean Water Act [CWA]). Originally enacted in 1948, it was amended in 1972 and has remained substantially the same since. The CWA consists of two major parts: provisions that authorize Federal financial assistance for municipal sewage treatment plant construction; and regulatory requirements that apply to industrial and municipal dischargers. The CWA authorizes the establishment of effluent standards on an industry basis. The CWA also requires states to adopt water quality standards that "consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses."

The CWA forms the basic national framework for the management of water quality and the control of pollution discharges; it provides the legal framework for several water quality regulations, including the NPDES, effluent limitations, water quality standards, pretreatment standards, antidegradation policy, nonpoint source discharge programs, and wetlands protection. The U.S. Environmental Protection Agency (EPA) has delegated the responsibility for administration of portions of the CWA to State and regional agencies.

##### *Impaired Water Bodies*

CWA Section 303(d) and California's Porter-Cologne Water Quality Control Act (described below) require that the state establish the beneficial uses of its state waters and to adopt water quality standards to protect those beneficial uses. Section 303(d) establishes a TMDL, which is the maximum quantity of a contaminant that a water body can maintain without experiencing adverse effects, to guide the application of state water quality standards. Section 303(d) also requires the



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### 3.9 Hydrology

state to identify “impaired” streams (water bodies affected by the presence of pollutants or contaminants) and to establish the TMDL for each stream.

#### *National Pollution Discharge Elimination System*

To achieve its objectives, the CWA is based on the concept that all discharges into the nation’s waters are unlawful, unless specifically authorized by a permit. The NPDES is the permitting program for discharge of pollutants into surface waters of the United States under CWA Section 402. Thus, industrial and municipal dischargers (point source discharges) must obtain NPDES permits from the appropriate RWQCB. The existing NPDES (Phase I) stormwater program requires municipalities serving more than 1,000,000 persons to obtain a NPDES stormwater permit for any construction project larger than five acres. Proposed NPDES stormwater regulations (Phase II) expand this existing national program to smaller municipalities with populations of 10,000 persons or more and construction sites that disturb more than one acre. For other dischargers, such as those affecting groundwater or from nonpoint sources, a Report of Waste Discharge must be filed with the RWQCB. For specified situations, some permits may be waived, and some discharge activities may be handled through being included in an existing General Permit.

#### *National Flood Insurance Program*

Congress passed the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. These Acts are intended to reduce the need for large publicly funded flood control structures and disaster relief by restricting development on floodplains.

The National Flood Insurance Program (NFIP) provides a means for property owners to financially protect themselves from flood damage. The NFIP offers flood insurance to homeowners, renters, and business owners if their community participates in the program. Participating communities agree to adopt and enforce ordinances that meet or exceed FEMA requirements to reduce the risk of flooding. The County of Santa Clara and the City of Sunnyvale are participants and must adhere to the NFIP.

Through its Flood Hazard Mapping Program, FEMA identifies flood hazards, assesses flood risks and partners with states and communities to provide accurate flood hazard and risk data. Flood Hazard Mapping is an important part of the NFIP, as it is the basis of the NFIP regulations and flood insurance requirements. FEMA maintains and updates data through FIRMs and risk assessments. A FIRM is an official map of a community on which FEMA has delineated both the special hazard areas and the risk premium zones applicable to the community.

A Special Flood Hazard Area (SFHA) is an area within a floodplain having a one percent or greater chance of flood occurrence within any given year (commonly referred to as the 100-year flood zone). SFHAs are delineated on flood hazard boundary maps issued by FEMA. The Flood Disaster Protection Act of 1973 and the National Flood Insurance Reform Act of 1994 make flood insurance mandatory for most properties in SFHAs.

## State

### *California Toxics Rule*

The California Toxics Rule (CTR) is a Federal regulation issued by the EPA providing water quality criteria for potentially toxic constituents in receiving waters with human health or aquatic life designated uses in the State of California. CTR criteria are applicable to the receiving water body and therefore must be calculated based upon the probable hardness values of the receiving waters for evaluation of acute (and chronic) toxicity criteria. At higher hardness values for the receiving water, copper, lead, and zinc are more likely to be complexed (bound with) components in the water column. This in turn reduces the bioavailability and resulting potential toxicity of these metals.

### *Porter-Cologne Water Quality Control Act*

The CWA places the primary responsibility for the control of surface water pollution and for planning the development and use of water resources with the states, although it establishes certain guidelines for the states to follow in developing their programs and allows the EPA to withdraw control from states with inadequate implementation mechanisms.

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act (Water Code Sections 13000, et seq.). The Porter-Cologne Act grants the State Water Resources Control Board (SWRCB) and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a water quality control plan for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

### *State Water Resources Control Board*

The SWRCB administers water rights, water pollution control, and water quality functions throughout the state, while the RWQCBs conduct planning, permitting, and enforcement activities. For the proposed project, the NPDES permit is divided into two parts: construction; and post-construction. Construction permitting is administered by the SWRCB, while post-construction permitting is administered by the RWQCB. In California, NPDES permits are also referred to as waste discharge requirements (WDRs) that regulate discharges to waters of the United States.



### *Construction General Permit Order 2009-0009-DWQ*

On November 16, 1990, the EPA published final regulations that established stormwater permit application requirements for specified categories of industries. The regulations provide that discharges of stormwater to waters of the United States from construction projects are effectively prohibited unless the discharge complies with an NPDES Permit. On August 19, 1999, the State Water Board reissued the General Construction Stormwater Permit (Water Quality Order 99-08-DWQ). On December 8, 1999, the State Water Board amended Order 99-08-DWQ to apply to sites as small as one acre.

Dischargers whose projects disturb one (1) or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Discharges of Stormwater Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore a facility's original line, grade, or capacity.

To obtain coverage under the Construction General Permit, Permit Registration Documents (PRDs), including a Notice of Intent (NOI), Risk Assessment, Site Map, and Storm Water Pollution Prevention Plan (SWPPP), among others, must be filed with the SWRCB prior to the commencement of construction activity. The NOI would notify the SWRCB of the applicant's intent to comply with the Construction General Permit. The SWPPP, which must be prepared by a certified Qualified SWPPP Developer (QSD), would include a list of Best Management Practices (BMPs) the discharger would use to protect stormwater run-off and the placement of those BMPs. Additionally, the project's SWPPP must contain a visual monitoring program and a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs.

### *Groundwater Management Act*

In 1992, the State Legislature provided for more formal groundwater management with the passage of Assembly Bill (AB) 3030, the Groundwater Management Act (Water Code Section 10750, et seq.). Groundwater management, as defined in DWR's Bulletin 118 Update 2003, is the planned and coordinated monitoring, operation, and administration of a groundwater basin, or portion of a basin, with the goal of long-term groundwater resource sustainability. Groundwater management needs are generally identified and addressed at the local level in the form of Groundwater Management Plans (GMP). The Act provides local water agencies with procedures to develop a GMP to enable those agencies to manage their groundwater resources efficiently and safely while protecting the quality of supplies. Under the Act, development of a GMP by a local water agency is voluntary.

### *Sustainable Groundwater Management Act*

The Sustainable Groundwater Management Act (SGMA) established a framework for sustainable, local groundwater management. SGMA requires groundwater-dependent regions to halt



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overdraft and bring basins into balanced levels of pumping and recharge. With passage of the SGMA, the Department of Water Resources launched the Sustainable Groundwater Management (SGM) Program to implement the law and provide ongoing support to local agencies around the State. The SGMA:

- Establishes a definition of “sustainable groundwater management”;
- Requires that a Groundwater Sustainability Plan be adopted for the most important groundwater basins in California;
- Establishes a timetable for adoption of Groundwater Sustainability Plans;
- Empowers local agencies to manage basins sustainably;
- Establishes basic requirements for Groundwater Sustainability Plans; and
- Provides for a limited State role.

Specifically, SGMA requires local public agencies and groundwater sustainability agencies in high- and medium-priority basins to develop and implement groundwater sustainability plans (GSPs) or prepare an alternative to a GSP. According to the California Department of Water Resources, the Santa Clara Basin is considered a “High” priority basin (California Department of Water Resources, 2020). SCVWD manages the Santa Clara Subbasin through its Groundwater Management Plan, which sets forth basin management goals and objectives and describes how the Subbasin is managed. Refer to “San Francisco Bay Regional Water Quality Control Plan (Basin Plan)” below.

#### Regional

##### *San Francisco Bay Regional Water Quality Control Plan (Basin Plan)*

The Basin Plan is a master policy document that contains descriptions of the legal, technical, and programmatic bases of water quality regulation in the San Francisco Bay region. The plan, which is updated every three years, describes the beneficial uses to be protected in these waterways, water quality objectives to protect those uses, and implementation measures to ensure those objectives are achieved.

##### *Santa Clara Valley Water District Comprehensive Water Resources Management Plan*

The SCVWD’s Comprehensive Water Resources Management Plan is organized in the following elements: Water Supply, Natural Flood Protection, and Water Resources Stewardship. Each element includes an informational overview that describes overarching goals and related objectives on a broad level and places them in a countywide context.

At the heart of the plan are the goals, objectives, and strategies that serve as the district’s framework and provide information for partner agencies. The SCVWD is involved in water management at varying levels of involvement. In some instances, it plays a primary role; in others, the district collaborates with other agencies and/or partners; in still other cases, the SCVWD serves



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as an informational resource and public advocate. The Comprehensive Water Resources Management Plan clarifies these degrees of involvement.

#### *Santa Clara Valley 2016 Groundwater Management Plan*

The SCVWD's Groundwater Management Plan describes the District's comprehensive groundwater management framework, including existing and potential actions to achieve basin sustainability goals and ensure continued sustainable groundwater management. The GWMP covers the Santa Clara and Llagas subbasins, located entirely in Santa Clara County. The SCVWD's prior Groundwater Management Plan was adopted by the Board in 2012 and described the District's comprehensive groundwater management framework, including basin management objectives, strategies, groundwater management programs, and outcome measures. The 2016 GWMP updates and expands on technical information in the 2012 GWMP and is prepared as an Alternative to a Groundwater Sustainability Plan under the Sustainable Groundwater Management Act (SGMA).

#### *Santa Clara Valley Urban Runoff Pollution Prevention Program*

The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) is an association of 13 cities and towns in the Santa Clara Valley, the County of Santa Clara, and the SCVWD all working to improve the water quality of south San Francisco Bay and the streams of Santa Clara County, by reducing nonpoint source pollution in storm water runoff and other surface flows. The Program and member agencies collaborate and share in implementation of the NPDES permit for municipal stormwater discharges, also referred to as the Municipal Regional Stormwater Permit (MRP), into the San Francisco Bay. Member agencies include Campbell, Cupertino, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Mountain View, Palo Alto, San Jose, Santa Clara, Saratoga, Sunnyvale, the County of Santa Clara, and the SCVWD. The MRP includes requirements for controlling regional pollutants of concern (i.e., pesticides, mercury, polychlorinated biphenyls (PCBs), copper, legacy pesticides). Stormwater management requirements in the current MRP include (Santa Clara Valley Urban Runoff Pollution Prevention Program 2019):

- Reducing trash loads from stormwater by 100 percent by July 2022;
- Developing and implementing a trash monitoring program for creeks and shorelines;
- Meeting mercury and PCBs stormwater reduction goals; and
- Developing and implementing Green Stormwater Infrastructure (GSI) Plans.

#### LOCAL

#### *City of Sunnyvale Stormwater Quality BMP Guidance Manual for New and Redevelopment Projects*

The City's BMP Guidance Manual instructs project applicants and the City in the preparation, review, and approval of redevelopment projects according to current requirements of the NPDES Stormwater Discharge Permit described above. The focus of the manual is on post-construction BMPs, although BMPs to be implemented during construction are also addressed. The guidance



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manual satisfied MRP requirements adopted by the San Francisco RWQCB in October 2009 to regulate municipal separate stormwater systems in 76 jurisdictions in the San Francisco Bay Area. Agencies subject to the MRP include the City of Sunnyvale, 12 other municipalities in the Santa Clara Valley, the SCVWD, and the County of Santa Clara, which together form the SCVURPPP described above.

BMPs include any kind of procedure or device designed to minimize the quantity of pollutants that enter the storm drain system. Procedures can include the use of site design measures early in the planning stages of a project site to incorporate BMPs in the site landscape to minimize water quality impacts. They may also include source control BMPs such as placing signage on storm drain inlets, covering trash enclosures, and implementing practices such as sweeping and spill prevention programs. Treatment BMPs include permanent devices such as permeable paving, infiltration trenches, and bioretention areas. The focus of the BMP Guidance Manual is on post-construction BMPs, although BMPs to be implemented during construction are also addressed.

#### *City of Sunnyvale General Plan*

#### **Environmental Management Chapter**

The General Plan Environmental Management chapter contains the following policies that are relevant to the analysis of hydrology and water quality impacts:

- Policy EM-8.3      Ensure that stormwater control measures and best management practices (BMPs) are implemented to reduce the discharge of pollutants in stormwater to the maximum extent practicable.
- Policy EM-8.5      Prevent accelerated soil erosion. Continue implementation of a construction site inspection and erosion control program to prevent discharges of sediment from erosion and discharges of other pollutants from new and redevelopment projects.
- Policy EM-8.6      Minimize the impacts from stormwater and urban runoff on the biological integrity of natural drainage systems and water bodies.
- Policy EM-9.1      Maintain and operate the storm drain system so that storm waters are drained from 95 percent of the streets within one hour after a storm stops.
- Policy EM-10.1     Consider the impacts of surface runoff as part of land use and development decisions and implement BMPs to minimize the total volume and rate of runoff of waste quality and quantity (hydromodification) of surface runoff as part of land use and development decisions.
- Policy EM-10.2     Consider the ability of a land parcel to detain excess storm water runoff in flood prone areas and require incorporation of appropriate controls. Require the incorporation of appropriate stormwater treatment and control measures for new and redevelopment regulated projects and/or any sites that may



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reasonably be considered to cause or contribute to the pollution of stormwater and urban runoff as define in the current version of the stormwater Municipal Regional Permit.

Policy EM-10.3 Require the incorporation of appropriate stormwater treatment and control measures for industrial and commercial facilities as identified in the stormwater Municipal Regional Permit.

#### Land Use and Transportation Element

Policy LT-9.19 Protect creeks and wetlands as important parts of the community's natural environment and open space and for their contribution to flood control.

LT-9.19c: Minimize or divert pollutants from draining into creeks and wetlands by enforcing best management practices during construction, site development, and ongoing operations.

#### *City of Sunnyvale Municipal Code*

In response to the 2001 NPDES permit amendment, the City adopted an ordinance in 2003 entitled Stormwater Management, which can be found in Sunnyvale Municipal Code (SMC) Chapter 12.60. The purpose of the Stormwater Management ordinance is to provide regulations and give legal effect to certain requirements of the NPDES permit issued to the City. Specifically, Chapter 12.60 includes:

- Discharge prohibitions to the stormwater conveyance system.
- Requirements for stormwater pollution prevention and the development of stormwater management plans.
- Numeric sizing criteria for pollutant removal treatment systems.
- Applicability of hydromodification management requirements to certain areas of the city based on drainage area to creeks and watersheds.
- Requirements for agreements to maintain stormwater treatment best management practices once constructed.
- Guidance on the selection of BMPs as well as minimum best management practices for all dischargers.
- Authority for City staff to inspect and require the proper operation and maintenance of treatment devices.
- The process by which waivers and alternative compliance with permit requirements may be demonstrated.
- Penalties for failure to comply with provisions of the chapter.



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SMC Chapter 16.62, Prevention of Flood Damage, establishes regulations to prevent flood damage in Sunnyvale. The chapter outlines provisions for reducing flood hazards, including standards for construction, utilities, subdivisions, manufactured homes, floodways, and coastal high hazard areas.

- Section 16.62.020, Administration—Establishment of development permit. Applications for development permits within a floodplain shall include plans which include, but not limited to, plans in duplicate drawn to scale showing the nature, location, dimensions and elevation of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities; and the location of the foregoing.
- Section 16.62.030, Provisions for flood hazard reduction—Standards of construction. The section mandates construction standards for anchoring, construction materials and methods, and elevation and floodproofing.

#### *City of Sunnyvale Green Stormwater Infrastructure Plan*

In September 2019, the City adopted the Green Stormwater Infrastructure (GSA) Plan to guide the siting, implementation, tracking and reporting of GSI projects for both private and public projects within the City. GSI systems use plants and soils to mimic natural watershed processes, capture stormwater and create healthier and more resilient environments. Development of the GSI Plan is required by the City's Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit. The plan is intended to serve as an implementation guide for future GSI projects, to continue to transition from traditional stormwater systems to GSI systems. Future implementing projects within the Specific Plan area will be required to comply with the GSI Plan.

#### *3.9.3 Impacts and Mitigation Measures*

##### STANDARDS OF SIGNIFICANCE

Pursuant to California Environmental Quality Act (CEQA) Guidelines Appendix G, a hydrology or water quality impact would be considered significant if the project would result in any of the following actions:

- 1) Violate any water quality standards or otherwise substantially degrade surface or groundwater quality.
- 2) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
- 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:



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- i) result in substantial erosion or siltation on- or off-site.
  - ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.
  - iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- 4) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.
- 5) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

#### Project Impacts and Mitigation Measures

#### **WATER QUALITY AND WASTE DISCHARGE (STANDARD OF SIGNIFICANCE 1)**

#### **Impact 3.9.1 Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?**

##### Construction Water Quality Impacts

Construction activities associated with future development or redevelopment pursuant to the project would consist of grading, demolition, and limited vegetation removal that would increase soil erosion rates on the areas proposed for infill or redevelopment. Grading operations may impact surface runoff by increasing the amount of silt and debris carried by runoff. Areas with uncontrolled concentrated flow would experience loss of material in the graded areas, potentially impacting waters beyond the construction site.

Additionally, refueling and parking of construction equipment and other vehicles on-site during construction may result in oil, grease, or related pollutant leaks and spills that may discharge into storm drains. Improper handling, storage, or disposal of fuels and materials or improper cleaning of machinery close to area waterways could cause water quality degradation.

As noted in subsection 3.9.2, Regulatory Framework, above, SMC Chapter 12.60, Stormwater Management, establishes regulations and gives legal effect to certain requirements of the NPDES permit issued to Sunnyvale regarding municipal stormwater and urban runoff requirements. During construction of projects in the city, the dischargers, through individual coverage under the State's General Construction NPDES permits, must eliminate non-stormwater discharges to stormwater systems, develop and implement a stormwater pollution prevention plan (SWPPP), and monitor discharges to stormwater systems. Measures included in subsequent grading plans for infill or redevelopment projects would be required to comply with SMC Chapter 12.60, as well as to employ BMPs identified in the SWPPP to prevent erosion and control loose soil and



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sediment, to ensure that proposed construction does not result in the movement of unwanted material into waters within or outside the construction site. This would reduce construction water quality impacts associated with project implementation to a **less than significant** level.

#### Operational Water Quality Impacts

Subsequent development under the project would result in infill and other development in the Specific Plan Area. Buildout of the Specific Plan would result in comparable amounts of impervious surfaces as existing conditions, with only a slight increase in impervious surfaces overall. Direct surface water quality impacts could occur from the maintenance of landscaped areas associated with the use of fertilizers, herbicides, and pesticides, and from motor vehicle operation and maintenance, in both residential and commercial areas.

The following surface water quality impacts could occur from the general land use activities:

- Residential: maintenance of landscaped common spaces and public streetscapes (fertilizers, herbicides, and pesticides), and motor vehicle operation and maintenance
- Office/R&D/Retail: maintenance of landscaped areas and public streetscapes (fertilizers, herbicides, pesticides)
- Public roadway improvements and private parking facilities: vehicle use and maintenance (oil, grease, metals, trash, sediment)

Runoff typically contains oils, grease, fuel, antifreeze, and byproducts of combustion (such as lead, cadmium, nickel, and other metals), as well as nutrients, sediments, and other pollutants. Additionally, sizable quantities of animal waste from pets (e.g., dogs and cats) could lead to fecal contamination of water sources. Precipitation during the early portion of the wet season (December to April) displaces these pollutants into stormwater runoff, resulting in high pollutant concentrations in the initial wet weather runoff.

The amount and type of runoff generated by the various projects in the Specific Plan Area would be greater than that under existing conditions due to increases in the amount of impervious surface. There would be a corresponding increase in urban runoff pollutants and roadway contaminants such as heavy metals, oil, and grease, as well as an increase in nutrients (e.g., fertilizers) and other chemicals from landscaped areas. These constituents would result in water quality impacts on- and off-site drainage flows including City's stormwater channels.

Potential impacts on water quality from construction and operation activities are currently addressed through the existing requirements of SMC Chapter 12.60 and individual NPDES permits. Compliance with the State General Construction Activity Storm Water Permit requirements (where applicable), SMC Chapter 12.60, and the SCVWD Urban Runoff Pollution Prevention Program (2018) would reduce surface water quality impacts associated with implementation of the project to a less than significant level. Impacts are avoided by using effective construction phase, source control, and treatment control BMPs that include site preparation, runoff control, sediment



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retention, landscaping, roadwork and paving methods, and dewatering activities, among other features. The effectiveness of BMPs is recognized in the California Stormwater Quality Association's Stormwater Best Management Practice Handbooks.

Most development under the project would involve residential construction. Sunnyvale's (2011b) Stormwater Quality BMP Guidance Manual requires all projects, whether commercial, residential, or industrial that create and/or replace 10,000 square feet or more of impervious surface area to implement stormwater treatment measures, site design measures (e.g., LID), and source control measures. In addition, projects that would create and/or replace 1 acre or more of impervious surface, and which are in areas where creeks are susceptible to development-induced erosion, would be required to implement hydromodification measures so that development runoff rates do not exceed predevelopment rates. Operational impacts to runoff and surface and groundwater quality would be **less than significant** in this regard.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

### GROUNDWATER SUPPLY AND RECHARGE (STANDARD OF SIGNIFICANCE 2)

#### **Impact 3.9.2 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?**

The project site overlies the Santa Clara Subbasin, which is a part of the larger Santa Clara Valley – Santa Clara Subbasin, and is currently developed/disturbed and largely covered with impervious surfaces. According to the California Department of Water Resources, the Basin is identified as a "High" priority basin (California Department of Water Resources, 2020). SCVWD manages the Santa Clara Subbasin through its Groundwater Management Plan, which sets forth basin management goals and objectives and describes how the Subbasin is managed. The Groundwater Management Plan's goals include: 1) manage groundwater supplies to optimize water supply reliability and minimize land subsidence; and 2) protect groundwater from contamination, including salt water intrusion.

Buildout of the Specific Plan would result in comparable amounts of impervious surfaces as existing conditions, with only a slight increase in impervious surfaces overall. However, the Specific Plan Area is not located within a local groundwater recharge area and no groundwater extraction would occur as part of the project. The Specific Plan Area is underlain by soils with low percolation rates the effect on groundwater recharge would be less than significant (SCVWD 2015a). Implementation of the project would not result in the need for new or additional groundwater supplies. Therefore, implementation of the Specific Plan would not result in any groundwater extraction or depletion of groundwater supplies, and is not anticipated to interfere with



### 3.9 Hydrology

implementation of SCVWD's Groundwater Management Plan. Impacts would be **less than significant**.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

### **SUBSTANTIALLY ALTER THE EXISTING DRAINAGE PATTERN OF THE SITE OR AREA (STANDARD OF SIGNIFICANCE 3)**

**Impact 3.9.3** **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:**

- (i) result in substantial erosion or siltation on- or off-site;**
- (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;**
- (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or**
- (iv) impede or redirect flood flows?**

There are no streams or rivers located near the Specific Plan Area, although a manmade pond is located at the southeast corner of East Remington Drive and El Camino Real to the south of the project boundaries. Thus, Specific Plan implementation would not result in the alteration of a stream or river.

#### *Erosion or Siltation*

Refer to Impact 3.9.1. The Specific Plan would generally involve comparable amounts of impervious surfaces as compared to existing conditions, with only a slight increase in impervious surfaces overall. Thus, Specific Plan implementation is not anticipated to result in substantially increased surface runoff resulting in substantial erosion on- or off-site. Following conformance with NPDES, Municipal Code, Stormwater Quality BMP Guidance Manual requirements, impacts concerning substantial erosion or siltation on- or off-site would be **less than significant**.

#### *On- or Off-Site Flooding*

Refer to Impact 3.9.1. Stormwater runoff from future projects and associated roadway improvements would enter local storm drains. Although future projects built under the project would be expected to increase impervious surface area, developments that would create or replace more than 10,000 square feet of impervious surface must comply with MRP Provision C.3



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### 3.9 Hydrology

and the City's requirements for controlling runoff. As such, it is anticipated that peak runoff flow rates and stormwater volumes would potentially be less as new development occurs and implements new regulations; therefore, the amount of runoff would not be greater than current levels. Further, the City requires that storm drains accommodate a 10-year storm, and post-development flow rates cannot exceed pre-development flow rates on a project-by-project basis (Sunnyvale 2017a).

Compliance with the State General Construction Activity Storm Water Permit requirements (where applicable), SMC Chapter 12.60, and the SCVURPPP BMPs would reduce stormwater runoff impacts associated with future projects (Sunnyvale 2011b). This impact would be avoided by using effective construction phase, source control, and treatment control BMPs that include LID features for site preparation, runoff control, sediment retention, and other similar features. The SMC requires that all new and redevelopment projects that create or replace one acre or more of impervious surface implement hydromodification controls. The code also enforces the NPDES General Construction Permit. Impacts concerning on- and off-site flooding would be **less than significant** in this regard.

#### *Polluted Runoff*

Refer to Impact 3.9.1. The project would generally involve comparable amounts of impervious surfaces as compared to existing conditions, with only a slight increase in impervious surfaces overall. Thus, implementation of the Specific Plan is not anticipated to result in substantially increased surface runoff that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Following conformance with NPDES, Municipal Code, Stormwater Quality BMP Guidance Manual requirements, impacts to stormwater drainage systems or sources of polluted runoff would be **less than significant**.

#### *Impede or Redirect Flood Flows*

Refer to Impact 3.9.1. The Specific Plan Area contains three areas in the 100-year flood, Zone AO,<sup>2</sup> designated by FEMA (2009). The three areas are 0.75 square miles in area (in total) and are at risk for an estimated 1.5 feet of flooding in each area. These areas are located on the south side of El Camino Real at the intersection with Rembrandt Drive, Van Dyck Drive on the west side of Sunnyvale, and both sides of the intersection with Lawrence Expressway on the east side of Sunnyvale (FEMA 2009).

The Sunnyvale Municipal Code requires that new structures built in a FEMA-designated Special Flood Hazard Area meet requirements set forth in SMC Title 16, Buildings and Construction. The standards for construction generally require that the lowest floor of any structure be elevated to or above the base flood elevation, anchoring, and the use of flood damage-resistant materials

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<sup>2</sup> Zone AO are areas subject to inundation by 1 percent annual chance shallow flooding where average depths are between 1 and 3 feet.



3.9 Hydrology

and methods to minimize damage to structures exposed to flood waters. Following compliance with NPDES and Municipal Code, the project’s potential to impede or redirect flood flows would be **less than significant**.

Mitigation Measures

None required.

Level of Significance

Less than significant.

**INUNDATION BY SEICHE, TSUNAMI, OR MUDFLOW (STANDARD OF SIGNIFICANCE 4)**

**Impact 3.9.4 Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?**

The probability of inundation from mudflows, seiches, or tsunamis would be low because the Specific Plan Area and vicinity is flat; therefore, mudflow impacts would not occur and there are no bodies of water near the Specific Plan Area that would be subject to a seiches or tsunami. Additionally, future development would be required to comply with flood hazard development regulations and requirements, and would not substantially redirect or impede flood flows due to building of structures in flood hazard areas. Therefore, this impact would be **less than significant**.

Mitigation Measures

None required.

Level of Significance

Less than significant.

**CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF A WATER QUALITY CONTROL PLAN OR SUSTAINABLE GROUNDWATER MANAGEMENT PLAN (STANDARD OF SIGNIFICANCE 5)**

**Impact 3.9.5 Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

Refer to Impact 3.9.2 for a discussion concerning the Specific Plan’s potential to conflict with or obstruct implementation of SCVWD’s Groundwater Management Plan. As discussed, the Specific Plan Area is located within the jurisdiction of the San Francisco RWQCB. The San Francisco RWQCB manages surface waters through implementation of its Basin Plan. Chapter 5, Plans and Policies, includes a number of water quality control plans and policies adopted by the SWRCB that apply to the San Francisco RWQCB. Basin Plan Chapter 3, Water Quality Objectives, includes specific water quality objectives according to waterbody type (i.e., ocean waters, surface waters, and groundwaters). As indicated under Impact 3.9.1, Specific Plan implementation would not result in significant construction-related impacts to water quality and surface and groundwater quality following conformance with the with NPDES, Municipal Code, Stormwater Quality BMP Guidance Manual requirements. As a result, implementation of the Specific Plan is not anticipated to conflict



### 3.9 Hydrology

with or obstruct implementation of a water quality control plan. Impacts would be **less than significant** in this regard.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

### CUMULATIVE IMPACTS

#### **Impact 3.9.6 Would Implementation of the project result in cumulative impacts to hydrology or water quality?**

For purposes of hydrology and water quality, cumulative impacts are considered for cumulative projects located in the same watershed (i.e., the Sunnyvale East Channel and Sunnyvale West Channel watersheds) as the proposed project.

#### Cumulative Water Quality/Waste Discharge Impacts

Development in all jurisdictions whose stormwater flows to the watersheds would be subject to policies and regulations to improve water quality and minimize potential to degrade water quality, as described in subsection 3.9.2, Regulatory Framework. Federal, State, and local laws, regulations, and permitting processes, such as the CWA, NPDES permitting requirements, and the Porter-Cologne Water Quality Control Act, apply to all development within the watersheds. Various programs and requirements are specific to the maintenance and improvement of regional water quality, including the State Implementation Program, the San Francisco RWQCB Basin Plan, the NPDES General Permits administered by the SWRCB and the San Francisco RWQCB, and the SCVURPPP. These regulations apply to all development that would take place in Sunnyvale and in neighboring jurisdictions. Sunnyvale's (2011b) required LID-based BMPs would protect and potentially improve water quality in the watersheds from pollutants in stormwater runoff.

Future development in the Specific Plan Area would be required to comply with SMC Chapters 12.60 and 16.62 as referenced in the impact discussions above. Future development would also be required to employ BMPs for the prevention of erosion and the control of loose soil and sediment. The SMC also mandates standard controls for stormwater conveyance, maintenance, and pollution removal.

Cumulative impacts would be reduced by using effective BMPs that would include site preparation, runoff control, sediment retention, and other similar features. Further, compliance with SMC Chapters 12.60 and 16.62 would reduce the project's contribution to cumulative water quality and waste discharge impacts to **less than cumulatively considerable**.

#### Mitigation Measures

None required.



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### 3.9 Hydrology

#### Level of Significance

Less than significant.

#### Groundwater Supply and Recharge

Cumulative development could result in changes to the amounts of impervious surfaces on each respective development site. However, the vicinity of the Specific Plan Area is largely developed with urban uses involving impervious surfaces. Individual development projects would be required to mitigate drainage conditions through conformance with applicable local, State, and federal regulatory requirements, as well as project-specific mitigation. Therefore, related development would not result in cumulatively considerable impacts to groundwater supplies and groundwater recharge.

Development of the Specific Plan in addition to related cumulative projects would result in limited changes to the amounts of impervious surfaces within the Basin area, as the Specific Plan Area is largely developed with impervious surfaces. The Specific Plan Area is not located within a groundwater recharge area and no groundwater extraction would occur as part of the project. Therefore, the project would not result in significant cumulatively considerable impacts to groundwater supplies and groundwater recharge. Impacts would be **less than cumulatively considerable**.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

#### Existing Drainage Patterns

As described above, the Specific Plan Area is largely built out in terms of available land development, and the plan itself would not be expected to significantly increase impervious surface areas. Thus, peak runoff flow rates in the Specific Plan Area would not be expected to increase significantly. However, additional development in the Specific Plan Area, along with past, present, and other future development in the Sunnyvale East Channel and Sunnyvale West Channel watersheds, could result in cumulative flooding impacts due to potential increases in peak runoff flow.

Drainage systems are formalized in the watershed via culverts, stormwater drains, gutters, and channels. Additionally, there is a countywide drainage system, which, due to the built-out nature of the county and the watershed area, would not be greatly modified by new development. Because of the built-out nature of the area, new development would be mainly infill and would be served by adequate drainage facilities. Drainage modifications would include increased capacity and new connections to the existing drainage system if needed.



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### 3.9 Hydrology

Cumulative development in the Sunnyvale East Channel and Sunnyvale West Channel watersheds would be subject to regulatory requirements designed to minimize potential erosion and flooding that may result during construction and operational conditions. Compliance with BMPs as part of the NPDES permit process, SWPPP, and stormwater management plan requirements (as applicable), any site-specific discharge requirements established by the San Francisco RWQCB, and compliance with the San Francisco RWQCB Basin Plan would minimize cumulative stormwater drainage effects. These requirements are applicable to all jurisdictions in the watersheds. Continued enforcement and project-level compliance with these measures would reduce this impact to **less than cumulatively considerable**.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

#### Seiche, Tsunami, or Mudflow

As discussed above, the probability of inundation from mudflows, seiches, or tsunamis would be low because the Specific Plan Area and vicinity is flat; therefore, mudflow impacts would not occur and there are no bodies of water near the Specific Plan Area that would be subject to a seiches or tsunami. Additionally, future development occurring within the Sunnyvale East Channel and Sunnyvale West Channel watershed would be required to comply with flood hazard development regulations and requirements. Impacts related to seiche, tsunami, and mudflow would be **less than cumulatively considerable**.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

#### Water Quality Control Plan or Sustainable Groundwater Management Plan

Refer to the "Groundwater Supply and Recharge" cumulative analysis above concerning the Specific Plan and cumulative development's potential to conflict with or obstruct implementation of SCVWD's Groundwater Management Plan. Cumulative development occurring within the jurisdiction of the San Francisco RWQCB would be subject to all applicable water quality control plans, policies, and objectives identified in Chapters 3 and 5 the Basin Plan. As discussed, cumulative development subject to NPDES requirements would be required to develop a stormwater management program that specifies BMPs to reduce the discharge of pollutants in stormwater to the maximum extent practicable. Cumulative development would be required to identify measures to ensure that each project does not adversely impact water quality, and would be subject to the SMC, Stormwater Quality BMP Guidance Manual requirements. Thus, related



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### 3.9 Hydrology

development would not result in cumulatively considerable impacts related to conflicting or obstructing implementation of a water quality control plan or sustainable groundwater management plan.

As indicated under Impact 3.9.1, Specific Plan implementation would not result in significant construction-related impacts to water quality and surface and groundwater quality following conformance with the with NPDES, Municipal Code, Stormwater Quality BMP Guidance Manual requirements. As a result, implementation of the Specific Plan is not anticipated to conflict with or obstruct implementation of a water quality control plan. As a result, Specific Plan implementation is not anticipated to result in cumulatively considerable impacts related to conflicting with or obstructing implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be **less than cumulatively considerable**.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

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## 3.10 Land Use and Planning

This section addresses potential land use and planning impacts that may result from future buildout of the Specific Plan Area. The following discussion addresses the existing land use and regulatory conditions of the affected environment, considers relevant land use policies and goals, identifies and analyzes environmental impacts, and recommends measures to reduce or avoid adverse impacts anticipated from implementation of the Specific Plan, as applicable.

### *3.10.1 Existing Setting*

#### On-Site Land Uses

The 2007 Precise Plan for El Camino Real identified four nodes where pedestrian-oriented, mixed-use development might occur. The General Plan Land Use and Transportation Element (LUTE) generally designated the nodes as Corridor Mixed-Use and remaining sites as Commercial. However, a few sites in the Specific Plan Area are designated High Density Residential, Office or Public Facilities; refer to Specific Plan **Figure 1-4** (Pre-Specific Plan Land Use Designations [2019]).

#### Surrounding Land Uses

Surrounding areas generally include lower-density residential uses immediately adjacent to the corridor, with parcels supporting single-family homes, townhomes, and duplexes sharing a property line with El Camino Real-fronting properties.

### *3.10.2 Regulatory Setting*

#### Regional

##### *Plan Bay Area*

The Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) adopted Plan Bay Area 2040 on July 26, 2017. Plan Bay Area is a long-range integrated transportation and land use/housing strategy through 2040 for the San Francisco Bay Area. The plan includes the region's Sustainable Communities Strategy and the 2040 Regional Transportation Plan.

Plan Bay Area marks the nine-county region's first long-range plan to meet the requirements of California's landmark 2008 Senate Bill 375, which calls on each of the state's 18 metropolitan areas to develop a Sustainable Communities Strategy to accommodate future population growth and reduce greenhouse gas emissions from cars and light trucks. Working in collaboration with cities and counties, the plan advances initiatives to expand housing and transportation choices, create healthier communities, and build a stronger regional economy. The plan includes housing and population forecasts and proposes areas of future development (ABAG and MTC 2013). Plan Bay Area 2040 includes seven goals and 13 performance targets covering three broad areas: the environment, equity, and the economy. These aggressive and aspirational targets enable the plan to be evaluated by its performance in areas identified as key regional concerns, including equitable access, economic vitality, and transportation system effectiveness.

## Local

### *City of Sunnyvale General Plan*

The Sunnyvale General Plan was first adopted by the City in 1957. The General Plan is the comprehensive planning document governing long-term development in Sunnyvale and articulates the community's vision for the future through a description of goals, policies, and actions. It addresses the physical development of the City and, when used together with a larger body of City Council policies, provides direction for decision making on City services and resources. It is both a long-range and a strategic planning document, containing long-term goals and policies for the next 10-20 years and strategic actions for the next five to ten years. Sunnyvale's General Plan consists of a Community Vision and five supporting chapters addressing the physical development of the City. These chapters group related topics together such as Community Character, Safety and Noise, and Environmental Management. The following is a summary of the topics found in this General Plan.

### Community Vision Element

The Community Vision describes the past, present, and desired future of Sunnyvale in broad, citywide terms. It provides both the background statement and the forward-looking vision upon which the functional elements of the Plan are based. As such, it is the overarching component of the General Plan, the source from which each of the functional elements springs.

### Land Use and Transportation Element

The Land Use and Transportation Element (LUTE) is a part of the City of Sunnyvale General Plan (Sunnyvale 2021). This element establishes the fundamental framework as to how the City would be laid out (streets and buildings) and how various land uses, developments, and transportation facilities would function together. The LUTE includes a series of land use and transportation goals, policies, and actions that provide direction for how much the City would change and grow, and where the growth would take place for an approximate 20-year horizon—a time frame that is referred to as Horizon 2035 (Sunnyvale 2010). The LUTE was adopted in compliance with the state law requirement that each city prepare and adopt a comprehensive and long-range general plan for its physical development (California Government Code Section 65300).

The LUTE incorporates and integrates policy direction and land use patterns from other City of Sunnyvale planning documents. The revised LUTE continues to support the proposed project and the City's long-term vision for this primary commercial corridor. Relevant policies of the LUTE which would apply to the project are included in Impact 3.10.1.

### Community Character Element

The Community Character Chapter contains information as well as goals and policies related to the following topics:

- Building and street design, including policies on gateways, public art, special districts, and public facilities.



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### 3.10 Land Use and Planning

- Protection of heritage structures and natural features, including programs to increase knowledge of Sunnyvale's heritage.
- Existing conditions and future issues with expansion of the library and continuous improvement of the library collection.
- Facilities for the encouragement of arts programming and activities.
- Issues and trends related to quality recreation programming.

#### Housing Element

The Sunnyvale Housing Element was adopted on December 16, 2014 and contains information as well as goals and policies related to the planning of existing and projected housing needs of all economic segments of the community. The ABAG is responsible for developing and assigning these regional housing needs allocations, or "RHNA", to Bay Area jurisdictions. Pursuant to the current RHNA planning period for the Bay Area, the Sunnyvale Housing Element is an eight-year plan for the years 2015 through 2023. The Element is divided into the following sections:

- Housing Needs Assessment – An evaluation of Sunnyvale's demographic, household and housing stock characteristics, and existing and future regional housing needs (RHNA);
- Housing Constraints – An assessment of potential governmental and market constraints to the development and improvement of housing in Sunnyvale;
- Housing Resources – An evaluation of the availability of sites to address Sunnyvale's regional housing growth needs. Financial and administrative resources for housing are also presented, as are opportunities for energy conservation and green building;
- Housing Plan – An evaluation of accomplishments under Sunnyvale's adopted 2009 Housing Element, and the City's housing goals, policies, programs and quantified objectives for the 2015-2023 planning period.

#### Safety and Noise Element

The Safety and Noise Element contains information as well as goals and policies pertaining to the following topics:

- Hazards and disaster preparedness and response — information on existing natural and manmade hazards and policies and plans to mitigate these hazards and prepare for disasters.
- Police, fire, and emergency services — information on police, fire, and emergency services and policies and plans to continue to improve these services.
- Noise — information on existing and projected noise conditions with policies and programs to maintain or reduce noise from transportation, land use operations, and single-event noise.

#### Environmental Management Element

The Environmental Management Element contains information as well as goals and policies pertaining to the following topics:



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### 3.10 Land Use and Planning

- Water Supply — information on various sources of potable and non-potable water, and policies to ensure adequate supplies, water conservation efforts and water quality.
- Wastewater Collection and Treatment — information on the wastewater collection system, the Water Pollution Control Plant, and policies for future treatment goals.
- Urban Runoff — Information on sources of urban runoff and treatment methods, as well as policies to minimize quantity of urban runoff and improve quality.
- Air Quality — information on sources air pollution and policies for addressing this pollution through transportation and land use.
- Solid Waste — information on collection, recycling programs and disposal and policies to reduce future waste and increase recycling efforts.

#### *City of Sunnyvale Zoning Code*

The Zoning Map and the Zoning Code (Title 19 of the Sunnyvale Municipal Code [SMC]) are tools that allow the City to regulate the location and development of land uses in a more precise manner than through the General Plan. The Zoning Code identifies and defines zoning districts and development standards, and regulates such issues as permitted uses, setbacks, building heights, building additions, population densities, parking requirements, landscaping, and land use compatibility.

As discussed in Section 3.10.1, Existing Setting, the Specific Plan Area is presently zoned C-2, O, P-F, R-4, and R-3; refer to **Figure 2-3, Existing Zoning Map**.

#### *City of Sunnyvale Design Guidelines*

In an effort to protect the attractiveness of Sunnyvale's distinct neighborhoods, the City has adopted private and public design guidelines to direct the visual impact of future growth and improvements. These include the following:

##### Design Guidelines for Private Development

- Citywide Design Guidelines
- Mixed-Use Development Toolkit
- Parking Structure Design Guidelines
- High Density Residential Design Guidelines
- Single Family Home Design Guidelines
- Various other design guideline documents

##### Design Guidelines for Public Improvements

- Requirements for Solid State Lighting LED Roadway Luminaires
- Roadway Lighting Design Criteria
- Sanitary Sewer Systems Design Criteria
- Storm Drainage Systems Design Standards
- Vision Zero Plan



3.10 Land Use and Planning

- Active Transportation Plan
- Roadway Safety Plan

The City has also adopted a telecommunications ordinance within the SMC and adopted Design Guidelines for telecommunication facilities to aesthetically guide the location of telecommunications facilities throughout the community.

*Precise Plan for El Camino Real*

The City has responded to development pressure by establishing a plan for El Camino Real, which is the City's primary commercial corridor. The Precise Plan for El Camino Real was adopted in 2007 to clarify the City's long-term vision for El Camino Real and to guide and encourage well-designed, appropriate developments along El Camino Real. The plan also offers strategies to capitalize on the strengths of El Camino Real and to overcome limitations in order to enhance the ability of the corridor to remain a vibrant and successful part of the community.

*3.10.3 Impacts and Mitigation Measures*

Standards of Significance

This analysis evaluates potential impacts relative to land use and planning based on the standards identified in California Environmental Quality Act Guidelines Appendix G. The project would have a significant impact if implementation of the project would:

- Physically divide an established community (refer to Section 4.0, Effects Found Not To Be Significant).
- 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.

Project Impacts and Mitigation Measures

**CONFLICT WITH ADOPTED LAND USE PLANS/POLICIES/REGULATIONS (STANDARD OF SIGNIFICANCE 2)**

**Impact 3.10.1 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?**

General Plan

As discussed in Section 2.0, the project requests adoption of a Specific Plan, which would require an amendment to the LUTE of the General Plan, among other approvals. The Specific Plan is a regulatory document and provides a means for implementing the City's General Plan within the Specific Plan Area. The Specific Plan, in conjunction with the El Camino Real Specific Plan Chapter (ECRSPC) of the SMC, establishes policies, land use regulations, standards and design guidelines for new development; recommends potential improvements to the roadway and streetscape; and identifies future programs and actions for Specific Plan implementation.



Chapter 4, Land Use and Development Standards, of the Specific Plan, in conjunction with the ECRSPC of the SMC, establishes land use classifications and land use policies, establishes zoning districts, and discusses the development standards that apply to each node and segment. Objective design standards for residential, commercial and mixed-use developments are included in Chapter 5 of the Specific Plan. The policies and regulations contained in the Specific Plan would serve as the zoning for the Specific Plan Area. **Table 3.10-1, General Plan Policy Consistency Analysis** analyzes the project’s consistency with the relevant General Plan LUTE policies.

**Table 3.10-1  
General Plan Consistency Analysis**

General Plan LUTE Policy	Consistency Statement
<b>Policy LT-1.6:</b> Integrate land use planning in Sunnyvale and the regional transportation system.	<b>Consistent.</b> The El Camino Real Corridor is the most heavily traveled multimodal corridor in the city, serving the needs of local neighborhoods as well as the greater region. Specific Plan implementation would create an environment that emphasizes circulation and accessibility and prioritizes efficient circulation patterns and safe and convenient multimodal access. The Specific Plan Area would incorporate a complete streets approach to design, which promotes safety, mobility, and accessibility for all users who travel along El Camino Real. Street design is addressed in the Specific Plan for El Camino Real and intersections within the corridor. Several street typologies are proposed that are intended to recognize the unique character of each node while linking together to create a connected network.
<b>Policy LT-1.7:</b> Emphasize efforts to reduce regional vehicle miles traveled by supporting active modes of transportation including walking, biking, and public transit.	<b>Consistent.</b> Refer to response to Policy LT-1.6.
<b>Policy LT-2.1:</b> Enhance the public’s health and welfare by promoting the city’s environmental and economic health through sustainable practices for the design, construction, maintenance, operation, and deconstruction of buildings, including measures in the Climate Action Plan.	<b>Consistent.</b> As discussed in Section 3.7, Greenhouse Gas Emissions, the project would not conflict with Plan Bay Area 2040, CALGreen, Title 24, and the City’s Climate Action Playbook. In addition, as discussed under Impact 3.7.1, project-generated GHG emissions would be in-line with the State’s long-term climate stabilization goals under Executive Order S-03-05.
<b>Policy LT-2.2:</b> Reduce greenhouse gas emissions that affect climate and the environment through land use and transportation planning and development.	<b>Consistent.</b> The Specific Plan establishes development standards and design guidelines for enhanced transit, pedestrian, bicycle and automobile circulation specific to the Specific Plan area. Therefore, because the transportation improvements included in the Specific Plan were developed to enhance transit, pedestrian, and bicycle facilities and connectivity in the project area, they would not result in a substantial



General Plan LUTE Policy	Consistency Statement
	<p>or measurable increase in vehicle miles travelled (VMT). Additionally, the proposed intersection improvements provided in the project’s Transportation Impact Analysis prepared by Hexagon Transportation Consultants (2020) would serve to improve access to the Sunnyvale Caltrain Station and the Lawrence Caltrain Station, improving multimodal safety, and enhancing the overall transit-oriented nature of the project area; refer to Section 3.15, Transportation, of this EIR. As discussed in Section 3.7, Greenhouse Gas Emissions, project implementation would involve less than significant GHG impacts. The project would be consistent with Policy LT-2.2 in this regard.</p>
<p><b>Policy LT-2.5:</b> Recognize the value of protected trees and heritage landmark trees (as defined in City ordinances) to the legacy, character, and livability of the community by expanding the designation and protection of large signature and native trees on private property and in City parks.</p>	<p><b>Consistent.</b> As discussed in Section 3.3, Biological Resources, a parcel located at the southwestern corner of El Camino Real and Wolfe Road includes three coast live oaks and one valley oak, which are identified as heritage trees on the City’s Heritage Resource Inventory. These resources are located on City-owned open space within the Three Points Neighborhood of the Specific Plan Area at 871 East Fremont Avenue. The City strictly enforces SMC (SMC) Sections 13.16, City Trees, and 19.94, Tree Preservation, to prevent the unauthorized removal, irreversible damage, and pruning of large, protected trees (Policy LT-2.4, Action LT-2.4a). As discussed, the purpose of SMC Chapter 19.94 is to “regulate the protection, installation and removal and long term management of significantly sized trees on private property within the City and City owned golf courses and parks; encourage the proper protection and maintenance of significantly sized trees which are located on such property; establish a review and permit procedure to assure the correct planting, maintenance, protection and removal of significant trees on such property; and establish penalties for violation of its provisions.” Future development occurring within the Specific Plan Area with the potential to impact the four heritage trees at 871 East Fremont Avenue would be subject to approval by the City’s Heritage Preservation Commission. Compliance with existing General Plan policies and SMC Sections 13.16 and 19.94 would ensure impacts to heritage trees are less than significant.</p>
<p><b>Policy LT-3.1:</b> Use land use planning, including mixed and higher-intensity uses, to support alternatives to the single-occupant automobile such as walking and bicycling and to attract and support high investment transit</p>	<p><b>Consistent.</b> Refer to response to Policy LT-1.6.</p>



General Plan LUTE Policy	Consistency Statement
such as light rail, buses, and commuter rail.	
<p><b>Policy LT-3.2:</b> Refine land use patterns and the transportation network so they work together to protect sensitive uses and provide convenient transportation options throughout the planning area.</p>	<p><b>Consistent.</b> Refer to response to Policy LT-1.6. The Specific Plan has been developed recognizing that high density residential uses abutting some properties create limitations and potential conflicts to more intense development that could have visual, privacy or operational impacts (e.g. light or noise disturbance). However, as described in Section 3.1, Aesthetics, and Section 3.11, Noise, impacts related to light and glare and noise would be less than significant following the established regulatory framework. In addition, new development must comply with development standards and design guidelines pertinent to lighting requirements.</p>
<p><b>Policy LT-3.5:</b> Follow California Environmental Quality Act requirements, Congestion Management Program requirements, and additional City requirements when analyzing the transportation impacts of proposed projects and assessing the need for offsetting transportation system improvements or limiting transportation demand.</p>	<p><b>Consistent.</b> Refer to Section 3.15, Transportation. As discussed, Specific Plan implementation would create an environment that emphasizes circulation and accessibility and prioritizes efficient circulation patterns and safe and convenient multimodal access. The project would be consistent with Policy LT-3.5 in this regard.</p>
<p><b>Policy LT-3.6:</b> Promote modes of travel and actions that provide safe access to city streets and reduce single-occupant vehicle trips and trip lengths locally and regionally. The order of consideration of transportation users shall be:</p> <ol style="list-style-type: none"> <li>(1) Pedestrians</li> <li>(2) Non-automotive (bikes, three-wheeled bikes, scooters, etc.)</li> <li>(3) Mass transit vehicles</li> <li>(4) Delivery vehicles</li> <li>(5) Single-occupant automobiles</li> </ol>	<p><b>Consistent.</b> Refer to response to Policy LT-1.6 and Section 3.15.</p>
<p><b>Policy LT-3.21:</b> Implement best practices, innovative facilities, and technology to enhance complete streets.</p>	<p><b>Consistent.</b> Refer to response to Policy LT-1.6.</p>
<p><b>Policy LT-3.22:</b> Provide safe access to city streets for all modes of transportation. Safety considerations of all transport modes shall take priority over capacity considerations of any one transport mode.</p>	<p><b>Consistent.</b> Refer to response to Policy LT-1.6.</p>



General Plan LUTE Policy	Consistency Statement
<p><b>Policy LT-3.23:</b> Ensure that the movement of cars, trucks and transit vehicles, bicycles, and pedestrians of all ages and abilities does not divide the community. City streets are public spaces and an integral part of the community fabric.</p>	<p><b>Consistent.</b> As discussed in Section 4.0, all future development in the Specific Plan Area would be evaluated at a project-specific level for consistency with the proposed land use plan to ensure the development is consistent with the Specific Plan and does not physically divide an established community. Additionally, resulting future development with implementation of the project is aimed at enhancing the sense of neighborhood and community by creating residential development that includes an improved and safer transportation corridor with amenities attractive to area residents. The Specific Plan would allow for future renovation of existing buildings as well as mixed-use, high-density development that promotes pedestrian- and bike-friendly infrastructure and would not have the potential to physically divide the surrounding community of Sunnyvale. Instead, the creation of open space, community gathering places, and high-density development would integrate local neighborhoods and the community of Sunnyvale.</p>
<p><b>Policy LT-3.24:</b> Ensure effective and safe traffic flows for all modes of transport through physical and operational transportation improvements.</p>	<p><b>Consistent.</b> As discussed in Section 3.15, Specific Plan implementation would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).</p>
<p><b>Policy LT-4.1:</b> Preserve and enhance an attractive community, with a positive image, a sense of place, landscaping, and a human scale.</p>	<p><b>Consistent.</b> As discussed in Section 3.1, the purpose of the Specific Plan is to provide an overall vision and guidance to transform the Specific Plan Area into a commercial and mixed-use corridor with additional housing opportunities. The plan envisions improved streetscapes, and safer, more enjoyable environments for walking, bicycling, and other modes of transportation, while preserving the quality of life for adjacent neighborhoods and existing assets to the community. The ECRSPC of the SMC includes minimum landscaping and useable open space requirements and states that all landscaped areas must comply with the SMC’s general planting, soil management, water efficiency and irrigation design requirements. In addition, the Urban Design Guidelines address general principles for establishing high quality landscaped areas through use of plant material and paving.</p>
<p><b>Policy LT-4.2:</b> Encourage nodes of interest and activity, public open spaces, well-planned development, mixed-use projects, signature commercial uses, and buildings and other desirable uses, locations, and physical attractions.</p>	<p><b>Consistent.</b> The corridor will feature four nodes of greater activity at key intersections where public transportation, housing, amenities and services will be strongly integrated; refer to Section 2.0. The Specific Plan envisions the nodes as unique neighborhoods that draw on the differing characteristics that define</p>



General Plan LUTE Policy	Consistency Statement
	them, in combination with the land use amenities and transportation opportunities that exist for each.
<b>Policy LT-4.3:</b> Enforce design review guidelines and zoning standards that ensure the mass and scale of new structures are compatible with adjacent structures, and also recognize the City's vision of the future for transition areas such as neighborhood Village Centers and El Camino Real nodes.	<b>Consistent.</b> As discussed in Specific Plan Chapter 4, Land Use and Development Standards, property owners and developers interested in developing in the Specific Plan Area should consult the Land Use and Development Standards to ensure projects comply with development standards. City staff and approving authorities would use Specific Plan Chapter 4, in conjunction with the ECRSPC of the SMC, to evaluate applications and ensure that future development is consistent with the design and development goals and vision for the Specific Plan Area.
<b>Policy LT-4.4:</b> Avoid monotony and maintain visual interest in newly developing neighborhoods, and promote appropriate architectural diversity and variety. Encourage appropriate variations in lot sizes, setbacks, orientation of homes, and other site features.	<b>Consistent.</b> The project would promote development of El Camino Real as a boulevard with a series of distinct neighborhoods, with a unified streetscape, sidewalk improvements, and pedestrian amenities. As stated in Section 2.0, Specific Plan implementation would guide the development of a rich mix of land uses including housing, retail, services, and small office.
<b>Policy LT-5.2:</b> Preserve and enhance the character of Sunnyvale's residential neighborhoods by promoting land use patterns and transportation opportunities that support a neighborhood concept as a place to live, work, shop, entertain, and enjoy public services, open space, and community near one's home and without significant travel.	<b>Consistent.</b> The Specific Plan would provide a compatible transition between El Camino Real development and adjacent residential neighborhoods. The Specific Plan also establishes a goal to establish pedestrian and bicycle connections between El Camino Real frontages and adjacent neighborhoods. The mixed land use pattern proposed by the Specific Plan would create a balance of employment, commercial, and residential areas.
<b>Policy LT-5.3:</b> Require new development, renovation, and redevelopment to be compatible and well integrated with existing residential neighborhoods.	<b>Consistent.</b> Refer to response to LT-5.2.
<b>Policy LT-6.2:</b> Limit the intrusion of incompatible uses and inappropriate development in and near residential neighborhoods, but allow transition areas at the edges of neighborhoods.	<b>Consistent.</b> Refer to response to LT-5.2.
<b>Policy LT-7.4:</b> Promote new mixed-use development and allow higher-residential density zoning districts (medium and higher) primarily in Village Centers, El Camino Real nodes, and future industrial-to-residential areas.	<b>Consistent.</b> Specific Plan implementation would support mixed-use development along the El Camino Real Corridor and would be consistent with Policy LT-7.4 in this regard.



General Plan LUTE Policy	Consistency Statement
<b>Policy LT-8.5:</b> Promote walking and bicycling through street design.	<b>Consistent.</b> Refer to response to Policy LT-1.6.
<b>Policy LT-13.2:</b> Improve the visual appearance of business areas and districts by applying high standards of architectural design, landscaping, and sign standards for new development and the reuse or remodeling of existing buildings.	<b>Consistent.</b> Refer to response to Policy LT-4.1.
<b>Policy LT-13.3:</b> Use density and design principles, such as physical transitions, between different land uses and to buffer between sensitive uses and less compatible uses.	<b>Consistent.</b> Refer to response to Policy LT-3.2.

2017. *General Plan Land Use and Transportation Element*.  
<https://sunnyvale.ca.gov/civicax/filebank/blobdload.aspx?BlobID=23980>.

As demonstrated in **Table 3.10-1**, the proposed project is consistent with the relevant General Plan LUTE policies, as it proposes the development of a mixed-use, compact, and well-connected urban form that would further increase housing and employment opportunities in the City. The project would change land use designations in certain areas of the affected land area to accommodate future growth and to realize the City’s vision. Further, the project outlines transportation and design guidelines that would mold the area to fit the City’s sustainable growth vision. The project would require an amendment to the City’s General Plan for the proposed change in land use designations. With approval of the General Plan amendment, the project would be consistent with the City’s General Plan regarding land use. Impacts would be **less than significant** in this regard.

### City of Sunnyvale Zoning Code

The City’s Zoning Code regulates development within the plan area. The project would amend the Zoning Code by establishing its own zoning for the plan area to regulate the allowed densities and types of development specific to the project. Upon City approval of the project and zoning amendments, the project would be consistent with the City’s Zoning Code regarding FAR, maximum and minimum density requirements, parking requirements, and circulation requirements.

### Plan Bay Area 2040

The project is subject to Plan Bay Area 2040. The consistency of the proposed project with relevant and applicable goals and targets of Plan Bay Area 2040 is provided in **Table 3.10-2, Plan Bay Area 2040 Consistency Analysis**.

**Table 3.10-2**  
**Plan Bay Area 2040 Consistency Analysis**

Goal and Targets	Consistency Statement
<b><u>Climate Protection, Target 1:</u></b> Reduce per-capita CO <sub>2</sub> emissions	<b><u>Consistent.</u></b> As discussed in Section 3.7, Greenhouse Gas Emissions, the project would not conflict with Plan Bay Area 2040, CALGreen, Title 24, and the City's Climate Action Playbook. In addition, as discussed under Impact 3.7.1, project-generated GHG emissions would be in-line with the State's long-term climate stabilization goals under Executive Order S-03-05.
<b><u>Adequate Housing, Target 2:</u></b> House the region's population	<b><u>Consistent.</u></b> Specific Plan implementation would allow for housing opportunities that help meet the needs of the communities, allowing for the development of up to 6,900 residential units. The project would be consistent with Target 2 in this regard.
<b><u>Healthy and Safe Communities, Target 3:</u></b> Reduce adverse health impacts	<b><u>Not Applicable.</u></b> Specifically, Target 3 of Plan Bay Area 2040 is not adopted for the "purpose of avoiding or mitigating an environmental effect," per Appendix G of the CEQA Guidelines.
<b><u>Open Space and Agricultural Preservation, Target 4:</u></b> Direct development within urban footprint	<b><u>Consistent.</u></b> As discussed throughout this EIR, the Specific Plan Area is largely built out in terms of available land development, with future development activities largely expected to involve infill development. Further, there are no lands designated as open space or agricultural within the Specific Plan Area. The project would not involve impacts to open space or agricultural uses in this regard.
<b><u>Equitable Access, Target 5:</u></b> Decrease share of lower-income households' budgets spent on housing and transportation	<b><u>Not Applicable.</u></b> Specifically, Target 5 of Plan Bay Area 2040 is not adopted for the "purpose of avoiding or mitigating an environmental effect," per Appendix G of the CEQA Guidelines.
<b><u>Equitable Access, Target 6:</u></b> Increase share of affordable housing	<b><u>Not Applicable.</u></b> Specifically, Target 6 of Plan Bay Area 2040 is not adopted for the "purpose of avoiding or mitigating an environmental effect," per Appendix G of the CEQA Guidelines.
<b><u>Equitable Access, Target 7:</u></b> Do not increase share of households at risk of displacement	<b><u>Consistent.</u></b> As discussed in Section 3.12, Population and Housing, project implementation would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. Therefore, Specific Plan implementation would not increase the region's share of households at risk of displacement.
<b><u>Economic Vitality, Target 8:</u></b> Increase share of jobs accessible in congested conditions	<b><u>Not Applicable.</u></b> Specifically, Target 8 of Plan Bay Area 2040 is not adopted for the "purpose of avoiding or mitigating an environmental effect," per Appendix G of the CEQA Guidelines (as of July 1, 2020, level of service [or delay] is no longer an environmental consideration under CEQA). Nonetheless, the Specific Plan update will accommodate up to 730,000 square feet of additional commercial development beyond that which has been constructed to date within the



3.10 Land Use and Planning

Goal and Targets	Consistency Statement
	Specific Plan Area. Specific Plan implementation would facilitate the efficient flow of traffic for all modes of travel and prioritize environmentally efficient modes of transportation. As a result, the project would increase jobs, would facilitate efficient traffic flow, and would be consistent with Target 8 of Plan Bay Area 2040.
<b><u>Economic Vitality, Target 9:</u></b> Increase jobs in middle-wage industries	<b><u>Not Applicable.</u></b> Specifically, Target 9 of Plan Bay Area 2040 is not adopted for the “purpose of avoiding or mitigating an environmental effect,” per Appendix G of the CEQA Guidelines. Refer to response to Target 8 of Plan Bay Area 2040.
<b><u>Economic Vitality, Target 10:</u></b> Reduce per-capita delay on freight network	<b><u>Not Applicable.</u></b> Specifically, Target 10 of Plan Bay Area 2040 is not adopted for the “purpose of avoiding or mitigating an environmental effect,” per Appendix G of the CEQA Guidelines.
<b><u>Transportation System Effectiveness, Target 11:</u></b> Increase non-auto mode share	<b><u>Consistent.</u></b> As discussed, Specific Plan implementation would create an environment that emphasizes circulation and accessibility and prioritizes efficient circulation patterns and safe and convenient multimodal access. The plan envisions improved streetscapes and safer, more enjoyable environments for walking, bicycling, and other modes of transportation, while preserving the quality of life for adjacent neighborhoods and existing assets to the community. The Specific Plan Area would incorporate a complete streets approach to design, which promotes safety, mobility, and accessibility for all users who travel along El Camino Real. Street design is addressed in the Specific Plan for El Camino Real and intersections within the corridor. Several street typologies are proposed that are intended to recognize the unique character of each node while linking together to create a connected network.
<b><u>Transportation System Effectiveness, Target 12:</u></b> Reduce vehicle operating and maintenance costs due to pavement conditions	<b><u>Not Applicable.</u></b> Specifically, Target 3 of Plan Bay Area 2040 is not adopted for the “purpose of avoiding or mitigating an environmental effect,” per Appendix G of the CEQA Guidelines.
<b><u>Transportation System Effectiveness, Target 13:</u></b> Reduce per-rider transit delay due to aged infrastructure	<b><u>Not Applicable.</u></b> Specifically, Target 3 of Plan Bay Area 2040 is not adopted for the “purpose of avoiding or mitigating an environmental effect,” per Appendix G of the CEQA Guidelines.

Association of Bay Area Governments and Metropolitan Transportation Commission. 2016. Plan Bay Area 2040.

As detailed in **Table 3.10-2**, the project would be consistent with applicable policies of Plan Bay Area 2040.

Based on the analysis above, the project would not conflict with the policy initiatives described above that were adopted for the purpose of avoiding or mitigating an environmental effect.



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### 3.10 Land Use and Planning

Because the project would not conflict with any applicable adopted land use plans, policies, or regulations, this impact would be **less than significant**.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

### CUMULATIVE IMPACTS

**Impact 3.10.3** Would the project contribute to a cumulative land use impact associated with the division of an established community or conflict with existing land use plans and regulations that provide environmental protection?

As identified under Impact 3.10.1 above, the project would not conflict with any applicable land use plans, policies, or regulations. The project would complement the general plans of surrounding jurisdictions, as the project ensures a regional approach to land use and transportation planning in the City while improving regional connections. Development projects within the City undergo a similar plan review process to determine potential land use planning policy and regulation conflicts. Each project would be analyzed independent of other projects, within the context of their respective land use, zoning, and regulatory setting. As part of the review process, each project would be required to demonstrate compliance with the provisions of the applicable land use designation(s) and zoning. As with the proposed project, each project would be analyzed to ensure that the goals, objectives, and policies of the General Plan, Municipal Code, and Plan Bay Area 2040 are upheld. Thus, the project would have a **less than significant** contribution to regional land use and planning impacts.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

## 3.11 Noise

This section describes the existing noise environment in the Specific Plan Area and the potential for the Specific Plan to result in noise impacts exceeding the City of Sunnyvale's applicable noise level criteria. Data used to prepare this section was taken from the traffic impact study (**Appendix D**) and information obtained by measuring and modeling existing and future traffic noise levels at the project site and in the surrounding area (**Appendix C**).

### *Fundamentals of Sound and Environmental Noise*

Sound is technically described in terms of amplitude (loudness) and frequency (pitch). The standard unit of sound amplitude measurement is the decibel (dB). The decibel scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Because the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Noise, on the other hand, is typically defined as unwanted sound because of its potential to disrupt sleep, to interfere with speech communication, and to damage hearing. A typical noise environment consists of a base of steady "background" noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These can vary from an occasional aircraft or train passing by to virtually continuous noise from, for example, traffic on a major highway.

### *Amplitude*

Amplitude is the difference between ambient air pressure and the peak pressure of the sound wave. Amplitude is measured in decibels on a logarithmic scale. Laboratory measurements correlate a 10 dB increase in amplitude with a perceived doubling of loudness and establish a 3 dB change in amplitude as the minimum audible difference perceptible to the average person.

### *Frequency*

Frequency is the number of fluctuations of the pressure wave per second. The unit of frequency is the Hertz. One Hertz equals one cycle per second. The human ear is not equally sensitive to sound of different frequencies. To approximate this sensitivity, environmental sound is usually measured in A-weighted decibels. On this scale, the normal range of human hearing extends from about 10 dBA to about 140 dBA. Common community noise sources and associated noise levels, in dBA, are depicted in **Figure 3.11-1, Typical Community Noise Levels**.

Figure 3.11-1  
Typical Community Noise Levels

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	Large Business Office
Quiet Urban Daytime	50	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

Source: Caltrans 2012



### *Addition of Decibels*

Because decibels are logarithmic units, sound levels cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3 dB increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dB higher than one source under the same conditions. Under the decibel scale, three sources of equal loudness together would produce an increase of 5 dB.

### *Sound Propagation and Attenuation*

Sound spreads (propagates) uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately 6 dB for each doubling of distance from stationary or point source. Sound from a line source, such as a highway, propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of approximately 3 dB for each doubling of distance from a line source, such as a roadway, depending on ground surface characteristics. No excess attenuation is assumed for hard surfaces like a parking lot or a body of water. Soft surfaces, such soft dirt or grass, can absorb sound, so an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed. For line sources, an overall attenuation rate of 3 dB per doubling of distance is assumed.

Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA. The manner in which older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-interior reduction of newer residential units is generally 30 dBA or more.

### *Noise Descriptors*

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Several rating scales have been developed to analyze the adverse effect of community noise on people. Because environmental noise fluctuates over time, these scales consider that the effect of noise on people is largely dependent on the total acoustical energy content of the noise, as well as the time of day when the noise occurs. The  $L_{eq}$  is a measure of ambient noise, while the  $L_{dn}$  and CNEL are measures of community noise. Each is applicable to this analysis and defined below.

- $L_{eq}$ , the equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the  $L_{eq}$  of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.



- $L_{dn}$ , the Day-Night Average Level, is a 24-hour average  $L_{eq}$  with a 10 dBA “weighting” added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour  $L_{eq}$  would result in a measurement of 66.4 dBA  $L_{dn}$ .
- CNEL, the Community Noise Equivalent Level, is a 24-hour average  $L_{eq}$  with a 5 dBA “weighting” during the hours of 7:00 p.m. to 10:00 p.m. and a 10 dBA “weighting” added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively. The logarithmic effect of these additions is that a 60 dBA 24-hour  $L_{eq}$  would result in a measurement of 66.7 dBA CNEL.
- $L_{min}$  is the minimum instantaneous noise level experienced during a given period of time.
- $L_{max}$  is the maximum instantaneous noise level experienced during a given period of time.
- Percentile Noise Level ( $L_n$ ) is the noise level exceeded for a given percentage of the measurement time. For example,  $L_{10}$  is the noise level exceeded for 10 percent of the measurement duration, and  $L_{50}$  is the noise level exceeded for 50 percent of the measurement duration.

### *Human Response to Noise*

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day or night, or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60 to 70 dBA range, and high above 70 dBA. Examples of low daytime levels are isolated, natural settings that can provide noise levels as low as 20 dBA and quiet, suburban, residential streets that can provide noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). Regarding increases in dBA, the following relationships should be noted for understanding this analysis:



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### 3.11 Noise

- Except in carefully controlled laboratory experiments, a change of 1 dB cannot be perceived by humans.
- Outside of the laboratory, a 3 dB change is considered a just-perceivable difference.
- A change in level of at least 5 dB is required before any noticeable change in community response would be expected. An increase of 5 dB is typically considered substantial.
- A 10 dB change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

#### 3.11.1 Existing Setting

##### Noise-Sensitive Receptors

Noise-sensitive land uses are those that may be subject to stress and/or interference from excessive noise. Noise-sensitive land uses include public schools, hospitals, and institutional uses such as churches, museums, and private schools. Typically, residential uses are also considered noise-sensitive receptors. Industrial and commercial land uses are generally not considered sensitive to noise. Current land uses located within the project vicinity that are sensitive to intrusive noise include residential uses, schools, museums, and hospitals.

##### Existing Ambient Noise Levels

According to the City's General Plan Noise Element (2011), noise is a significant and inherent part of Sunnyvale's environment. The noise environment is a result of historical land use decisions, competing regional and community goals, geographic factors, and limited local controls. Major noise sources in Sunnyvale consist of transportation sources and community sources. Major roadways cause most of the ambient noise in Sunnyvale. Highways include US 101, Interstate 280, State Route (SR) 85, and SR 237. Major local roadways include Mathilda Avenue, Wolfe Road, Lawrence Expressway, El Camino Real (SR 82), and Homestead Road. Mary Avenue, Hollenbeck Road, Fremont Avenue, and Remington Drive are relatively quiet roads, but they are adjoined by a large number of residences and therefore contribute to residential noise exposure in Sunnyvale.

Aircraft operations at Moffett Federal Airfield contribute to the noise environment in northwest Sunnyvale. Northeast Sunnyvale is affected by San Jose International Airport flight patterns. Commuter and freight train operations affect noise levels in central Sunnyvale. Light rail trains now operate in the City along the Tasman Drive roadway corridor. Stationary noise sources in the City include light industrial and manufacturing facilities generally located in an area between the East Evelyn Avenue/Caltrain rail corridor and Central Expressway.

The project site is identified as a major transportation facility by the General Plan Noise Element (El Camino Real). A review of the General Plan Noise Element shows the Specific Plan Area outside



of the Moffett Federal Airfield noise contours. According to **Figure 6-4** of the Noise Element (2011), the project site currently experiences noise levels of less than 60 L<sub>dn</sub>.

Existing Roadway Noise Levels

In order to assess the potential for mobile source noise impacts, it is necessary to determine the noise currently generated by vehicles traveling through the project area. The existing roadway noise levels in the vicinity of the Specific Plan Area were projected. Noise models were run using the Federal Highway Administration’s Highway Noise Prediction Model (FHWA RD-77-108) together with several roadway and site parameters. These parameters determine the projected impact of vehicular traffic noise and include the roadway cross-section (such as the number of lanes), roadway width, average daily traffic (ADT), vehicle travel speed, percentages of auto and truck traffic, roadway grade, angle-of-view, and site conditions (“hard” or “soft”). The model does not account for ambient noise levels (i.e., noise from adjacent land uses) or topographical differences between the roadway and adjacent land uses. Noise projections are based on modeled vehicular traffic as derived from traffic data provided by Hexagon Transportation Consultants, Inc. via email on December 30, 2020.

A 30- to 40-mile per hour (mph) average vehicle speed was assumed for existing conditions based on empirical observations and posted maximum speeds along the adjacent roadways. Existing modeled traffic noise levels are depicted in **Table 3.11-1**. As shown in **Table 3.11-1**, noise within the area from mobile noise ranges from 57.1 dBA to 70.0 dBA at 100 feet from roadway centerline.

**Table 3.11-1  
Existing Traffic Noise Levels**

Roadway Segment	ADT	dBA CNEL @ 100 Feet from Roadway Centerline
<b>El Camino Real</b>		
SR-85 to Bernardo Avenue	64,380	68.7
Bernardo Avenue to Hollenbeck Avenue	52,180	67.8
Hollenbeck Avenue to Fair Oaks Avenue	46,100	66.0
Fair Oaks Avenue to Lawrence Road	68,420	67.7
<b>South Bernardo Avenue</b>		
Evelyn Avenue to El Camino Real	8,350	57.1
El Camino Real to Remington Drive	8,580	57.2
<b>Mary Avenue</b>		
Evelyn Avenue to El Camino Real	21,510	62.3
El Camino Real to Remington Drive	23,640	62.6
<b>Hollenbeck Avenue</b>		
El Camino Real to Remington Drive	15,900	59.9
Remington Drive to Fremont Avenue	10,340	58.0
<b>Mathilda Avenue</b>		
Evelyn Avenue to El Camino Real	67,800	67.7
El Camino Real to Sunnyvale Saratoga Road	48,560	67.6



Roadway Segment	ADT	dBA CNEL @ 100 Feet from Roadway Centerline
<b>Sunnyvale Saratoga Road</b>		
Mathilda Avenue to Remington Drive	60,440	68.6
Remington Drive to Fremont Avenue	83,560	70.0
<b>Sunnyvale Avenue</b>		
Evelyn Avenue to El Camino Real	13,310	59.2
<b>Remington Drive</b>		
West of Bernardo Avenue to Hollenbeck Avenue	9,940	57.9
Hollenbeck Avenue to El Camino Real	41,710	65.3
<b>Fair Oaks Avenue</b>		
El Camino Real to Evelyn Avenue	40,680	65.2
<b>Fremont Avenue</b>		
Hollenbeck Avenue to Wolfe Road	33,200	65.9
<b>Wolfe Road</b>		
Evelyn Avenue to El Camino Real	27,910	63.6
El Camino Real to Homestead Road	45,890	65.6

Notes: ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level

Source: Noise modeling is based upon traffic data provided by Hexagon Transportation Consultants, Inc. on December 30, 2020.

### Fundamentals of Environmental Groundborne Vibration

Sources of earthborne vibrations include natural phenomena (earthquakes, volcanic eruptions, sea waves, landslides, etc.) or man-made causes (explosions, machinery, traffic, trains, construction equipment, etc.). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions).

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the peak particle velocity (PPV); another is the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. PPV is typically used for evaluating potential building damage, whereas PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration. Typically, ground-borne vibration, generated by man-made activities, attenuates rapidly with distance from the source of vibration. Man-made vibration issues are therefore usually confined to short distances (i.e., 500 feet or less) from the source. Both construction and operation of development projects can generate ground-borne vibration.

**Table 3.11-2** displays the reactions of people and the effects on buildings produced by continuous vibration levels. The annoyance levels shown in **Table 3.11-2** should be interpreted with care since vibration may be found to be annoying at much lower levels than those listed, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations

frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage. In high noise environments, which are more prevalent where groundborne vibration approaches perceptible levels, this rattling phenomenon may also be produced by loud airborne environmental noise causing induced vibration in exterior doors and windows.

**Table 3.11-2**  
**Human Reaction and Damage to Buildings for Continuous Vibration Levels**

Peak Particle Velocity (inch/second)	Human Reaction	Effect on Buildings
0.006–0.019	Range of threshold of perception	Vibrations unlikely to cause damage of any type
0.08	Vibrations readily perceptible	Recommended upper level to which ruins and ancient monuments should be subjected
0.1	Level at which continuous vibrations may begin to annoy people, particularly those involved in vibration sensitive activities	Virtually no risk of architectural damage to normal buildings
0.2	Vibrations may begin to annoy people in buildings	Threshold at which there is a risk of architectural damage to normal dwellings <sup>1</sup>
0.4–0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Architectural damage and possibly minor structural damage

*Note: Historic and some old buildings have a threshold of 0.25 PPV (in/sec).*

*Source: California Department of Transportation, Transportation and Construction Vibration Guidance Manual, Table 20, April 2020.*

### 3.11.2 Regulatory Setting

#### State

##### *Governor's Office of Planning and Research*

The Governor's Office of Planning and Research (OPR) (2017), published the State of California General Plan Guidelines, which provide guidance for the acceptability of projects within specific



noise environments based on average-daily noise conditions (CNEL/L<sub>dn</sub>). However, it is important to note that the OPR guidance does not consider local conditions, including a particular community’s sensitivity to noise, noise reduction goals, or assessment of the relative importance of noise pollution. As a result, noise standards developed by local jurisdictions typically differ somewhat from the OPR guidance. In the case of the project, the City has adopted local noise standards, which are most relevant to the noise conditions in Sunnyvale. Therefore, this analysis is based on local standards, and the OPR guidance is not considered.

Local

*City of Sunnyvale General Plan*

The City has established noise standards in its adopted General Plan Noise Element intended to protect community residents from harmful and annoying noise levels. These policies identify permissible maximum average-daily noise standards for determination of land use compatibility. The City’s General Plan noise standards are summarized in **Table 3.11-3**. As shown in the table, the land use compatibility noise standards for sensitive uses (i.e. school and residential land uses) is 60 dBA L<sub>dn</sub> (Sunnyvale 2011). It is important to note that these noise criteria apply to newly proposed land uses and are based on average-daily noise levels. The land use compatibility standards mean that the proposed new land use cannot be sited in a location where it would receive exterior and interior noise above the maximum levels specified unless adequate noise reduction measures have been incorporated to reduce noise levels to within acceptable levels.

**Table 3.11-3  
City of Sunnyvale Maximum Permissible Noise Criteria  
for Determination of Land Use Compatibility**

Proposed Land Use	Maximum L <sub>dn</sub> (dBA)	
	Exterior	Interior
Residential	60	45
School	60	60

Source: Sunnyvale 2011

*Sunnyvale Municipal Code*

Sunnyvale Municipal Code (SMC) Title 19, Chapter 19.42, presents operational noise standards that would be enforced on residentially zoned property. Operational noise cannot exceed 75 dBA at any point on the property line of the premises upon which the noise or sound is generated or produced; provided, however, that the noise or sound level is not to exceed 50 dBA during nighttime or 60 dBA during daytime hours at any point on adjacent residentially-zoned property. If the noise occurs during nighttime hours and the enforcing officer has determined that the noise involves a steady, audible tone such as a whine, screech, or hum, or is a staccato or intermittent noise (e.g., hammering) or includes music or speech, the allowable noise or sound level cannot exceed 45 dBA.



SMC Title 16, Chapter 16.08, presents construction noise regulations. Construction activity is permitted between the hours of 7:00 a.m. and 6:00 p.m. daily Monday through Friday. Saturday hours of operation are between 8:00 a.m. and 5:00 p.m. No construction activity is allowed on Sundays or national holidays when City offices are closed.

### 3.11.3 *Impacts and Mitigation Measures*

#### Threshold of Significance

According to CEQA Guidelines Appendix G, impacts related to noise are considered significant if the project would result in any of the following conditions:

- 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.
- 2) Generation of an excessive groundborne vibration or groundborne noise level.
- 3) For a project located within the vicinity of a private airstrip or an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or a public use airport, exposure of people residing or working in the project area to excessive noise levels.

The project site is not located in an airport land use plan, within 2 miles of a public airport or public use airport, or in the vicinity of a private airstrip. Therefore, this analysis does not further evaluate Threshold of Significance 3.

#### NOISE IMPACT CRITERIA

Criteria for determining the significance of noise impacts were developed based on information contained in CEQA Guidelines Appendix G and the City's noise standards and guidelines. Sunnyvale's Noise Element standard of 60 dBA  $L_{dn}$  for residential uses is used as the threshold for project impacts to the residences in the project vicinity. The analysis considers the increases in noise levels over the pre-project noise conditions. With this in mind, the City's General Plan Noise Element states that an increase of more than 3 dBA when the total  $L_{dn}$  exceeds the "normally acceptable" category would be a significant impact. As previously stated, the land use compatibility noise standard for schools and residential land uses is 60 dBA  $L_{dn}$  and according to **Figure 6-4** of the Noise Element, the project site and surrounding vicinity currently experiences noise levels of approximately 60 dBA  $L_{dn}$ . Therefore, for the purposes of this analysis, an increase of 3 dBA over existing noise conditions in the project vicinity (60 dBA  $L_{dn}$ ) would be considered a significant impact.



### *Significance of Changes in Traffic Noise Levels*

An off-site traffic noise impact typically occurs when there is a discernable increase in traffic and the resulting noise level exceeds an established noise standard. In community noise considerations, changes in noise levels greater than 3 dB are often identified as substantial, while changes less than 1 dB will not be discernible to local residents. A 5-dB change is generally recognized as a clearly discernable difference.

As traffic noise levels at sensitive uses likely approach or exceed the City's 60 dBA CNEL clearly compatible standard, a 3.0 dB increase as a result of the project is used as the increase threshold for the project. Thus, the project would result in a significant noise impact if a permanent increase in ambient noise levels of 3.0 dB occurs upon project implementation and the resulting noise level exceeds the applicable exterior standard at a noise sensitive use.

### *Significance of Changes in Cumulative Traffic Noise Levels*

The project's contribution to a cumulative traffic noise increase would be considered significant when the combined effect exceeds the perception level (i.e., auditory level increase) threshold. The combined effect compares the "cumulative with project" condition to the "existing" conditions. This comparison accounts for the traffic noise increase from the project generated in combination with traffic generated by projects in the cumulative projects list. The following criteria have been utilized to evaluate the combined effect of the cumulative noise increase.

- ***Combined Effects:*** The cumulative with project noise level ("Future With Project") would cause a significant cumulative impact if a 3.0 dB increase over existing conditions occurs and the resulting noise level exceeds the applicable exterior standard at a sensitive use.<sup>1</sup>

Although there may be a significant noise increase due to the proposed project in combination with other related projects (combined effects), it must also be demonstrated that the project has an incremental effect. In other words, a significant portion of the noise increase must be due to the proposed project. The following criteria have been utilized to evaluate the incremental effect of the cumulative noise increase.

- ***Incremental Effects:*** The "Future With Project" causes a 1 dBA increase in noise over the "Future Without Project" noise level.

A significant impact would result only if both the combined and incremental effects criteria have been exceeded and the resulting noise level exceeds the applicable exterior standard at a noise sensitive use.

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<sup>1</sup> As shown in **Table 3.11-3**, the City of Sunnyvale considers 60 dBA CNEL clearly compatible for sensitive uses. Therefore, this analysis utilizes 60 dBA CNEL as the sensitive use exterior standard.

### *Project Impacts and Mitigation Measures*

#### **INCREASE IN AMBIENT NOISE LEVELS IN EXCESS OF STANDARDS ESTABLISHED IN THE LOCAL GENERAL PLAN OR NOISE ORDINANCE (STANDARD OF SIGNIFICANCE 1)**

**Impact 3.11.1** 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?

#### *Construction*

Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., land clearing, grading, excavation, paving). Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. Although noise ranges are generally similar for all construction phases, the initial site preparation phase tends to involve the most heavy-duty equipment having a higher noise-generation potential. Noise levels associated with individual construction equipment are summarized in **Table 3.11-4**.

**Table 3.11-4**  
**Typical Construction Equipment Noise Levels**

<b>Equipment</b>	<b>Typical Noise Level (dBA L<sub>max</sub>) 50 Feet from Source</b>
Air Compressor	81
Backhoe	80
Compactor	82
Concrete Mixer	85
Concrete Vibrator	76
Crane, Mobile	83
Dozer	85
Generator	81
Grader	85
Impact Wrench	85
Jackhammer	88
Loader	85
Truck	88
Paver	89
Pneumatic Tool	85
Roller	74
Saw	76

Source: FTA 2006



As depicted in **Table 3.11-4**, noise levels generated by individual pieces of construction equipment typically range from approximately 74 dBA to 89 dBA  $L_{max}$  at 50 feet (FTA 2006). Average-hourly noise levels associated with construction projects can vary, depending on the activities performed, reaching levels of up to approximately 83 dBA  $L_{eq}$  at 50 feet. Short-term increases in vehicle traffic, including worker commute trips and haul truck trips, may also result in temporary increases in ambient noise levels at nearby receptors.

During project construction, exterior noise levels could affect the nearest existing sensitive receivers in the vicinity. The nearest sensitive receptors include residences to the north, south, and west of the Specific Plan Area. The City of Sunnyvale does not establish quantitative noise limits for demolition or construction activities occurring in the City. Construction noise levels would be reduced through implementation of Mitigation Measure NOI-1, which would require construction best management practices (BMPs) for projects subject to CEQA review (i.e., non-exempt projects). Specifically, Mitigation Measure NOI-1 would require all construction equipment to be equipped with properly operating and maintained mufflers, locate stationary construction equipment so that emitted noise is directed away from the nearest noise sensitive receptors, locate equipment staging in areas furthest away from sensitive receptors, and limit haul truck deliveries to the same hours specified by SMC Chapter 16.08 for construction equipment (between the hours of 7:00 a.m. and 6:00 p.m. Monday through Friday, and between 8:00 a.m. and 5:00 p.m. on Saturdays). Therefore, compliance and/or adherence to the SMC and Mitigation Measure NOI-1 would reduce short-term construction noise impacts to **less than significant** levels.

### *Operations*

The project estimates that total buildout of the Specific Plan Area through the year 2035 would accommodate approximately 8,500 residential units and 3,980,000 square feet of commercial floor area, which would be equivalent to net increases of approximately 6,900 residential units and 730,000 square feet of commercial floor area above existing conditions. Operational noise sources associated with the Specific Plan Area are discussed below.

### **Stationary Noise Sources**

Stationary noise generated on the project site would occur within the proposed residential and commercial land uses. The nearest sensitive receptors include residences to the north, south, and west of the Specific Plan Area. Stationary noise sources at the project site may include mechanical equipment and parking lot activity.

### Mechanical Noise

Future uses within the Specific Plan Area would use heating, ventilation, and air conditioning units (HVAC). HVAC systems typically result in noise levels that average 55 dBA at 50 feet from the



source.<sup>2</sup> Although detailed site plans for future development within the Specific Plan Area have not yet been developed, HVAC equipment associated with high density residential and commercial uses would typically be roof mounted. Pursuant to SMC Section 19.38.020, mechanical equipment (i.e. HVAC systems) would be screened from view from adjoining streets or property. Based on modeled existing roadway noise levels, existing traffic along El Camino Real ranges from 66.0 to 68.7 dBA; refer to **Table 3.11-1**. Therefore, HVAC noise levels would not be perceptible above existing noise levels. Further, HVAC noise is currently generated within existing uses in the Specific Plan Area. Therefore, the proposed HVAC units would not result in a new source of noise in the Specific Plan Area. Thus, impacts would be **less than significant** in this regard.

Parking Lot Noise

Traffic associated with parking lots is typically not of sufficient volume to exceed community noise standards, which are based on a time-averaged scale such as the CNEL (or L<sub>dn</sub>) scale. However, the instantaneous maximum sound levels generated by a car door slamming, engine starting up, and car pass-bys may be an annoyance to adjacent noise-sensitive receptors. Estimates of the maximum noise levels associated with parking lot activities are presented in **Table 3.11-5**.

**Table 3.11-5  
Typical Noise Levels Generated by Parking Lots**

Noise Source	Maximum Noise Levels at 50 Feet from Source
Car door slamming	61 dBA L <sub>eq</sub>
Car starting	60 dBA L <sub>eq</sub>
Car idling	53 dBA L <sub>eq</sub>

*Source: Kariel, H. G., Noise in Rural Recreational Environments, Canadian Acoustics 19(5), 3-10, 1991.*

As shown in **Table 3.11-5**, parking lot noise levels range between 53 dBA and 61 dBA at a distance of 50 feet. At the time of this analysis, the proposed project's parking areas have not been identified. However, existing traffic along El Camino Real ranges from 66.0 to 68.7 dBA; refer to **Table 3.11-1**. Therefore, parking lot noise levels would not be perceptible above existing noise levels in the Specific Plan Area. Further, parking lot noise is currently generated within existing uses in the Specific Plan Area. Therefore, noise associated with parking lot activities would not represent a new source of noise in the Specific Plan Area. Thus, impacts would be **less than significant** in this regard.

**Mobile Noise Conditions**

To assess the mobile noise level impacts associated with development of the proposed project, traffic noise modeling was conducted for the proposed project using traffic volumes provided by

<sup>2</sup> U.S. Environmental Protection Agency, Community Noise, 1971.



Hexagon Transportation Consultants, Inc.<sup>3</sup> and the FHWA's RD-77-108 traffic noise model. The modeling results are included in **Appendix D**.

Based upon traffic data provided by Hexagon Transportation Consultants, Inc., the "Existing Without Project" and "Existing With Project" were compared for future noise conditions along roadway segments in the project vicinity. In **Table 3.11-6** the noise level (dBA at 100 feet from centerline) equates to what would typically be heard 100 feet perpendicular to the roadway centerline. As indicated in **Table 3.11-6** under "Existing Without Project" conditions, noise levels at a distance of 100 feet from the centerline would range from approximately 57.1 dBA to 70.0 dBA. The highest noise levels under "Existing Without Project" conditions would occur along Sunnyvale Saratoga Road (Remington Drive to Fremont Avenue). Similarly, under "Existing With Project" conditions, noise levels at a distance of 100 feet from the centerline would range from approximately 58.6 dBA to 70.7 dBA, with the highest noise levels occurring along the same segment.

**Table 3.11-6  
Predicted Increases in Traffic Noise Levels**

Roadway Segment	Existing Without Project		Existing With Project		Difference in dBA @ 100 feet from Roadway
	ADT	dBA @ 100 Feet from Roadway Centerline	ADT	dBA @ 100 Feet from Roadway Centerline	
<b>El Camino Real</b>					
SR-85 to Bernardo Avenue	64,380	68.7	88,150	70.1	1.4
Bernardo Avenue to Hollenbeck Avenue	52,180	67.8	74,530	69.4	1.6
Hollenbeck Avenue to Fair Oaks Avenue	46,100	66.0	66,730	67.6	1.6
Fair Oaks Avenue to Lawrence Road	68,420	67.7	80,350	68.4	0.7
<b>South Bernardo Avenue</b>					
Evelyn Avenue to El Camino Real	8,350	57.1	11,820	58.6	1.5
El Camino Real to Remington Drive	8,580	57.2	12,640	58.9	1.7
<b>Mary Avenue</b>					
Evelyn Avenue to El Camino Real	21,510	62.3	28,910	63.6	1.3
El Camino Real to Remington Drive	23,640	62.6	26,630	63.2	0.6
<b>Hollenbeck Avenue</b>					
El Camino Real to Remington Drive	15,900	59.9	20,870	61.1	1.2
Remington Drive to Fremont Avenue	10,340	58.0	14,550	59.5	1.5
<b>Mathilda Avenue</b>					
Evelyn Avenue to El Camino Real	67,800	67.7	77,190	68.3	0.6
El Camino Real to Sunnyvale Saratoga Road	48,560	67.6	60,210	68.5	0.9

<sup>3</sup> Existing and Existing Plus Project ADTs were provided by Hexagon Transportation Consultants, Inc., via email on December 30, 2020.

Roadway Segment	Existing Without Project		Existing With Project		Difference in dBA @ 100 feet from Roadway
	ADT	dBA @ 100 Feet from Roadway Centerline	ADT	dBA @ 100 Feet from Roadway Centerline	
<b>Sunnyvale Saratoga Road</b>					
Mathilda Avenue to Remington Drive	60,440	68.6	78,750	69.8	1.2
Remington Drive to Fremont Avenue	83,560	70.0	98,960	70.7	0.7
<b>Sunnyvale Avenue</b>					
Evelyn Avenue to El Camino Real	13,310	59.2	15,920	59.9	0.7
<b>Remington Drive</b>					
West of Bernardo Avenue to Hollenbeck Avenue	9,940	57.9	12,820	59.0	1.1
Hollenbeck Avenue to El Camino Real	41,710	65.3	49,020	66.0	0.7
<b>Fair Oaks Avenue</b>					
El Camino Real to Evelyn Avenue	40,680	65.2	50,830	66.1	0.9
<b>Fremont Avenue</b>					
Hollenbeck Avenue to Wolfe Road	33,200	65.9	40,970	66.9	1.0
<b>Wolfe Road</b>					
Evelyn Avenue to El Camino Real	27,910	63.6	32,970	64.4	0.8

Notes: ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level

Source: Noise modeling is based upon traffic data provided by Hexagon Transportation Consultants, Inc. on December 30, 2020.

As shown in **Table 3.11-6**, 16 of the roadway segments modeled (along El Camino Real, Mary Avenue, Hollenbeck Avenue, Mathilda Avenue, Sunnyvale Saratoga Road, Remington Drive, Fair Oaks Avenue, Fremont Avenue, and Wolfe Road) would generate noise levels above the 60 dBA CNEL standard. However, the increase in traffic noise would not exceed the 3.0 dB threshold. Therefore, a less than significant impact would occur as noise generated along roadway segments under the "Existing With Project" scenario would not exceed both the 3.0 dB increase threshold and the 60 dBA CNEL standard. Therefore, impacts would be **less than significant** in this regard.

### Mitigation Measures

**NOI-1** For projects that are subject to California Environmental Quality Act (CEQA) review (i.e., non-exempt projects), project applicants shall ensure through contract specifications that construction best management practices (BMPs) will be implemented by all project contractors to reduce construction noise levels. Contract specifications shall be included in construction documents, which shall be reviewed and approved by the City Community Development Department prior to issuance of a grading or building permit (whichever is issued first). BMPs to reduce construction noise levels may include, but are not limited to, the following:



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1. Ensure that construction equipment is properly muffled according to industry standards and is in good working condition.
2. Place noise-generating construction equipment and construction staging areas away from sensitive uses.
3. Construction activities shall occur between the hours of between the hours of 7:00 a.m. and 6:00 p.m. Monday through Friday, and between 8:00 a.m. and 5:00 p.m. on Saturdays, pursuant to Sunnyvale Municipal Code Chapter 16.08.
4. Implement noise attenuation measures, as needed, which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources.
5. Use electric air compressors and similar power tools rather than diesel equipment, where feasible.
6. Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than five minutes.
7. The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment (between the hours of 7:00 a.m. and 6:00 p.m. Monday through Friday, and between 8:00 a.m. and 5:00 p.m. on Saturdays). The haul route exhibit shall design delivery routes to minimize the exposure of sensitive land uses or residential dwellings to delivery truck-related noise.
8. Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow surrounding owners and residents to contact the job superintendent. If the City or the job superintendent receives a complaint, the superintendent shall investigate, take appropriate corrective action, and report the action taken to the reporting party and the Community Development Department.

Level of Significance

Less than significant with mitigation incorporated.

**GENERATION OF AN EXCESSIVE GROUNDBORNE VIBRATION OR GROUNDBORNE NOISE LEVEL (STANDARD OF SIGNIFICANCE 2)**

**Impact 3.11.2 Would the project result in generation of excessive groundborne vibration or groundborne noise levels?**

Project construction can generate varying degrees of groundborne vibration, depending on the construction procedure and the construction equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration



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levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Groundborne vibrations from construction activities rarely reach levels that damage structures.

Construction vibration impacts include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on the soil composition and underground geological layer between vibration source and receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment.

As shown in **Table 3.11-2**, the California Department of Transportation (Caltrans) has published reactions of people and the effects on buildings produced by continuous vibration levels. Based on **Table 3.11-2**, there is a risk of architectural damage to normal dwellings at 0.2 inch/second PPV and a risk of architectural damage to historic buildings at 0.25 inch/second PPV. Further, **Table 3.11-2** notes that vibrations may begin to annoy people at 0.2 inch/second PPV. The typical vibration produced by construction equipment is illustrated in **Table 3.11-7**.

Table 3.11-7  
Typical Vibration Levels for Construction Equipment

Equipment	Approximate peak particle velocity at 25 feet (inch/second)	Approximate peak particle velocity at 26 feet (inch/second)	Approximate peak particle velocity at 60 feet (inch/second)	Approximate peak particle velocity at 100 feet (inch/second)
Pile Driver (impact)	1.518	1.431	0.408	0.190
Pile Driver (sonic)	0.734	0.692	0.197	0.092
Vibratory compactor/roller	0.210	0.198	0.056	0.026
Caisson Drilling	0.089	0.084	0.024	0.011
Large bulldozer	0.089	0.084	0.024	0.011
Loaded trucks	0.076	0.072	0.020	0.010
Jackhammer	0.035	0.033	0.009	0.004
Small bulldozer	0.003	0.003	0.0008	0.0004

Notes:

1. Calculated using the following formula:

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

where: PPV (equip) = the peak particle velocity in in/sec of the equipment adjusted for the distance  
PPV (ref) = the reference vibration level at 25 feet in in/sec  
D = the distance from the equipment to the receiver

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.

Ground-borne vibration generated during construction activities would primarily impact existing structures that are located adjacent to or within the vicinity of future Specific Plan development. Based upon the information provided in **Table 3.11-7**, vibration levels could reach up to 0.210 inch/second PPV for typical construction activities (and up to 1.518 inch/second PPV if pile driving



activities were to occur) at structures located within 25 feet of construction. For structures that are located at or within 25 feet of potential project construction sites, structures at these locations may experience vibration levels during construction activities that exceed the Caltrans vibration impact threshold of 0.2 inch/second PPV; refer to **Table 3.11-2**. Therefore, implementation of Mitigation Measure NOI-2 would be required. Pursuant to Mitigation Measure NOI-2, should construction activities requiring operation of groundborne vibration generating equipment take place within 25 feet of a structure, a project-specific vibration impact analysis shall be conducted. In addition, the 0.2 inch/second Caltrans vibration impact threshold would be exceeded within 100 feet of impact pile driving activities and within 60 feet of sonic pile driving activities. Therefore, Mitigation Measure NOI-3 would be required to prohibit impact and sonic pile driving within 100 and 60 feet, respectively, of buildings and instead utilize alternative installation methods. With implementation of Mitigation Measures NOI-2 and NOI-3, construction vibration levels would not exceed 0.2 inch/second PPV. Therefore, the human annoyance threshold criteria (i.e., 0.2 inch/second PPV) would not be exceeded. Short-term vibration impacts would be **less than significant** with implementation of Mitigation Measures NOI-2 and NOI-3.

Operation of the proposed residential and commercial land uses would not generate high levels of groundborne vibration. Occasional large truck movements may occur in conjunction with transport of materials to the project site. However, large truck movements would generate minor levels of vibration for very short time periods. Therefore, impacts associated with operational groundborne vibration would be **less than significant**.

### Mitigation Measures

**NOI-2** Projects that are subject to California Environmental Quality Act (CEQA) review (meaning, non-exempt projects) with construction activities requiring operation of groundborne vibration generating equipment (i.e., vibratory compactor/roller, large bulldozer, caisson drilling, loaded trucks, and jackhammer) within 25 feet of a structure shall be required to prepare a project-specific vibration impact analysis to evaluate potential construction vibration impacts associated with the project, and to determine any specific vibration control mechanisms that shall be incorporated into the project's construction bid documents to reduce such impacts. Contract specifications shall be included in construction documents, which shall be reviewed and approved by the City Engineer prior to issuance of a grading permit.

**NOI-3** Projects that are subject to California Environmental Quality Act (CEQA) review (meaning, non-exempt projects) which require impact pile driving activities within 100 feet of buildings and/or sonic pile driving activities within 60 feet of buildings shall implement the below measures to reduce the potential for architectural/structural damage resulting from elevated groundborne vibration levels. Contractors shall demonstrate, to the satisfaction of the City Engineer and prior to issuance of a grading permit, that pile driving



activities would not exceed the California Department of Transportation (Caltrans) vibration threshold (i.e., 0.2 inch/second PPV) prior to initiation of construction.

- Impact pile driving within 100 feet of any building shall utilize alternative installation methods, such as pile cushioning, jetting, predrilling, cast-in-place systems, and resonance-free (i.e., sonic) vibratory pile drivers.
- Sonic pile driving activities within 60 feet of any building shall utilize alternative installation methods, such as pile cushioning, jetting, predrilling, and cast-in-place systems.

### Level of Significance

Less than significant with mitigation incorporated.

## CUMULATIVE IMPACTS

### Impact 3.11.3 Would the project make a cumulatively considerable contribution to a significant cumulative noise impact?

Cumulative noise impacts would occur primarily as a result of increased traffic on local roadways due to buildout of the Specific Plan and other projects in the vicinity. The cumulative mobile noise analysis is conducted in a two-step process. First, the combined effects from both the proposed project and other projects are compared. Second, for combined effects that are determined to be cumulatively significant, the project's incremental effects then are analyzed. The project's contribution to a cumulative traffic noise increase would be considered significant when the combined effect exceeds perception level (i.e., auditory level increase) threshold. The combined effect compares the "Future With Project" condition to "Existing" conditions. This comparison accounts for the traffic noise increase from the project generated in combination with traffic generated by projects in the cumulative projects list.

A significant impact would result only if both the combined (including an exceedance of the applicable exterior standard at a sensitive use) and incremental effects criteria have been exceeded. Noise by definition is a localized phenomenon, and reduces as distance from the source increases. Consequently, only the proposed project and growth due to occur in the project site's general vicinity would contribute to cumulative noise impacts. **Table 3.11-8** lists the traffic noise effects along roadway segments in the project vicinity for "Existing," "Future Without Project," and "Future With Project" conditions, including incremental and net cumulative impacts.

**Table 3.11-8  
Cumulative Noise Scenario**

Roadway Segment	Existing	Future Without Project	Future With Project	Combined Effects	Incremental Effects	Future With Project Noise Level Exceeds City's 60 dBA CNEL Noise Standard for Sensitive Receptors?	Cumulatively Significant Impact?
	dBA @ 100 Feet from Roadway Centerline	dBA @ 100 Feet from Roadway Centerline	dBA @ 100 Feet from Roadway Centerline	Difference In dBA Between Existing and Future With Project	Difference In dBA Between Future Without Project and Future With Project		
<b>El Camino Real</b>							
SR-85 to Bernardo Avenue	68.7	69.1	70.3	1.6	1.3	Yes	No
Bernardo Avenue to Hollenbeck Avenue	67.8	68.6	69.9	2.1	1.3	Yes	No
Hollenbeck Avenue to Fair Oaks Avenue	66.0	66.6	68.0	2.0	1.4	Yes	No
Fair Oaks Avenue to Lawrence Road	67.7	68.2	68.8	1.1	0.6	Yes	No
<b>South Bernardo Avenue</b>							
Evelyn Avenue to El Camino Real	57.1	58.0	59.3	2.2	1.3	No	No
El Camino Real to Remington Drive	57.2	57.7	59.3	2.1	1.5	No	No
<b>Mary Avenue</b>							
Evelyn Avenue to El Camino Real	62.3	63.7	64.6	2.3	1.0	Yes	No
El Camino Real to Remington Drive	62.6	62.7	63.3	0.7	0.5	Yes	No
<b>Hollenbeck Avenue</b>							
El Camino Real to Remington Drive	59.9	61.3	62.2	2.3	0.9	Yes	No
Remington Drive to Fremont Avenue	58.0	60.4	61.3	3.3	0.9	Yes	No
<b>Mathilda Avenue</b>							
Evelyn Avenue to El Camino Real	67.7	67.7	68.3	0.6	0.6	Yes	No
El Camino Real to Sunnyvale Saratoga Road	67.6	68.0	68.9	1.3	0.9	Yes	No
<b>Sunnyvale Saratoga Road</b>							
Mathilda Avenue to Remington Drive	68.6	68.9	70.0	1.4	1.1	Yes	No
Remington Drive to Fremont Avenue	70.0	69.9	70.7	0.7	0.8	Yes	No
<b>Sunnyvale Avenue</b>							
Evelyn Avenue to El Camino Real	59.2	60.1	60.7	1.5	0.6	Yes	No
<b>Remington Drive</b>							
West of Bernardo Avenue to Hollenbeck Avenue	57.9	59.7	60.5	2.6	0.8	Yes	No



3.11 Noise

Roadway Segment	Existing	Future Without Project	Future With Project	Combined Effects	Incremental Effects	Future With Project Noise Level	Cumulatively Significant Impact?
	dBA @ 100 Feet from Roadway Centerline	dBA @ 100 Feet from Roadway Centerline	dBA @ 100 Feet from Roadway Centerline	Difference In dBA Between Existing and Future With Project	Difference In dBA Between Future Without Project and Future With Project	Exceeds City's 60 dBA CNEL Noise Standard for Sensitive Receptors?	
Hollenbeck Avenue to El Camino Real	65.3	65.5	66.1	0.8	0.7	Yes	No
<b>Fair Oaks Avenue</b>							
El Camino Real to Evelyn Avenue	65.2	66.0	66.8	1.6	0.8	Yes	No
<b>Fremont Avenue</b>							
Hollenbeck Avenue to Wolfe Road	65.9	67.3	67.9	2.0	0.7	Yes	No
<b>Wolfe Road</b>							
Evelyn Avenue to El Camino Real	63.6	67.1	67.5	3.9	0.3	Yes	No
El Camino Real to Homestead Road	65.6	65.9	66.3	0.7	0.4	Yes	No

Notes: ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level

Source: Noise modeling is based upon traffic data provided by Hexagon Transportation Consultants, Inc. on December 30, 2020.

As shown in **Table 3.11-8**, 19 of the roadway segments modeled (along El Camino Real, Mary Avenue, Hollenbeck Avenue, Mathilda Avenue, Sunnyvale Saratoga Road, Sunnyvale Avenue, Remington Drive, Fair Oaks Avenue, Fremont Avenue, and Wolfe Road) would generate noise levels above the 60 dBA CNEL standard. However, the Incremental Effects criterion of 1.0 dBA and the Combined Effects criterion of 3.0 dBA would not be concurrently exceeded along any roadway segments in the Specific Plan Area. Therefore, the proposed project, in combination with cumulative background traffic noise levels, would result in **less than cumulatively considerable** impacts.

Mitigation Measures

None required.

Level of Significance

Less than cumulatively considerable.

## 3.12 Population and Housing

This section provides a discussion of the environmental setting and conditions in the project area relative to population and housing, including local and regional growth trends in the City of Sunnyvale and Santa Clara County. Standards of significance to determine potential impacts in this section include performance standards outlined in the City's General Plan, adopted Land Use and Transportation Element (LUTE), and applicable regulatory statutes. Analysis includes an evaluation of potential direct and indirect environmental effects that may result from project implementation and a determination as to whether significant environmental effects would remain after application of applicable policies and actions identified in the General Plan and the LUTE.

### 3.12.1 Existing Setting

#### Population Trends

Population data for the Santa Clara County and the City is presented in **Table 3.12-1, Population Estimates and Projections**.

**Table 3.12-1  
Population Estimates and Projections**

Year	Santa Clara County	City of Sunnyvale
<b>Population</b>		
2010 <sup>1</sup>	1,781,642	140,081
Existing Conditions (May 2020) <sup>2</sup>	1,961,969	156,503
<i>2010-2020 Change</i>	<i>+180,327</i>	<i>+16,422</i>
<i>2010-2020 % Change</i>	<i>+10.1%</i>	<i>+11.7%</i>
<b>2035 ABAG Forecast</b>	<b>2,387,165</b>	<b>203,780</b>
<i>2020-2035 Change</i>	<i>+425,196</i>	<i>+47,277</i>
<i>2020-2035 % Change</i>	<i>+21.7%</i>	<i>+30.2%</i>

Source: DOF 2020, ABAG 2020d.

#### *Santa Clara County*

The County's population totaled 1,781,642 persons in 2010 and is currently estimated to be approximately 1,961,969 persons, representing a growth rate of approximately 10.1 percent between 2010 and 2020.

The Association of Bay Area Governments (ABAG) projects the County's population to increase to approximately 2,387,165 persons by 2035 (the project buildout year), representing a 21.7 percent increase from 2020 to 2035.



City of Sunnyvale

As indicated in Table 3.12-1, the City’s population was an estimated 140,081 persons in 2010 and is currently estimated to be approximately 156,503 persons, representing a population increase rate of approximately 11.7 percent between 2010 and 2020.

ABAG forecasts the City’s population to increase to approximately 203,780 persons by 2035, a 30.2 percent increase from 2020 to 2035, whereas the County is projected to increase at a rate of just 21.7 percent in the same time period.

Household Trends

Housing data for the County and City is presented in Table 3.12-2, Housing Inventory Estimates and Projections.

Table 3.12-2
Housing Inventory Estimates and Projections

Table with 3 columns: Category, Santa Clara County, and City of Sunnyvale. Rows include 2010, Existing Conditions (May 2020), 2010-2020 Change, 2010-2020 % Change, 2020 Vacancy Rate, 2020 Persons per Household, 2035 ABAG Forecasts, 2020-2035 Change, and 2020-2035 % Change.

Source: DOF 2020, ABAG 2020d

Santa Clara County

The County’s housing inventory was an estimated at 631,920 dwelling units in 2010 and is currently estimated to be approximately 674,558 dwelling units, representing an increase of approximately 6.7 percent between 2010 and 2020.

Vacancy rates are a measure of the general availability of housing. They also indicate how well the types of available units meet the housing market demand. A low vacancy rate suggests that households may have difficulty finding housing within their price range, whereas a high vacancy rate indicates that either the units available are not suited to the population’s needs or there is an oversupply of housing units. The availability of vacant housing units provides households with choices of type and price to accommodate their specific needs. Low vacancy rates can result in higher prices, limited choices, and settling with inadequate housing. Low vacancy rates may also contribute to overcrowding. A vacancy rate between 4.0 and 6.0 is considered “healthy.” As of 2020, the County has an estimated vacancy rate of 4.3 percent and an average household size of 2.99.



ABAG forecasts the County’s dwelling units to reach 815,980 by 2035 (the Specific Plan buildout year), representing an increase of approximately 30 percent between 2020 and 2035; refer to **Table 3.12-2**.

*City of Sunnyvale*

The City’s housing inventory was an estimated 55,791 dwelling units in 2010 and is currently estimated to be approximately 60,273 dwelling units, representing an increase of approximately 8.1 percent; refer to **Table 3.12-2**. Comparatively, the City’s housing growth rate between 2010 and 2020 was higher than the County’s growth rate for the same period (8.1 percent). As indicated in **Table 3.12-2**, the City’s 2020 vacancy rate is estimated to be approximately 4.0 percent.

ABAG forecasts the City’s dwelling units to reach 77,450 by 2035, representing an increase of approximately 28.5 percent between 2020 and 2035.

Employment

**Table 3.12-3, Employment Estimates and Projections**, details employment data for the County and City.

**Table 3.12-3  
Employment Estimates and Projections**

	Santa Clara County		City of Sunnyvale	
	Employment	Unemployment Rate	Employment	Unemployment Rate
Existing Conditions (December 2020) <sup>1</sup>	979,000	5.9%	82,100	4.6%
2035 ABAG Forecast <sup>2</sup>	1,231,000	--	99,595	--
2020-2035 Change	+252,000	--	+17,495	--
2020-2035 % Change	+25.7%	--	+21.3%	--

Source: State of California 2020, ABAG 2020d

*Santa Clara County*

According to the California Employment Development Department, the County has an estimated 979,000 jobs and an unemployment rate of 5.9 percent as of December 2020. ABAG projections indicate that the County is forecasted to have an estimated 1,231,000 jobs by 2035 (the project buildout year).

*City of Sunnyvale*

As indicated in **Table 3.12-3**, the City has an estimated 82,100 jobs and an unemployment rate of 4.6 percent as of December 2020. ABAG projections indicate that the number of jobs within the City are forecast to increase to 99,595 jobs by 2035.

The jobs/housing ratio is used as a general measure of balance between a community’s employment opportunities and the housing needs of its residents. However, it does not indicate the types of jobs available or if wages are commensurate with housing prices. A ratio of 1.0 or



greater generally indicates that a community provides adequate employment opportunities, potentially allowing its residents to work within the community (rather than commuting to neighboring cities). As of 2020, the City's jobs/housing ratio is approximately 1.36.

#### 3.12.2 Regulatory Setting

##### *State*

##### [Housing Element Law - Article 10.6 of the Government Code \(Sections 65580 - 65589.8\)](#)

The California legislature has declared the attainment of affordable housing and a suitable living environment for every Californian to be of vital importance. Attaining the state's housing goals requires efforts from all sectors, including the private sector and all levels of government. Each local government has the power to facilitate the improvement and development of housing for all economic segments of the community, while accounting for economic, environmental, and fiscal factors as well as community goals and regional housing needs. The tool by which local governments attempt to achieve these goals is the general plan housing element. The housing element identifies and analyzes existing and projected housing needs and presents goals, policies, quantified objectives, and programs to address those needs. The housing element also provides implementation measures for these programs. Each jurisdiction in the state must update its housing element at least every eight years in accordance with housing element law. The City of Sunnyvale's General Plan Housing Element is described under the Local subheading below.

##### [Senate Bill 375](#)

Senate Bill 375, adopted in October 2008, calls upon each of California's 18 metropolitan planning organization regions to develop an integrated transportation, land use, and housing plan known as a sustainable communities strategy (SCS). The SCS must demonstrate how the region will reduce greenhouse gas emissions through long-range planning. It also requires the regional housing needs allocation, which anticipates housing needs for local jurisdictions, to conform to the SCS, and represents an opportunity to advocate for increased access to and distribution of affordable housing across the region.

##### *Regional*

##### [Regional Housing Needs Assessment \(RHNA\)](#)

State law requires that jurisdictions provide their fair share of regional housing needs. The State of California Department of Housing and Community Development (HCD) is mandated to determine the state-wide housing need. In cooperation with HCD, local governments and Councils of Governments are charged with making a determination of the existing and projected housing needs as a share of the state-wide housing need of their city or region.

The Regional Housing Needs Assessment is an assessment process performed periodically as part of Housing Element and General Plan updates at the local level. The RHNA quantifies the housing



need by income group within each jurisdiction during specific planning periods. The RHNA allows communities to anticipate growth, so that collectively the region can grow in ways that enhance quality of life, improve access to jobs, promote transportation mobility, and address social equity and fair share housing needs.

The 5<sup>th</sup> Cycle Final Regional Housing Need Plan for the San Francisco Bay Area: 2015-2023 was adopted on July 18, 2013 and covers the planning period from January 31, 2015 to January 1, 2023. In 2013, ABAG identified that Sunnyvale's fair share of regional housing need for the 2015–2023 planning period consisted of 1,640 units affordable to very low-income households, 906 units affordable to low-income households, 932 units affordable to moderate-income households, and 1,974 units affordable to above moderate-income households, for a total of 5,452 units (City of Sunnyvale 2014).

As the RHNA process is required to be updated every 8 years, ABAG began updating the RHNA methodology for the 6<sup>th</sup> RHNA Cycle in October 2019 (which will cover years 2023-2031) and provided a draft Regional Housing Needs Determination for the Bay Area on June 9, 2020. The Plan Bay Area 2050 Final Blueprint data for the 2050 Household baseline allocation was released in December 2020. Adoption of a final RHNA methodology occurred on May 20, 2021. The final housing allocation, showing the number of housing units, by income category, that each jurisdiction receives based on the final adopted methodology will be issued in December 2021. Each local government will then be responsible for revising its housing element by January 2023 to show how it plans to accommodate its portion of the Bay Area's housing need (ABAG 2020b).

### Plan Bay Area 2040

Plan Bay Area 2040 was adopted on July 26, 2017, and represents the efforts of nine Bay Area counties to provide a regional, long-range plan to meet the requirements of California's landmark 2008 Senate Bill 375. As stated previously, SB 375 requires each of the state's 18 metropolitan areas to develop an SCS to accommodate future population growth and to reduce greenhouse gas emissions from cars and light trucks. Working in collaboration with cities and counties, the plan advances initiatives to expand housing and transportation choices, create healthier communities, and build a stronger regional economy. The plan includes housing and population forecasts and recommends areas where future development should be focused (ABAG 2017b).

Additionally, Plan Bay Area 2050 is currently being developed. The plan is focused on four key issues: the economy, the environment, provision of housing, and transportation. The new regional plan outlines strategies for growth and investment through the year 2050, while simultaneously striving to meet and exceed applicable federal and state requirements. It is anticipated that the Metropolitan Transportation Commission and the Association of Bay Area Governments will adopt the Plan Bay Area 2050 in fall 2021 (ABAG 2020c).

## Local

### City of Sunnyvale General Plan

The General Plan and the adopted LUTE describe how the City plans to fulfill its share of housing needs through the utilization of vacant and underdeveloped sites, redevelopment opportunities in industrialized areas, and designation of mixed-use zones in the City's downtown.

The City of Sunnyvale General Plan Housing Element was adopted in December 2014 and serves as the City's primary policy document regarding the development, rehabilitation, and preservation of housing for all economic segments of the population within its jurisdiction for the 2015–2023 planning period. Accordingly, the Housing Element identifies and analyzes the existing and projected housing needs of Sunnyvale and lists goals, policies, and programs for the preservation, improvement, and development of housing. The Housing Element also identifies sites for future housing development that are adequate to accommodate Sunnyvale's allocation of the regional housing need. The goals, policies, and programs are classified in six categories: provision of new housing, housing conservation and maintenance, removal of governmental constraints, provision of adequate housing sites, equal housing opportunities and special needs, and neighborhood quality. The following Housing Element policies are related to population and housing:

### Housing Element

- Policy HE-1.1 Encourage diversity in the type, size, price, and tenure of residential development in Sunnyvale, including single-family homes, townhomes, apartments, mixed-use housing, transit-oriented development and live-work housing.
- Policy HE-4.1 Provide site opportunities for development of housing that responds to diverse community needs in terms of density, tenure type, location, and cost.
- Policy HE-4.2 Continue to direct new residential development into specific plan areas, near transit, and close to employment and activity centers.
- Policy HE-6.1 Continue efforts to balance the need for additional housing with other community values, including preserving the character of established neighborhoods, high quality design, and promoting a sense of identity in each neighborhood.
- Policy HE-6.2 Promote neighborhood vitality by providing adequate community facilities, infrastructure, landscaping and open space, parking, and public health and safety within new and existing neighborhoods.

The project proposes redevelopment in commercial and mixed-use zones that are in compliance with the following LUTE policies and actions addressing population, housing, and employment:



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## Land Use and Transportation Element

- Policy LT-1.2 Minimize regional sprawl by endorsing strategically placed development density in Sunnyvale and by utilizing a regional approach to providing and preserving open space for the broader community.
- Policy LT-5.2 Preserve and enhance the character of Sunnyvale’s residential neighborhoods by promoting land use patterns and transportation opportunities that support a neighborhood concept as a place to live, work, shop, entertain, and enjoy public services, open space, and community near one’s home and without significant travel.
- LT-5.2b: Support a full spectrum of conveniently located commercial, public, and quasi-public uses that support and enhance the livability of residential neighborhoods.
- Policy LT-6.1 Improve and preserve the character and cohesiveness of existing residential neighborhoods.
- LT-6.1d: Establish standards and promote and support programs that result in the maintenance and rehabilitation of existing housing and residential neighborhoods.
- Policy LT-6.2 Limit the intrusion of incompatible uses and inappropriate development in and near residential neighborhoods, but allow transition areas at the edges of neighborhoods.
- LT-6.2a: Where appropriate, use higher-density residential and higher-intensity uses as buffers between neighborhood commercial centers and transportation and rail corridors.
- LT-6.2b: Require appropriate noise attenuation, visual screening, landscape buffers, or setbacks between residential areas and dissimilar land uses.
- Policy LT-7.1 In addition to more traditional forms of housing (single-family detached, townhouses, garden apartments, and shared corridor multi-family housing), support alternative housing types including co-housing, single-room occupancy units, live/work spaces, transitional housing, senior housing, assisted living, and other types that may become necessary and appropriate to serve a changing population.
- Policy LT-7.4 Promote new mixed-use development and allow higher-residential density zoning districts (medium and higher) primarily in Village Centers, El Camino Real nodes, and future industrial-to-residential areas.



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### 3.12 Population and Housing

- Policy LT-11.4 Participate in regional efforts to respond to transportation and housing problems caused by economic growth in order to improve the quality of life and create a better environment for businesses to flourish.
- LT-11.4a: Support land use policies to achieve a healthy relationship between the creation of new jobs and housing.
- Policy LT-12.4 Attract and retain a diversity of commercial enterprises and industrial uses to sustain and bolster the local economy and provide a range of job opportunities.
- LT-12.4b: Ensure that rezoning of industrial or commercial areas and sites will not significantly hurt the community's economic base.
- Policy LT-12.8 Provide quality neighborhood, community, and regional retail centers/uses to meet the needs of residents.
- Policy LT-14.5 Use the Industrial-to-Residential (ITR) combining district to help meet the community's housing needs for all ages and economic sectors and balance its use with maintaining a healthy economy and employment base. ITR zoning allows industrial/commercial/office uses to continue as conforming uses while an area transitions to residential uses. ITR areas include Tasman Crossing, East Sunnyvale, the Lawrence Station Area, the Evelyn Corridor (Fair Oaks to Wolfe), and Fair Oaks Junction.
- Policy LT-14.7 Balance the need for additional residential uses with industrial uses needed for a healthy economy.
- Policy LT-14.8 Ensure that development projects provide appropriate improvements or resources to meet the city's future infrastructure and facility needs, and provide development incentives that result in community benefits and enhance the quality of life for residents and workers.

#### *3.12.3 Impacts and Mitigation Measures*

##### Standards of Significance

According to California Environmental Quality Act (CEQA) Guidelines Section 15131(a), economic or social effects of a project are not treated as significant effects on the environment. If the proposed project were to cause physical changes as a result of economic or social changes, the physical effects (for example, the destruction of habitat resulting from housing construction to accommodate increased population) could be considered significant.

This analysis evaluates potential impacts on population and housing based on the standards of significance identified in CEQA Guidelines Appendix G. A significant impact would occur if implementation of the project would:



3.12 Population and Housing

- 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).
- 2) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

Project Impacts and Mitigation Measures

**SUBSTANTIAL UNPLANNED POPULATION GROWTH (STANDARD OF SIGNIFICANCE 1)**

**Impact 3.12.1 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)?**

As elaborated in Section 2.0, Project Description, the project estimates that total buildout of the Specific Plan Area through the year 2035 would accommodate approximately 8,500 residential units and 3,980,000 square feet of commercial floor area, which would serve as net increases of approximately 6,900 residential units and 730,000 square feet of commercial floor area above existing conditions. However, no demolition or development activities are proposed as part of the project and existing on-site uses would remain until future redevelopment is proposed at a later date. Therefore, project implementation would induce direct population growth in the City through future anticipated buildout in accordance with the proposed project.

It is speculative to determine whether all future residents of the anticipated 6,900 additional dwelling units would relocate from within or outside of the City. Thus, this analysis conservatively assumes future residents would relocate from outside of the City. Based on the City’s average household size of 2.69, the anticipated 6,900 additional units would introduce up to 18,561 additional residents to the City. The anticipated population growth associated with the project represents only a 12-percent increase from the City’s current population of 156,503 persons (DOF 2020).

**Table 3.12-4, Proposed Project’s Development Potential Compared to General Plan Buildout Assumptions** compares the project’s potential population and housing growth to the General Plan’s population and housing forecasts for the City at buildout. The City’s housing stock is forecast to total approximately 72,460 dwelling units at General Plan buildout, with a resultant population of approximately 174,500 persons; refer to **Table 3.12-4**. Compared to the General Plan buildout assumptions, the proposed development potential would increase the City’s housing stock by 6,900 dwelling units and increase the City’s population by 18,561 persons. As shown in **Table 3.12-4**, buildout in accordance with the proposed Specific Plan would not exceed the General Plan’s housing forecasts but would exceed the General Plan’s buildout population forecasts by 564 persons. An additional 564 persons would represent only 0.3 percent increase



over the City's General Plan buildout assumptions for 2035 and thus would not represent a substantial increase in population. Impacts would be less than significant in this regard.

**Table 3.12-4  
Proposed Project's Development Potential  
Compared to General Plan Buildout Assumptions**

Description	Dwelling Units	Population
Existing Conditions (May 2020) <sup>1</sup>	60,273	156,503
Proposed Net Development Potential	6,900	18,561
<i>Total City (Including Proposed Net Development Potential)</i>	67,173	175,064
General Plan Buildout Assumptions for 2035	72,460	174,500
<i>Project's Net Development Potential Compared to General Plan Buildout Increase Assumption</i>	-5,287	+564

Source: DOF 2020

**Table 3.12-5, Proposed Project's Development Potential Compared to ABAG Growth Forecasts**, compares the project's anticipated housing and population growth with ABAG's 2035 growth projections for Sunnyvale. As indicated in **Table 3.12-5**, ABAG projects that the City's housing stock would total 77,450 dwelling units with a resultant population of 203,780 persons by 2035. Compared to ABAG's growth forecasts, the proposed development potential would increase the City's housing stock by 6,900 dwelling units and increase the City's population by up to 18,561 persons. As shown, the proposed project's development potential would not exceed ABAG's population estimates or growth forecasts for dwelling units for 2035. The project would not result in substantial unplanned population growth and impacts in this regard would be less than significant.

**Table 3.12-5  
Proposed Project's Development Potential Compared to ABAG Growth Forecasts**

Description	Dwelling Units	Population
Existing Conditions (May 2020) <sup>1</sup>	60,273	156,503
Proposed Net Development Potential	6,900	18,561
<i>Total City (Including Proposed Net Development Potential)</i>	67,173	175,064
ABAG 2035 Forecasts <sup>3,4</sup>	77,450	203,780
<i>Project's Net Development Potential Compared to ABAG's 2035 Forecast Increase Assumption</i>	-10,277	-28,716

Source: DOF 2020, ABAG 2021



*JOBS/HOUSING BALANCE*

As stated above, the jobs/housing ratio is used as a general measure of balance between a community’s employment opportunities and the housing needs of its residents. As of December 2020, the City’s jobs/housing ratio is approximately 1.36.

Future projects implemented in accordance with the Specific Plan Area would develop new dwelling units and generate new jobs. The project’s anticipated development potential would allow up to 6,900 residential units and 730,000 square feet of commercial floor area above existing conditions. The project’s employment increase would be approximately 503 persons (EIA 2012; DOF 2020). As such, the proposed project would increase the City’s employment base over existing conditions (December 2020) from approximately 82,100 to 82,603 jobs, representing an approximately 0.6 percent increase. However, the 6,900 additional dwelling units would also increase the City’s housing stock from 60,273 (May 2020) to 67,173, representing an approximately 11.4 percent increase.

At project buildout, the City’s jobs/housing ratio would slightly decrease from the existing 1.36 to 1.23. As the project would allow for a ratio of 1.0 or greater, which generally indicates that a community provides adequate employment opportunities, impacts would be less than significant.

In conclusion, the project would not induce substantial unplanned population growth, either directly or indirectly, in the project area. Impacts in this regard would be **less than significant**.

Mitigation Measures

None required.

Level of Significance

Less than significant.

**DISPLACEMENT OF A SUBSTANTIAL NUMBER OF EXISTING PEOPLE OR HOUSING (STANDARD OF SIGNIFICANCE 2)**

**Impact 3.12.2 Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

The project as proposed, in connection with the City’s LUTE, would accommodate anticipated future growth through a compact urban form that seeks to make efficient use of existing infrastructure and public services, thus minimizing expansion that could be the impetus for the removal of existing housing units and/or businesses. Project implementation would not directly result in new construction; however, implementation of the project over time would allow for future development of 6,900 new housing units, thus providing a surplus of housing opportunities over that currently allowed under buildout of the General Plan. Amendments to the City’s LUTE would change land use designations in some areas within the project boundaries not currently designated for growth to accommodate new anticipated development. In doing so, the project is



aimed at allowing for orderly future development of adequate housing, nonresidential facilities, and public services within the corridor, as well as enhanced transportation infrastructure systems to serve the corridor, and implementing sustainable growth planning and policies for a growing population.

Because most of Sunnyvale has been developed with urban-type uses, the project is focused on redeveloping lands currently occupied by commercial uses. Project implementation would allow for undeveloped and underutilized lands to be converted to mixed-use and residential housing that would substantially increase the City's existing housing stock. Conversion of existing residential uses to nonresidential uses that could potentially displace a substantial number of people or housing units is not anticipated. Future development of diverse housing types would be supported under LUTE Policies LT-1.2 and LT-7.1. The land use changes in the LUTE support development, at increased densities and intensities in selected areas, of mixed uses, affordable housing, and transit-oriented development (e.g., clustering of homes, businesses, and offices within proximity to transit stations). The introduction of new land use designations that allow a broad and flexible mix of land uses would support both residential and commercial growth, and would provide for a wider range of housing opportunities to complement Sunnyvale's existing range of allowable residential densities.

Therefore, implementation of the project would not displace substantial numbers of existing residents or housing units and would not necessitate the construction of replacement housing elsewhere. The project does not directly propose the demolition of existing uses located along the El Camino Real corridor, nor does it propose a substantial change in land use designations that would result in the displacement of large numbers of people or housing within the project area. Impacts in this regard would be **less than significant**.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

### CUMULATIVE IMPACTS

#### **Impact 3.12.3 Would the project result in a cumulative increase in population and housing growth in Sunnyvale as well as in the surrounding region, along with associated environmental impacts?**

Cumulative impacts involving population and housing are analyzed in terms of consistency with General Plan and ABAG growth assumptions for applicable jurisdictions. As stated above, the project's proposed development potential would introduce up to 6,900 additional units, which would introduce up to 18,561 additional residents to the City. **Tables 3.12-4** and **3.12-5** compare the project's anticipated population and housing growth to the General Plan buildout assumptions and ABAG growth forecasts, respectively. As summarized above, the project would



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### 3.12 Population and Housing

not exceed ABAG's population estimates or dwelling unit forecasts for 2035. The project's contribution to impacts relative to substantial unplanned population or housing growth in Sunnyvale and/or the surrounding region would be **less than significant**.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

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### 3.13 Public Services

This section evaluates fire protection services, law enforcement, schools, and other public facilities within the plan area. Each subsection includes a description of existing facilities and infrastructure, applicable service goals, and environmental impacts potentially resulting from implementation of the Specific Plan. It should be noted that California Environmental Quality Act (CEQA) Guidelines Section 15131 states that the economic effects of a project, such as the cost of providing public services, shall not be treated as a significant effect on the physical environment that would require analysis in the EIR.

#### 3.13.1 Existing Setting

##### Fire Protection Services

###### *Sunnyvale Department of Public Safety Fire Services Bureau*

The Sunnyvale Department of Public Safety Bureau of Fire Services (Fire Bureau) is an all-hazard/full-service bureau within the Department of Public Safety (DPS) that provides emergency medical services, fire suppression, hazardous material incident mitigation, rescue operations, fire prevention/investigations, and statewide mutual aid response (City of Sunnyvale 2011).

The Fire Bureau operates six fire stations, which include nine fire engines, three trucks, and one Rescue/OES Type II Hazardous Materials apparatus (City of Sunnyvale 2020a). Each is staffed with two persons in Sunnyvale, with additional staffing coming from the ranks of on-duty patrol officers. The Rescue/OES Type II Hazardous Materials apparatus is alternatively staffed based on available personnel with either one or two public safety officers. In addition, off-duty public safety officers can respond to an emergency to further enhance staff needs (City of Sunnyvale 2011).

Four fire stations are centrally located to the east and west of the plan area, including the following: Fire Station #1 is located at 171 N. Mathilda Avenue; Station #2 is located at 795 E. Arques Avenue; Station #3 is located at 910 Ticonderoga Drive; and Station #4 is located at 996 South Wolfe Road. The stations are situated throughout Sunnyvale, with locations based on a combination of call volume and response times.

The Fire Bureau has mutual aid and/or automobile aid agreements with Santa Clara County Fire, San Jose Fire, Mountain View Fire, and Santa Clara (City) Fire. These agreements cover responses to freeway incidents and structure fire incidents in areas of common shared boundaries between jurisdictions (City of Sunnyvale 2011).

On average, the Fire Bureau responds to approximately 7,000 calls for fire and emergency service annually (City of Sunnyvale 2020a). For fiscal year 2018/2019, the Fire Bureau responded to 7,204 emergency events, of which 2,017 were emergency fire events and 5,187 were emergency medical events (City of Sunnyvale 2020a). For fiscal year 2018/2019, average fire response to all emergency events was approximately 4 minutes, 36 seconds; average response time to emergency fire events



was approximately 5 minutes, 13 seconds; and average response time to emergency medical events was approximately 4 minutes, 23 seconds (City of Sunnyvale 2020a).

### Law Enforcement

#### *City of Sunnyvale Department of Public Safety Bureau of Police Services*

The existing Sunnyvale Civic Center is a 269,830 square-foot facility located at the corner of El Camino Real and Mathilda Avenue in the City's Downtown Node. The Civic Center is home to the City's primary administrative facilities, including City Hall, the Sunnyvale Public Library, and the Department of Public Safety Headquarters.

Police services are provided by the City of Sunnyvale Department of Public Safety Bureau of Police Services (Police Bureau). The Police Bureau operates out of a central station located at 700 All America Way. The Police Bureau maintains two patrol teams consisting of five patrol units, allowing for continuous coverage of the City 24 hours a day. The number of officers in each unit changes depending on the time of the day the shift covers. In addition to patrolling, the Police Bureau provides a traffic safety unit, a SWAT team, a crisis negotiations team, a canine unit, a desk officer, a police training officer, a crime scene investigator, a bicycle patrol, a gang enforcement team, a crisis intervention team, a mobile field force, and technical services (City of Sunnyvale 2016). The Department of Public Safety's Crime Prevention Unit also provides public information and school presentations to promote school security and safety related to safe walking and bicycle routes, drug and alcohol awareness, internet safety, stranger awareness, gang awareness, teen dating violence, bicycle safety (City of Sunnyvale 2015a).

In 2019, the Police Bureau reported 3,670 crimes, or approximately 23.6 reports per 1,000 people (City of Sunnyvale 2020c). Average response time to emergency calls for service for the 2018/2019 fiscal year was approximately 4 minutes, 12 seconds for average calls, while for urgent calls, the response time was 5 minutes, 3 seconds (City of Sunnyvale 2020a).

The City is currently undertaking renovations to expand and update the City's existing Civic Center. Phase I of this project will result in new facilities including a City Hall and Public Safety Emergency Operations Center addition. The project will include renovations to the Public Safety Headquarters to provide approximately 17,450 square feet of improvements, along with a new two-story, approximately 15,000 square-foot Emergency Operations Center. The improvements are intended to provide dedicated space for a detectives' bureau and to relieve overcrowding in the existing Public Safety Building (City of Sunnyvale 2020b). Refer to the Civic Center Master Plan under Section 3.13.2, Regulatory Framework, for more information.

### Schools

Sunnyvale residents are served by four public school districts: Sunnyvale School District, Cupertino Union School District, Santa Clara Unified School District, and Fremont Union High School District.

Approximately two-thirds of the K–8 students who live in Sunnyvale are within the attendance boundary of the Sunnyvale School District. The district has experienced modest enrollment growth

in recent years, and this trend is expected to continue for the foreseeable future. The district operates eight elementary schools, serving students in grades kindergarten through fifth grade (K–5), and two middle schools, serving students in grades 6–8 (SSD 2020a). In general, residents located north of Fremont Avenue and west of the Santa Clara Unified School District boundary are served by the Sunnyvale School District.

Residents located generally on the eastern edge of the City are served by the Santa Clara Unified School District (grades K–12). The Santa Clara Unified School District operates schools in Santa Clara, the Alviso neighborhood of San Jose, and three schools in Sunnyvale. The schools within Sunnyvale include two grades K–5 schools and one grades 6–8 school (SCUSD 2019). High school students in this district attend either Santa Clara High School or Wilcox High School, neither of which is located in Sunnyvale. K–5 students may also attend Santa Clara Unified School District schools located outside of Sunnyvale.

The Fremont Union High School District boundaries span a portion of the project area. The district operates five high schools. Future students within the western portion of the plan area would be served by Homestead High School; students in the eastern portion would be served by Fremont High School (FUHSD 2020).

The Cupertino Union School District would also serve students within the plan area. The district operates 20 elementary schools serving grades kindergarten through fifth grade (K–5) (with exception of McAuliffe School, which serves grades K–8) and six middle schools serving grades 6–8 (CUSD 2020). Future students within the central portion of the plan area may attend schools operated by the district.

#### Other Public Facilities (Libraries)

The approximately 60,800 square-foot Sunnyvale Public Library offers a range of materials and resources including books, magazines, recorded books, CDs, and DVDs. The library offers on-site access to the Internet, including wireless access. A variety of online resources, such as e-books, podcasts, interlibrary loan and collections of audio/video downloads are also available free of charge through the library's website (City of Sunnyvale 2017a).

The City also plans to construct a new 20,000 square-foot branch library facility at the Lakewood Elementary School site. The project would increase access to library services for those living in north Sunnyvale by making it more convenient for residents to visit. The City of Sunnyvale City Council approved a partnership agreement on January 14, 2020 with the Sunnyvale School District and Fremont Union High School District to construct and operate the new branch library. Construction is currently anticipated to begin in Spring 2022 and be completed in late 2023 (City of Sunnyvale 2020a).



### 3.13.2 Regulatory Setting

#### Fire Protection Services

##### *State*

##### California Code of Regulations Title 24 – Fire Codes

California Code of Regulations (CCR) Title 24, refers to the California Building Standards Code (CBC), which contains complete regulations and general construction building standards of State agencies, including administrative, fire and life safety and field inspection provisions. Part 2 was updated in 2008 to reflect changes in the base document from the Uniform Building Code to the International Building Code. CBC Part 9 refers to the California Fire Code, which contains other fire safety-related building standards.

##### California Public Resources Code Sections 4290-4299 and General Code Section 51178

A variety of State codes, particularly Public Resources Code Sections 4290-4299 and General Code Section 51178, require minimum Statewide fire safety standards pertaining to: roads for fire equipment access; signage identifying streets, roads and buildings; minimum private water supply reserves for emergency fire use; and fire fuel breaks and greenbelts. They also identify primary fire suppression responsibilities among the federal, State, and local governments. In addition, any person who owns, leases, controls, operates, or maintains a building or structure in or adjoining a mountainous area or forest-covered, brush-covered or grass-covered land, or any land covered with flammable material, must follow procedures to protect the property from wildland fires. This regulation also helps to ensure fire safety and provide adequate access to outlying properties for emergency responders and safe evacuation routes for residents.

##### *Local*

##### City of Sunnyvale Fire Code

The City of Sunnyvale Fire Code is included as Section 16.52 of the Sunnyvale Municipal Code (SMC). The Fire Code prescribes regulations governing conditions hazardous to life and property from fire or explosion through adoption of the 2019 California Fire Code. The Fire Code provides guidance for a range of issues, including payment of appropriate development impact fees, emergency planning and preparedness, fire protection systems, and access, among other items. The Fire Code is updated statewide every three years, consistent with the California Building Standards Code.

##### Emergency Response/Evacuation Plans

Government Code Section 8607(a) directs the Governor's Office of Emergency Services (OES) to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters. The program is intended to provide effective management of multi-agency and multijurisdictional emergencies in California. SEMS

consists of five organizational levels, which are activated as necessary: (1) Field Response, (2) Local Government, (3) Operational Area, (4) Regional, and (5) State.

### City of Sunnyvale Emergency Plan

The City's Emergency Plan addresses the planned response that will be coordinated from the Emergency Operations Center (EOC) to emergency situations associated with natural disasters and technological incidents. The operational concepts reflected in this plan focus on potential large-scale emergencies that can generate unique situations requiring unusual response. Such emergencies pose major threats to life and property and can affect the well-being of large numbers of people. The intent of the plan is to save lives and protect property by developing operational capabilities that mitigate, prepare for, respond to, and recover from any emergency or disaster.

### City of Sunnyvale General Plan Land Use and Transportation Element

The LUTE does not contain policies regarding the provision of fire protection services; however, the following general policy is identified:

Policy LT-14.8: Ensure that development projects provide appropriate improvements or resources to meet the future infrastructure and facility needs of the City and provide development incentives that result in community benefits and enhance the quality of life for residents and workers.

### Safety and Noise Element

Additionally, the Sunnyvale General Plan Safety and Noise Element provides general direction regarding how fire protection services should be provided.

Goal SN-3      Ensure a safe and secure environment for people and property in the community by providing effective public safety response and prevention and education services.

Policy SN-3.1: Provide rapid and timely response to all emergencies.

Policy SN-5.1: Assure that equipment and facilities are provided and maintained to meet reasonable standards of safety, dependability, and compatibility with fire service operations.

Policy SN-5.4: Conduct field operations and emergency scene management in a safe, effective, and efficient manner.



Law Enforcement

*Local*

City of Sunnyvale General Plan  
Land Use and Transportation Element

The LUTE does not contain policies regarding the provision of law enforcement services; however, the following general policy is identified:

Policy LT-14.8: Ensure that development projects provide appropriate improvements or resources to meet the future infrastructure and facility needs of the City and provide development incentives that result in community benefits and enhance the quality of life for residents and workers.

Additionally, the following goals and policies from the General Plan Safety and Noise Element provide general direction regarding how law enforcement services should be provided.

Safety and Noise Element

Goal SN-3 Ensure a safe and secure environment for people and property in the community by providing effective public safety response and prevention and education services.

Policy SN-3.1: Provide rapid and timely response to all emergencies.

Policy SN-4.2: Provide for assessment of changing community needs and expectations.

Civic Center Master Plan

The Civic Center Master Plan was adopted by the City in 2018. The existing Sunnyvale Civic Center is a 269,830 square-foot facility located at the corner of El Camino Real and Mathilda Avenue in the City's Downtown Node. The Civic Center is home to the City's primary administrative facilities (City Hall), the Sunnyvale Public Library, and the Department of Public Safety headquarters.

The Civic Center Modernization Project – Phase 1 is currently underway to renovate and update the existing Civic Center and site. The project is guided by the Civic Center Master Plan, adopted in 2018, which provides a 20-year, multi-phased vision for the entire campus. Buildout of the Master Plan will result in three new facilities including a City Hall, a new Department of Public Safety Headquarters, and a new or remodeled/expanded main library; increased open space and native landscaping; and relocation of the majority of existing surface parking to underground spaces. Phase I construction of the new Sunnyvale Civic Center project began in December 2020, with project construction anticipated to be completed by April 2023 (City of Sunnyvale 2020b).

The project will include renovations to the Public Safety Headquarters to provide approximately 17,450 square feet of improvements, along with a new entry and lobby. A new 2-story

approximately 15,000 square-foot Emergency Operations Center will be constructed next to the existing Department of Public Safety Headquarters building. The improvements are intended to provide dedicated space for a detectives' bureau and to relieve overcrowding in the existing Public Safety Building (City of Sunnyvale 2020b).

## Schools

### *State*

#### Leroy F. Greene School Facilities Act of 1998 (SB 50)

Senate Bill 50 (SB 50) was enacted by the State Legislature in 1998 and made significant amendments to existing State law governing school fees. Specifically, SB 50 amended prior California Government Code Section 65995(a) to prohibit State or local agencies from imposing school impact mitigation fees, dedications or other requirements in excess of those provided in the statute in connection with "any legislative or adjudicative act...by any State or local agency involving...the planning, use, or development of real property...." The legislation also amended California Government Code Section 65996(b) to prohibit local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "legislative or adjudicative act [involving] the planning, use or development of real property." Further, SB 50 established the base amount of allowable developer fees: \$1.93 per square foot for residential construction and \$0.31 per square foot for commercial uses. These base amounts are commonly called "Level 1 fees" and are the same caps that were in place at the time SB 50 was enacted. Level 1 fees are subject to inflation adjustment every two years.

In certain circumstances, for residential construction, school districts can impose fees that are higher than Level 1 fees. School districts can impose Level 2 fees, which are equal to 50 percent of land and construction costs if they: (1) prepare and adopt a school needs analysis for facilities; (2) are determined by the State Allocation Board to be eligible to impose these fees; and (3) meet at least two of the following four conditions:

- At least 30 percent of the district's students are on a multi-track year-round schedule;
- The district has placed on the ballot within the previous four years a local school bond that received at least 50 percent of the votes cast;
- The district has passed bonds equal to 30 percent of its bonding capacity; or
- At least 20 percent of the district's teaching stations are relocatable classrooms.

Additionally, if the State's bond funds are exhausted, a school district that is eligible to impose Level 2 fees is authorized to impose even higher fees. Commonly referred to as "Level 3 fees," these fees are equal to 100 percent of land and construction costs of new schools required as a result of new developments.

## Local

### Measure P

In November 2004, voters in the Sunnyvale School District approved Measure P, a \$120 million General Obligation Bond measure, to maintain a safe learning environment at Sunnyvale's elementary and middle schools by upgrading infrastructure; improving and expanding school libraries; repairing, replacing, and rehabilitating aging facilities; and constructing and equipping classroom buildings and student support facilities.

Facilities improvements to be funded by Measure P were identified by Sunnyvale School District faculty, staff, students, independent facilities professionals, and community residents. The result of their work is a comprehensive Facilities Standards and Master Plan to be implemented over a period of 10 years. The Facilities Standards and Master Plan provides a cost-effective "road map" to achieve high quality instructional facilities required to accommodate students' future educational programming needs.

Laws governing passage of Measure P require strict accountability, including annual independent audits and public oversight, for the spending of funds received as a result of voter-approved bonds.

### Developer Fee Compliance

The Sunnyvale School District adopted a resolution imposing developer impact fees pursuant to AB 2926, effective January 22, 1988. Building permits for new development are not to be issued without a completed Certificate of Compliance (SSD 2020b).

### City of Sunnyvale Land Use and Transportation Element

The LUTE includes the following policies and actions to address impacts on school resources from future development that would occur with project implementation.

Policy LT-14.8:           Ensure that development projects provide appropriate improvements or resources to meet the future infrastructure and facility needs of the City and provide development incentives that result in community benefits and enhance the quality of life for residents and workers.

Policy LT-14.9:           Support the provision of a full spectrum of public and quasi-public services (e.g., parks, day care, group living, recreation centers, religious institutions, schools, hospitals, large medical clinics) that are appropriately located in residential, commercial, and industrial neighborhoods and ensure that they do not have a negative effect on the surrounding area.



LT-14.9a: Encourage carpooling, shuttles, and transit access to public and quasi-public services to minimize adverse traffic and parking impacts on neighborhoods.

LT-14.9b: Ensure the provision of bicycle support facilities at all major public use locations.

Policy LT-14.15: Recognize schools, both public and private, as integral parts of the community that require special consideration to manage traffic, support residential development, and provide open space.

LT-14.15a: Work with school districts and private school operators during and after the City review and permitting process to minimize negative effects on the surrounding area.

LT-14.15b: Maintain a working relationship with school districts on transportation, pedestrian and bicycle access, safe routes to schools, and other neighborhood issues.

LT-14.15c: Assist public and private schools in neighborhood relations regarding land use and transportation issues.

LT-14.15d: Work closely with school districts to review the impacts of proposed residential development on school capacity and facilities.

Policy LT-14.16: Support continuous education (beyond grades K-12) and educational enrichment programs while minimizing impacts on the surrounding land uses.

### Parks and Recreational Resources

Refer to Section 3.14, Recreation, of this EIR for discussion of the project relative to parks and recreational resources.

### *3.13.3 Impact Analysis and Mitigation Measures*

#### Standards of Significance

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. An impact on public services is considered significant if the project would:

- 1) 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:

- i. Fire Protection



- ii. Police Protection
- iii. Schools
- iv. Parks
- v. Other Public Facilities

As stated above, evaluation of potential project effects on parks and recreation resources [Standard of Significance 4 (or Item 1d, above)] is provided in Section 3.14, Recreation.

### **FIRE PROTECTION SERVICES (STANDARD OF SIGNIFICANCE 1)**

**Impact 3.13.1** 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:

**a) Fire protection?**

The City's Fire Bureau does not maintain a staffing ratio goal based directly on population or employment; staffing levels are instead identified based on service demand and other factors. Implementation of the project itself would not necessitate the need to develop new fire protection facilities to serve the area. However, future growth outlined in the project, in accordance with the City's LUTE, would facilitate the increase of both population and the number of housing units in Sunnyvale, which could increase demand for fire protection services. Furthermore, subsequent development under the project would result in additional commercial development, which could also increase the need for fire protection services, and may include additional personnel, building inspections, and permits.

The Specific Plan does not contain policies regarding the provision of fire protection services; however, the Sunnyvale General Plan provides general direction regarding how public services should be provided. Subsection 3.13.2 above outlines specific policies and actions related to fire protection services in the City. Development under the project would be subject to these policies and actions, in addition to other regulations and standards for new development, including appropriate standards for emergency medical services, emergency access, emergency water supply, fire preparedness, capacity, and response, to ensure adequate fire protection services are available. Furthermore, as the project would bring additional annual revenue to the City in the form of increased local property taxes and sales tax, the increased demand for fire protection would be offset by funding increases for additional firefighters, administrative personnel, training, and equipment.

The assessment of future services expansion and associated environmental impacts cannot be identified at this time because such evaluation requires future speculation under unknown



circumstances, such as timing and location. In addition, future development associated with project implementation would be subject to General Plan Policy LT-14.8, which would ensure that new development provide appropriate improvements or resources to meet the future infrastructure and facility needs of the City (i.e., fire protection services).

Therefore, with the implementation of City policies, regulations, and standards for new development, project impacts related to fire protection and emergency medical services would be **less than significant**.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

### POLICE PROTECTION SERVICES (STANDARD OF SIGNIFICANCE 2)

**Impact 3.13.2** 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:

#### b) Police Protection?

By the year 2035, the City's population is anticipated to grow to 203,780 persons; refer to Section 3.12, Population and Housing. As shown, buildout of the project is anticipated to result in 6,900 new residential housing units (above that allowed with future buildout of the current General Plan) and an estimated 6,900 people. New demand for police protection services would not result immediately, but rather would occur over time as future projects are developed. It is anticipated that this additional population would result in an associated increase in service calls and a commensurate incremental need for additional staffing and equipment to maintain the City's police response time goals over time.

While the project does not contain policies or actions that would substantially affect law enforcement services, projected growth under the project could increase the need for law enforcement protection services due to the development of additional residential housing units and nonresidential uses (i.e., commercial). Public uses, such as a police station, would be a permitted use in all land use designations, subject to City review and approval.

The project recognizes that a variety of public facilities would be needed to serve the area as development proceeds. Some of these would be provided through mandatory fees and assessments consistent with existing City policies. For example, General Plan Policy SN-3.1 directs that rapid and timely response to all emergencies be provided, and Policy SN5.1 requires that



equipment and facilities are provided and maintained to meet reasonable standards for law enforcement. Additionally, as stated above, the City is currently implementing Phase I of the Civic Center Modernization Project, which will expand the existing Public Safety Headquarters and provide a new Emergency Operations Center which will enhance operations of the detectives' bureau and relieve overcrowding in the existing Public Safety Building (City of Sunnyvale 2020b). Additionally, Phase III will include a brand-new Department of Public Safety Headquarters.

Implementation of the project may also help to reduce crime as the area is revitalized by the influx of businesses, residential development, and improved infrastructure. The project would bring additional annual revenue to the City in the form of increased local property taxes and sales taxes that would help offset the increased demand for police service by funding increases in police personnel, training, and equipment.

Until definitive information is available on the need for future expansion or new development of police protection facilities, potential environmental impacts would be too speculative for evaluation. However, all new development, including any future development allowed by the project, would be required to comply with General Plan Policy LT-14.8, which would ensure that new development provide appropriate improvements or resources to meet the future infrastructure and facility needs of the City (i.e., law enforcement services). Furthermore, any substantial expansion of law enforcement service facilities would be subject to the appropriate CEQA environmental review, which would identify and address site-specific environmental impacts, as well as City discretionary review and conformance to applicable City requirements. Therefore, with the implementation of City policies, project impacts related to police protection services would be **less than significant**.

Mitigation Measures

None required.

Level of Significance

Less than significant.

**PUBLIC SCHOOLS (STANDARD OF SIGNIFICANCE 3)**

**Impact 3.13.3** 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:

**c) Public Schools?**

While the project does not contain policies or actions that would substantially affect student enrollment, projected growth occurring over time as the result of project implementation could



increase student enrollment in the Sunnyvale School District, Santa Clara Unified School District, Cupertino Union School District, and/or Fremont Union High School District. Buildout of the new housing units allowed with the project (above that currently allowed with buildout of the General Plan) would generate new students that would attend various elementary, middle, and high schools that serve the Specific Plan Area. However, it is anticipated that the new students would be distributed among the region's four school districts, as described above under Section 3.13.1, Existing Setting. If classroom capacity at specific schools serving the plan area were found to be inadequate, the respective districts could take corrective measures to resolve the issue, such as transporting students to less crowded schools, or identifying opportunities to more efficiently use existing or underutilized school facilities.

As authorized by California Government Code Sections 65995, 65996(a), and 65996(b), the region's school districts collect school impact fees from new residential and nonresidential development within their respective districts. The permitted method for addressing potential effects of increased school enrollment from ongoing development is limited to the statutory authority of school districts to impose school impact fees. California Government Code Sections 65995, 65996(a), and 65996(b) have preempted and limited the ability of local governments to exercise their police power to mitigate school impacts. A local government may not impose development requirements regarding school facilities in a manner inconsistent with State statutes on the subject. Therefore, under current statutes and case law, payment of the required school impact fees would address the potential impact of the project on school services to the furthest extent permitted by law.

Under CEQA, school overcrowding is considered a social impact instead of an environmental impact (*Goleta Union School District vs. Regents of University of California* [2d Dist. 1995]), so potential impacts to schools beyond physical environmental impacts due to the expansion or new development of facilities are not considered and cannot be mitigated. To that point, without definitive information on specific future school district facility expansion plans, such impacts are considered to be too speculative to evaluate for the project. All new development, including any future development allowed by the project, would be required to comply with General Plan Policy LT-14.8, which would ensure that new development provide appropriate improvements or resources to meet the future infrastructure and facility needs of the City (i.e., school services). Furthermore, any significant expansion of school facilities or development of new school facilities would be subject to appropriate CEQA environmental review as required by the respective school districts, which would identify and address any site-specific impacts. Therefore, with implementation of City policies, regulations, and standards for new development, project impacts related to school services are considered **less than significant**.

### Mitigation Measures

None required.



### Level of Significance

Less than significant.

#### OTHER PUBLIC FACILITIES (STANDARD OF SIGNIFICANCE 5)

**Impact 3.13.4** 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:

**d) Other Public Facilities?**

As stated, buildout of the project would generate new housing units and population growth. As a result, demand for other public facilities and services, such as libraries, is anticipated to increase over time as future development occurs. The EIR for the General Plan determined that new library facilities may be needed to serve development in the northern portion of the City, but that the need for these facilities would be evaluated as part of the planning process for future development. Lakewood Branch Library is currently in design to serve the residents in North Sunnyvale. In addition, the EIR for the General Plan determined that there would not be a need for additional arts, cultural, and community facilities that would constitute a significant impact (City of Sunnyvale 2014).

As noted above, the City has commenced construction planned with the Sunnyvale Civic Center Master Plan Phase 1, which includes a new City Hall and an expanded Public Safety Headquarters/Emergency Operations Center. It is anticipated that full buildout of Phase 1 will be completed by April 2023 (City of Sunnyvale 2020b). An addition or renovation to the main library (Phase 2 of the Civic Center Masterplan) will start feasibility studies in 2023. Design and construction dollars have not yet been allocated for this project. Additionally, the City has entered into an agreement with the Sunnyvale School District and Fremont Union High School District to construct a new public library at the Lakewood Elementary School by late 2023. These facilities would help the City to address new demands for public library services as buildout of the General Plan, as well as the proposed project, occurs incrementally over time.

Furthermore, the project would generate additional annual revenue for the City in the form of increased local property taxes and sales taxes. Such resources would be available to the City for the funding of new and/or expanded facilities, including libraries. Future development would be reviewed against General Plan Policy LT-14.8, which would ensure that new development provide appropriate improvements or resources to meet the future infrastructure and facility needs of the City (i.e., library services). The need for new facilities would be evaluated as part of the planning process for future development and would be subject to conformance with CEQA requirements. Therefore, the project would not in itself directly result in the need for the provision of or need for new or physically altered governmental facilities, the construction of which could cause



significant environmental impacts. Implementation of City policies, regulations, and standards for new development would ensure that project impacts related to the provision of other public facilities are reduced to **less than significant**.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

### CUMULATIVE IMPACTS

#### Impact 3.13.5 Would the project result in a cumulative impact to public services?

##### Fire Protection Services

Future development in Sunnyvale would increase cumulative demand for fire protection and related services. Cumulative impacts associated with fire protection services that would occur under the project would occur within the City's Fire Bureau service area. Implementation of the project and the LUTE would require additional fire-related services and equipment to adequately serve the City under 2035 conditions. Buildout over time could result in the need for additional Fire Bureau personnel who could require new or expanded facilities; however, future development would be subject to General Plan Policy LT-14.8, which would ensure that new development provide appropriate improvements or resources to meet the future infrastructure and facility needs of the City (i.e., fire protection services). Implementation of City policies, along with compliance with the California Fire Code, would help maintain adequate response times and staffing ratios within the City. The project's contribution to potential impacts on fire protection services would be **less than significant**.

##### Police Protection

Cumulative impacts associated with police protection services would occur within the Police Bureau's service area. Expected increases in demand for police services would thus be geographically limited and would not result in a considerable contribution to increased demand for these public services beyond the City's limits. Over time, cumulative development could result in the need for additional law enforcement personnel who may require new or expanded facilities; however, future development would be subject to General Plan Policy LT-14.8, which would ensure that new development provide appropriate improvements or resources to meet the future infrastructure and facility needs of the City (i.e., police protection services). Implementation of City policies and actions would help maintain adequate response times and staffing ratios within the City.

Additionally, as stated above, the City is currently undertaking renovations to expand and update the existing Civic Center that will result in renovations to the Public Safety Headquarters and a new Emergency Operations Center. The improvements will help to relieve overcrowding in the



existing Public Safety Building and allow for more effective provision of police protection and investigative services (City of Sunnyvale 2020b). The long term (Phase 3) vision in the Civic Center Masterplan is to have a new relocated Public Safety Headquarters.

With conformance to relevant City policies and regulatory requirements, combined with the provision of new planned facilities, the project's contribution to potential impacts on police protection services would be **less than significant**.

### Public Schools

Project implementation would introduce future additional residential and commercial development that would increase demands for school services. However, future development would be subject to Education Code Section 17620 et seq., which allows school districts to collect impact fees from developers of new commercial and residential building space. As future development would be required to pay these development impact fees, which are deemed to be full mitigation, the project's incremental effects to local school facilities are not considered to be significant.

For purposes of school services analysis, cumulative impacts are considered for projects which would also be sited within the same school districts serving the proposed project. Cumulative development would be evaluated on a case-by-case basis at the project level, as they are implemented, for their potential to impact school services provided by the affected school districts.

Cumulative development within the boundaries of those districts affected by the proposed project has the potential to result in the need for additional school resources (i.e., additional staffing, equipment, expanded/new facilities). However, cumulative development would be subject to all applicable laws, ordinances, and regulations in place for school services. Individual development projects would be required to pay the statutory school fees based on the type and size of development proposed pursuant to SB 50, and as allowed by California Government Code Sections 65995, 65996(a), and 65996(b). Payment of fees to the appropriate school district is considered full mitigation for project impacts associated with the need to provide new or altered school facilities to serve new students generated by future development. Further, the City would ensure that future cumulative development projects pay the cost of its infrastructure and services needs and require new development to pay the capital costs of public facilities and services needed to serve those development.

As concluded in Standard of Significance 3, above, buildout of the project is not anticipated to involve significant impacts to school services following conformance with the applicable laws, ordinances, and regulations in place for school services. Further, as buildout of the project is anticipated to gradually occur through the year 2035, the City and the school districts would be able to effectively plan for increases in population and demands for school services as site-specific development occurs. Therefore, the project's contribution to a cumulative impact on school facilities would be **less than significant**.



### Other Facilities

As stated above, the Civic Center Modernization Project is currently underway to renovate and update the City's existing Civic Center and facilities. Buildout of the Civic Center Master Plan will result in a new or remodeled/expanded main library. The City also plans to construct a new branch library facility at the Lakewood School site (City of Sunnyvale 2020a).

Additionally, all cumulative development projects, including those occurring with future project buildout, would be subject to General Plan Policy LT-14.8, which would ensure that new development provide appropriate improvements or resources to meet the future infrastructure and facility needs of the City (i.e., library services). Under such conditions, and with conformance to applicable City policies and regulations, it is anticipated that any increase in demands would be adequately met. The project's contribution to a cumulative impact on other public facilities would be **less than significant**.

### Mitigation Measures

None required.

### Level of Significance

Less than significant.

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## 3.14 Recreation

This section describes existing recreational facilities and open space resources within and around the Specific Plan Area, identifies applicable service goals, and evaluates potential environmental impacts to recreational resources that may result from project implementation.

### 3.14.1 Existing Setting

#### Citywide Recreational Amenities

To address recreational park demands, the City has established nine neighborhood planning areas to help determine open space availability within the City. The neighborhood planning areas are generally bounded by traffic arterials, with an elementary school or park within walking distance, and with neighborhood shopping facilities within a half-mile radius (City of Sunnyvale 2011). Parks equal to or less than three acres in size are considered to primarily serve those living within a quarter-mile radius of the park. For larger parks, a half-mile radius was used, because the larger parks generally include more amenities and can serve a greater number of people. For open space at a school site, which represents athletic fields without amenities such as restrooms or playgrounds, a quarter-mile radius was used (City of Sunnyvale 2011).

Within its incorporated limits, the City owns and maintains approximately 765.31 acres devoted to parks and open space for public use (City of Sunnyvale 2020a). Such resources include the following (City of Sunnyvale 2019):

- 6 mini parks (8.65 acres)
- 6 neighborhood parks (31.57 acres)
- 10 community parks (137.23 acres)
- 16 school playfields (87.16 acres)
- Regional open space (177 acres)
- Special use areas that include golf courses, skate parks, and tennis centers (263.98 acres)
- Civic spaces (1.60 acres)<sup>1</sup>
- Public grounds (1.66 acres)
- Greenbelt and trail (47.99 acres)
- Small urban plots (8.47 acres)

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<sup>1</sup> It is noted 6 acres of civic spaces will be available following completion of Phase I of the Civic Center Modernization Project, which is anticipated to be completed in 2023.



The Sunnyvale Community Center offers a recreation campus with performing and creative arts centers, indoor sports and general recreation buildings, a senior center, and a historical museum set amongst fruit orchards and a public pond. The Community Center offers a 200-seat Performing Arts Center, which hosts resident theater companies, producing many children's productions, and includes a theater and a dance studio. The adjacent Orchard Heritage Park includes a 10-acre working orchard, the Orchard Heritage Interpretive Exhibit, and a historical museum operated by the Sunnyvale Historical Society. The 23,000 square-foot Senior Center hosts many social, cultural, and educational activities for seniors and offers rooms for hosting large events.

### Recreational Facilities within the Specific Plan Area

Other public facilities and community recreational amenities along El Camino Real include public and private schools, neighborhood associations, places of worship, and several public parks overseen by the Sunnyvale Department of Public Works – Parks, Trees and Golf Division. City residents also have access to extensive open space overseen by the Midpeninsula Regional Open Space District.

#### 3.14.2 Regulatory Setting

##### Federal

##### *National Recreation and Park Association*

The National Recreation and Park Association (NRPA) develops voluntary best management practices to recreation size and occupancy standards for citizens of urban and rural communities. Sunnyvale has not established specific metrics for open space; however, the NRPA standards have been incorporated into the City's General Plan. The NRPA recommends 4.0 to 6.0 acres of open space per 1,000 residents (NRPA 1995). The NRPA has since acknowledged the difficulty in setting standards that would be applicable to all communities, given each community's unique characteristics. The 1995 NRPA standard is, however, still widely used to establish whether sufficient park space is available in a community. At 5 acres per 1,000 residents, Sunnyvale falls within that guideline.

Recreational lands differ from other open space lands in that they allow a greater range of public access and direct recreational uses. Recreational lands vary by size, use, and facilities. The NRPA has developed definitions for various types of recreational facilities, including mini parks, neighborhood parks, and community parks. The NRPA defines a regional park/park preserve as an area of natural or ornamental quality for outdoor recreation such as picnicking, boating, fishing, swimming, camping, and trail uses, with much of the land reserved for conservation and natural resource management.

The NRPA also describes other types of recreational facilities, such as linear parks for hiking, bicycling, and equestrian activities; special use areas for golf, gardening, and outdoor theaters; and conservancies designated for the protection and management of natural or cultural resources.



The NRPA has established guidelines for the amount of recreational land necessary to serve a given population; however, these guidelines are generally oriented toward metropolitan areas. Therefore, the NRPA advises each jurisdiction to establish its own standards that are tailored to the unique characteristics of the area.

## State

### *Quimby Act*

The Quimby Act (Government Code Section 66477) states that the legislative body of a city or county may, by ordinance, require the dedication of land or impose a fee payment requirement of in lieu thereof, or a combination of both, for park or recreational purposes as a condition to the approval of a tentative map or parcel map, provided certain requirements are met. This Section further states that "the dedication of land, or the payment of fees, or both, shall not exceed the proportionate amount necessary to provide three (3.0) acres of park area per 1,000 persons residing within a subdivision subject to this section."

### *Proposition 40 Park Bond Act*

Proposition 40 is intended to maintain a high quality of life for California's growing population by providing a continuing investment in park and recreational facilities. Specifically, it is for acquisition and development of neighborhood, community, and regional parks, and recreational land and facilities, in urban and rural areas. Projects eligible for funding include acquisition, development, improvement, rehabilitation, restoration, enhancement and the development of interpretative facilities, or local parks and recreational land and facilities, and funds are distributed based upon a city's population.

## Local

### *City of Sunnyvale General Plan*

The City's General Plan includes the following policies related to parks and recreation.

### *Community Character Element*

Policy CC-11.3 Give priority to acquiring/developing open space and recreational amenities and programs in areas:

- Which are heavily impacted by daytime or business use.
- Where similar amenities and programs do not already exist.
- Where the current number of households within specified distances relying on the open space or recreational amenity is greater.
- Where the projected number of households within specified distances which will be relying on the open space or recreational amenity is greater.

### Land Use and Transportation Element

Policy LT-3.26 Support the proliferation of multiuse trails within Sunnyvale and their connection to regional trails in order to provide enhanced access to open space, promote alternative transportation options, and increase recreational opportunities while balancing those needs with the preservation of natural habitat, public safety, and quality of life in residential neighborhoods.

Policy LT-9.1 Ensure that the planned availability of open space in both the City and the region is adequate.

LT-9.1a: Define a minimum open space standard for residential uses, mixed use developments, business developments, and Village Centers.

LT-9.1b: Utilize joint agreements between the City and local school districts to create community recreational opportunities.

Policy LT-9.2 Support public and private efforts in and around Sunnyvale to acquire, develop and maintain open space and recreation facilities and services for public use.

Policy LT-9.18 Improve accessibility to parks and open space by removing barriers.

LT-9.18b: Evaluate the feasibility of flood control channels and other utility easements for pedestrian and bicycle greenways. Coordinate with flood control and utility agencies early in the process to determine feasibility/desirability of the project.

LT-9.18c: Develop and adopt a standard for a walkable distance from housing to parks.

Policy LT-11.2 Support a full spectrum of conveniently located commercial, mixed-use, public, and quasi-public uses that add to the positive image of the community.

Policy LT-14.11 Maintain and promote conveniently located public and quasi-public uses and services that enhance neighborhood cohesiveness and provide social and recreational opportunities.

### Sunnyvale Municipal Code

Chapter 18.10, Parks and Open Space Dedication, of the Sunnyvale Municipal Code (SMC) establishes, as a condition of approval of any final subdivision map or parcel map, that the subdivider shall dedicate land for park and open space use, pay a fee in lieu thereof, or both. As of July 1, 2014, the City mandates providing a minimum of 5.0 acres of open space per 1,000 residents.



### Parks of the Future Plan

In 2008, the City developed the Parks of the Future Plan to identify strategies to meet current and future community needs based on changing trends in recreation, new patterns for recreation participation, and new areas of growth and development in the City. Based on research and feedback from the community, the plan established goals, standards, and guidelines for the improvement and development of parks and recreation facilities.

The Parks of the Future Plan proposed two sets of standards for park and facility development based on the NRPA. A minimum standard was proposed to maintain the existing level of service in the City at 5.34 acres per 1,000 residents. The plan also proposed an increased level of service, to raise the total level of service to a minimum of 5.5 acres per 1,000 residents. Based on the first standard, the City would require an additional 156 acres of parkland, while the second standard would require an additional 180.91 acres of parkland by the year 2028, based on projected population growth (see **Table 3.14-1**, below). The plan notes that due to the buildout setting of the City, there is not enough available land to meet the projected need.

**Table 3.14-1  
Recommended Park Level of Service Standards and Anticipated Need**

Existing Acres of Parkland (2008)	Sunnyvale Level of Service (2008)	Recommended Standard	Additional Acres Needed to Meet Standard	
			Population (2008) 137,538	Projected Population (2028) 166,332
733.92	5.34 (acres per 1,000 population)	5.50 (acres per 1,000 population)	22.54	180.91

Source: City of Sunnyvale 2008, Table 5.

### 3.14.3 Impacts and Mitigation Measures

#### Standards of Significance

This analysis evaluates the project’s potential impacts on recreational resources based on the standards of significance identified in CEQA Guidelines Appendix G. The project would have a significant impact if it would:

- 1) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- 2) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

## Project Impacts and Mitigation Measures

### **INCREASE IN THE USE OF PARKS AND RECREATIONAL FACILITIES THAT WOULD RESULT IN SUBSTANTIAL PHYSICAL DETERIORATION (STANDARD OF SIGNIFICANCE 1)**

**Impact 3.14.1** 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?

Buildout of the project would result in an increase of 2,700 new residential housing units (or 8,500 dwelling units total) over that currently allowed with future buildout of the General Plan, and would increase the City's housing stock by 6,900 dwelling units and increase the City's population by up to 18,561 persons (beyond the population expected by the buildout of the existing LUTE) within the Specific Plan Area; refer to Section 3.12, Population and Housing. These new residents would likely use the City's available parks and recreation areas and facilities, which may create increased demand for similar additional recreational resources over time. Currently, the City owns and maintains approximately 772 acres of land devoted to open space and recreational facilities (City of Sunnyvale 2020a).

As shown in **Table 3.14-2**, below, the City maintains approximately 5.0 acres of parkland per 1,000 residents (based on 2020 population estimates). Without the development of any new parks or recreational facilities by the year 2035, the parkland ratio would decrease to approximately 4.4 acres per 1,000 residents. The increase in population resulting with the project (over that currently allowed by the General Plan) would further decrease the parkland ratio to approximately 4.3 acres of parkland per 1,000 residents. As discussed above, the NRPA recommends 4.0 to 6.0 acres of open space per 1,000 residents (NRPA 1995). Therefore, open space acreages under the Horizon 2035 LUTE and project buildout in 2035 would remain within acceptable levels per the NRPA guidelines. This indicates that the existing amount of park acreage Citywide would be sufficient to accommodate the project's demand without causing substantial deterioration of existing facilities.

**Table 3.14-2**  
**Demographic Comparison 2020 to 2035**

	<b>Existing Conditions (2020)</b>	<b>Horizon 2035 LUTE</b>	<b>Project 2035</b>	<b>Change over LUTE</b>
Population	156,503	174,500	180,918	6,418
Parkland Ratio (acres of parkland per 1,000 residents)	5.0	4.4	4.3	-0.1

Source: City of Sunnyvale 2017; California Department of Finance 2020.

Further, this new demand for parks and recreational facilities would not occur immediately, but would occur over time as future development occurs. Using the 2035 anticipated ratio of 4.4 acres of parkland per 1,000 persons, this growth and development would generate an increased



demand for approximately 28.2 acres of new parkland [(6,418 additional persons/1,000 persons) x .4 acres = 28.2 acres per 1,000 persons]. As stated, without the development of additional parks and recreation facilities, implementation of the project would cause the City's ratio of acres of parkland per person to decrease to 4.3 in the year 2035.

Although the Parks of the Future Plan identified two standards for parkland ratios (5.34 and 5.5 acres of parkland per 1,000 residents) that are higher than the projected ratios (4.4 and 4.3), the proposed project would not significantly hinder the City from increasing park and recreational facilities to reach those standards. The analysis above offers a worst-case scenario where no additional parks or recreational facilities are constructed through 2035, which is unlikely. It is reasonable to assume that the City has plans to expand parks and recreation facilities due to natural growth and improvement of the City. Furthermore, per the SMC, new development would also be required to dedicate land, pay a fee in lieu thereof, or both, for park or recreational purposes at a ratio of 5 acres per 1,000 residents. The development fees would be applied toward the acquisition and development of local and community park facilities throughout the City. Payment of the development fees would be made prior to issuance of building permits or final map recordation, whichever comes first. Therefore, payment would offset the increase in demand of parks and recreational facilities generated by the proposed project, such that existing facilities would not substantially deteriorate. Additionally, it is assumed that the City would continue to invest in and develop new parks and recreational facilities prior to 2035, which would increase the parkland ratio.

Therefore, although implementation of the project would result in a reduction in the City's parkland ratio, the change between the Horizon 2035 LUTE and project buildout in 2035 would be negligible and still within the acceptable levels per the NRPA guidelines. With the dedication of land and/or payment of development fees by developers within the Specific Plan Area, along with future park development by the City, impacts to recreational resources would be **less than significant**.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

### REQUIRE OR INCLUDE THE CONSTRUCTION OR EXPANSION OF RECREATIONAL FACILITIES (STANDARD OF SIGNIFICANCE 2)

**Impact 3.14.2 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?**

In meeting new demands for parks and recreational facilities within the City of Sunnyvale, future construction of such resources may result in environmental effects. Such activities may include



potential disturbance of biological and/or cultural resources, temporary construction air pollutant emissions, soil erosion and water quality degradation, handling of hazardous materials, temporary construction noise, and/or temporary generation of construction-related traffic.

The Specific Plan, LUTE, and General Plan policies listed above would ensure that adequate parks and recreational facilities are provided to accommodate the anticipated increase in the number of residents over time. As stated under Impact 3.14.1 above, future developers within the Specific Plan Area would be required to dedicate land and/or pay a fee in lieu thereof for park or recreational purposes. It is anticipated that new development within the Specific Plan Area would incorporate some publicly accessible open space and amenities such as playgrounds, tot lots, water features, or similar outdoor amenities. As such, future development within the Specific Plan Area may contribute to the construction or expansion of recreational facilities that may have an adverse physical effect on the environment. However, future expansion or development of new recreational facilities would be subject to City discretionary review and CEQA requirements, as appropriate, which would identify and address any potential site-specific environmental impacts. In addition, project-level construction would comply with existing codes and local zoning and permitting ordinances to reduce the severity of potential environmental impacts to the extent feasible. Therefore, compliance with existing policies and regulations, and conformance with the City's discretionary review process, would reduce impacts to **less than significant**.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

### CUMULATIVE IMPACTS

#### Impact 3.14.3 Would future construction under the project result in a significant contribution to the cumulative degradation of recreational resources?

The project's cumulative setting includes future buildout of the General Plan, Lawrence Station Area Plan, Fortinet Precise Plan, and Downtown Specific Plan; refer to Section 3.0, Introduction to Environmental Analysis. Future cumulative development would increase the population of the area and potentially increase the need for additional or expanded park and recreational facilities. Residents of other cities or unincorporated areas lacking in parkland or recreation facilities may also travel to an adjacent city to use such facilities, thereby increasing the use and furthering deterioration of those facilities or resulting in the need for new or expanded facilities.

The proposed project, combined with other cumulative development projects, would contribute to an increase in demand for park and recreation facilities in the City. Although implementation of the project would result in a reduction in the City's parkland ratio, the change between the Horizon 2035 LUTE and project buildout in 2035 would be negligible. Existing park and recreation



facilities would be sufficient to accommodate the proposed project's population increase in addition to other cumulative development under the current General Plan and the LUTE because projects would be required to comply with Quimby Act and the City's park land provision requirements. With the dedication of land and/or payment of fees by future developers within the Specific Plan Area, along with development of future parks and recreational amenities undertaken by the City, project impacts to recreational facilities would be less than significant. Applicants that develop within the Specific Plan Area would be required to dedicate parkland and/or pay the City's development fees to aid future land acquisition and/or development of local and community park facilities throughout the City. Similarly, cumulative projects that increase the demand for park and recreation facilities in the City would be required to provide parkland and/or pay the City's development fees.

All substantial expansion or development of new recreational facilities would be subject to the appropriate CEQA environmental review by the City, which would identify and address any site-specific impacts. Therefore, implementation of City policies, such as the collection of development fees, along with compliance with CEQA requirements, would ensure that potential cumulative impacts related to recreational resources are properly addressed and mitigated. Therefore, the project's contribution to potential cumulative impacts on recreational facilities is considered **less than significant**.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

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### 3.15 Transportation and Traffic

This section describes the applicable federal, state, and local transportation regulations and policies, and discusses the existing roadway network and transportation facilities in the vicinity of the project. This section also summarizes transportation impacts in the El Camino Real Specific Plan area and evaluates the potential transportation impacts resulting from implementation of the project.

The discussion in this section is largely based upon the project-specific Transportation Impact Analysis (TIA) prepared for the project by Hexagon Transportation Consultants, Inc. (Hexagon 2020; refer to **Appendix D**). Transportation and circulation information was also obtained from available public resources such as the City of Sunnyvale General Plan (2011), including the Land Use and Transportation Element (adopted 2017). Potential impacts of the project were evaluated in accordance with the standards set forth by the City of Sunnyvale.

#### 3.15.1 Existing Setting

The Specific Plan area runs along El Camino Real in the City of Sunnyvale from Sylvan Avenue to the Lawrence Expressway. The Specific Plan Area abuts the City of Mountain View to the west and the City of Santa Clara to the east. Major roadways within or near the Specific Plan area include El Camino Real, Lawrence Expressway, Central Expressway, Bernardo Avenue, Mary Avenue, Hollenbeck Avenue/Pastoria Avenue, Mathilda Avenue, Sunnyvale Avenue, Fair Oaks Avenue, Wolfe Road, Evelyn Avenue, Remington Drive, Fremont Avenue and Homestead Road. Regional access to the study area is provided by US 101 to the north, I-280 to the south and SR 85 and SR 237 to the west.

Transit services are provided by Caltrain and the Santa Clara County Valley Transportation Authority (VTA). The VTA currently provides seven bus routes with the Specific Plan area. Caltrain provides commuter rail service between San Francisco and Gilroy within the City via the Sunnyvale Caltrain Station and the Lawrence Caltrain Station.

The Specific Plan area contains bike lanes and bike routes that provide adequate connection for bicycles travelling in the north-south direction. Along El Camino Real, bike lanes are present along only a short segment between Fair Oaks Avenue and Sunnyvale Avenue. On other segments of El Camino Real, bicycles have to travel in the curb lanes. Although the curb lanes are generally wider than other travel lanes, factors such as high travel speeds, high vehicular volumes, presence of on-street parking (along certain segments), and the number of driveways discourage bicycle travel along El Camino Real (TIA, 2019).

According to the City's Land Use and Transportation Element (LUTE), El Camino Real is classified as a Class I arterial that should contain sidewalks with a width of 11 to 13 feet. However, the current sidewalk widths along El Camino Real are approximately 6 ft wide, which do not comply with General Plan standards. Sidewalks are present along both sides of all major roadways within



the Specific Plan. Pedestrian crosswalks and signal heads are present at all major signalized intersections along El Camino Real.

### 3.15.2 Regulatory Setting

#### Federal

There are no new federal laws or regulations addressing transportation that are relevant to the project.

#### State

##### *Senate Bill 743*

Senate Bill (SB) 743, passed in 2013, required the Governor's Office of Planning and Research (OPR) to develop new CEQA guidelines that address traffic metrics under CEQA. As stated in the legislation, upon adoption of the new guidelines, "automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the guidelines, if any."

In December of 2018, OPR published the most recent version of the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018), which provides guidance for Vehicle Miles Traveled (VMT) analysis. The Office of Administrative Law approved the updated State CEQA Guidelines, and lead agencies had an opt-in period until July 1, 2020 to implement the updated guidelines regarding VMT. As of July 1, 2020, implementation of CCR Section 15064.3 of the updated CEQA Guidelines apply statewide.

#### Regional

##### *Plan Bay Area*

Plan Bay Area is a long-range integrated transportation and land-use/housing strategy through 2040 for the San Francisco Bay Area. On July 18, 2013, the Association of Bay Area Governments (ABAG) Executive Board and MTC jointly approved the plan. The plan includes the region's Sustainable Communities Strategy and the 2040 RTP and represents the next iteration of a planning process that has been in place for decades.

Plan Bay Area marks the nine-county region's first long-range plan to meet the requirements of California's landmark Senate Bill 375, which calls on each of the state's 18 metropolitan areas to develop a Sustainable Communities Strategy to accommodate future population growth and reduce greenhouse gas emissions from cars and light trucks. Working in collaboration with cities and counties, the plan advances initiatives to expand housing and transportation choices, create healthier communities, and build a stronger regional economy.



### *Santa Clara Valley Transportation Authority*

In its role as transit operator, Santa Clara Valley Transportation Authority (VTA) is responsible for the development, operation, and maintenance of the bus and light rail system in the county. VTA operates over 70 bus lines and three light rail lines, in addition to shuttle and paratransit service. VTA also provides transit service to major regional destinations and transfer centers in adjoining counties.

VTA's Short Range Transit Plan is a federally mandated planning document that describes the plans, programs, and goals of VTA's transit service. The plan has a 10-year planning horizon and is updated annually. It focuses on the characteristics and capital needs of the existing system and on committed (funded) expansion plans. The current plan proposes to keep bus and light rail service at existing levels, to expand community bus services (neighborhood-based circulator and feeder routes that travel within a limited area), to continue to contribute monetarily to Caltrain service, and to replace and expand the bus vehicle fleet.

### Local

#### *City of Sunnyvale Council Policy Manual*

The Sunnyvale City Council adopted Council Policy 1.2.8, "Transportation Analysis Policy," on June 30, 2020; thus, establishing VMT as the primary threshold of significance for analysis of transportation impacts under CEQA. This policy is designed to provide guidance in the preparation of transportation analysis for land use and transportation projects as part of the environmental review process to comply with CEQA (City of Sunnyvale 2020).

Council Policy 1.2.8 requires that all projects evaluate and disclose transportation-related environmental impacts using VMT as the primary metric, as required by CEQA. Additionally, the policy establishes Level of Service (LOS) as an operational measurement of intersection efficiency and all land use and transportation projects may be required to perform operational evaluations. However, because a project's effect on automobile delay no longer constitutes a significant impact under CEQA, the LOS analysis is included as **Appendix D** and is not analyzed in this EIR.

The following policy requirements related to VMT are applicable to the project:

- 1. Land Use Projects.** For residential and employment projects, projects will use the Countywide Average VMT as the baseline with a VMT reduction threshold set at 15 percent below the baseline to identify potential transportation impacts and propose mitigations.
- 2. Exemptions.** Projects that further the City's goals and policies, including those that will not result in significant transportation impacts, are exempt from the requirement to prepare a detailed VMT analysis. A list of exempt projects includes the following:
  - A. Small Infill Projects (110 daily trips or less).
  - B. Neighborhood-Serving Retail/Service Development uses (maximum 100,000 square feet total for entire commercial development), similar to uses permitted by right or with a



Miscellaneous Planning Permit (MPP) in the C-1 (Neighborhood Business Zoning District) subject to evaluation by the Director of Community Development. Such uses not considered neighborhood-serving include auto dealerships, car wash/repair facilities, drive-thru restaurants/services, restaurants with banquet halls, hotels, and similar uses that have a regional draw.

- C. City Facilities such as fire stations, parks, community centers, branch libraries.
- D. Restricted Affordable Housing Projects that meet the following:
  - (I) For rental developments: At least 25 percent of the proposed residential units dedicated as affordable to households up to 80 percent AMI. The developer shall meet the requirements for the City's Rental Inclusionary (SMC Ch. 19.77), and then may provide the remainder of the required units at low income.
  - (II) For ownership developments: At least 25 percent of the proposed residential units dedicated as affordable to households up to 120 percent AMI. The developer shall meet the requirements for the City's Below Market Rate Ownership Inclusionary (SMC Ch. 19.67).
  - (III) For either type of development: The development may utilize the State Density Bonus, however 25 percent of the total constructed units on site must be deed restricted for affordable housing. Prior to the issuance of any building permit for the project, an Affordable Housing Regulatory Agreement shall be recorded against the parcel(s) which sets rent and occupancy restrictions for fifty-five years and shall run with the land through any change of ownership.
- E. Transportation Projects that reduce or do not increase VMT including, but not limited to:
  - (I) Roadway maintenance, rehabilitation and safety improvements;
  - (II) Installation or reconfigured traffic lanes to provide left-turns, right-turns, etc.;
  - (III) Conversion of existing lanes to managed or transit lanes;
  - (IV) Multimodal improvements that promote walking, bicycling and transit;
  - (V) Technology projects that optimize intersection operations, and traffic metering systems, detection, cameras and other electronics designed to optimize traffic flow;
  - (VII) Installation of traffic control devices and roundabouts;
  - (VIII) Relocation or removal of parking; and
  - (IX) Installation of publicly available alternative fuel/charging infrastructure.
- F. Transit Supportive Projects (office/R&D projects with a floor area ratio of more than 75 percent or a residential project of at least 35 dwelling units/acre) within ½ mile of an existing major bus stop or existing stop along a high quality transit corridor that meet all of the following requirements;



- (I) Support the multimodal transportation network by facilitating access to multimodal transportation with improved pedestrian facilities, bike lanes, transit stops; does not harm or hinder access to multimodal transportation;
- (II) Does not exceed maximum parking requirements or propose higher than what is allowed per the development standards;
- (III) Is transit oriented in design:
  - a. Has a walkable design that prioritizes pedestrians;
  - b. Is sustainable, and compact;
  - c. Facilitates ease of bicycle use;
  - d. Is focused or centered around transit; and
- (IV) Redevelopment of a site that provides at least as many affordable units as previously existed.

**3. Transportation Projects.** Project types that would likely lead to a measurable and substantial increase in vehicle travel generally include addition of through lanes on existing or new highways, including general purpose lanes, HOV lanes, peak period lanes, auxiliary lanes, or lanes through grade-separated interchanges. Transportation projects that add vehicle capacity to the roadway network will be required to analyze:

- A. Direct, indirect, and cumulative effects of the transportation project.
- B. Near term and long term induced vehicle travel in total VMT.
- C. Consistency with state and local greenhouse gas reduction goals.
- D. Impacts on the development of multimodal transportation networks.
- E. Impacts on the development of diversity of land uses.

**4. Regional Projects.** For projects such as regional retail, hospitals, stadium, sports complexes, or schools that are not regulated by a Public School District or that require permits from a local jurisdiction, a net increase in total VMT may indicate a significant transportation impact.

#### *City of Sunnyvale General Plan*

The City's General Plan Land Use and Transportation Element (2017) includes the following policies and implementing measures relevant to the analysis of transportation impacts.

#### *Land Use and Transportation Element*

Policy LT-1.6: Integrate land use planning in Sunnyvale and the regional transportation system

Policy LT-1.7: Emphasize efforts to reduce regional vehicle miles traveled by supporting active modes of transportation including walking, biking, and public transit.



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3.15 Transportation

Policy LT-2.3: Accelerate the planting of large canopy trees to increase tree coverage in Sunnyvale in order to add to the scenic beauty and walkability of the community; provide environmental benefits such as air quality improvements, wildlife habitat, and reduction of heat islands; and enhance the health, safety, and welfare of residents.

Policy LT-3.5: Follow California Environmental Quality Act requirements, Congestion Management Program requirements, and additional City requirements when analyzing the transportation impacts of proposed projects and assessing the need for offsetting transportation system improvements or limiting transportation demand.

Policy LT-3.6: Promote modes of travel and actions that provide safe access to city streets and reduce single-occupant vehicle trips and trip lengths locally and regionally. The order of consideration of transportation users shall be:

- (1) Pedestrians
- (2) Non-automotive (bikes, three-wheeled bikes, scooters, etc.)
- (3) Mass transit vehicles
- (4) Delivery vehicles
- (5) Single-occupant automobiles POLICY

Policy LT-3.7: Provide parking and lane priority to environmentally friendly motorized vehicles (e.g. carpools, low emission, zero emission).

Policy LT-3.8: Prioritize safe accommodation for all transportation users over non-transport uses. As City streets are public spaces dedicated to the movement of vehicles, bicycles, and pedestrians, facilities that meet minimum appropriate safety standards for transport uses shall be considered before non-transport uses are considered.

Policy LT-3.9: As parking is the temporary storage of transportation vehicles, do not consider parking a transport use of public streets.

Policy LT-3.10: Prioritize street space allocated for transportation uses over parking when determining the appropriate future use of street space.

Policy LT-3.11: As they become available, use multimodal measures of effectiveness to assess the transportation system in order to minimize the adverse effect of congestion. Continue to use level of service (LOS) to describe congestion levels. Use vehicle miles traveled (VMT) analysis to describe potential environmental effects and impacts to the regional transportation system.



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3.15 Transportation

Policy LT-3.12: Maintain a funding mechanism where new and existing land uses equitably participate in transportation system improvements.

Policy LT-3.14: Require roadway and signal improvements for development projects to improve multimodal transportation system efficiency.

Policy LT-3.15: Prioritize transportation subsidies and project financing over time to the most environmentally friendly modes and services. Support bicycling through planning, engineering, education, encouragement, and enforcement.

Policy LT-3.16: Support neighborhood traffic calming and parking policies that protect internal residential areas from citywide and regional traffic, consistent with engineering criteria, operating parameters, and resident preferences.

Policy LT-3.19: Utilize intelligent transportation systems and other technological applications to improve travel efficiency and safety.

Policy LT-3.21: Implement best practices, innovative facilities, and technology to enhance complete streets.

Policy LT-3.22: Provide safe access to city streets for all modes of transportation. Safety considerations of all transport modes shall take priority over capacity considerations of any one transport mode.

Policy LT-3.27: Require appropriate roadway design practice for private development consistent with City standards and the intended use of the roadway.

Policy LT-4.2: Encourage nodes of interest and activity, public open spaces, well-planned development, mixed-use projects, signature commercial uses, and buildings and other desirable uses, locations, and physical attractions.

Policy LT-4.3: Enforce design review guidelines and zoning standards that ensure the mass and scale of new structures are compatible with adjacent structures, and also recognize the City's vision of the future for transition areas such as neighborhood Village Centers and El Camino Real nodes.

Policy LT-5.1: Strengthen the image that the community is composed of cohesive residential neighborhoods, each with its own individual character and Village Center; allow change and reinvestment that reinforces positive neighborhood concepts and standards such as walkability, positive architectural character, site design, and proximity to supporting uses.

In addition, the Housing Element adopted in 2014 contains the following relevant policies:



### Housing Element

Policy HE 6.3: Continue a high quality of maintenance for public streets, rights-of-way, and recreational areas, and provide safe and accessible pedestrian, bike, and transit linkages (accessibility) between jobs, residences, transportation hubs, and goods and services.

#### *Sunnyvale Municipal Code*

Sunnyvale Municipal Code (SMC) Chapter 10.60 sets forth the City's Transportation Demand Management (TDM) program. SMC Sections 19.46.100 and 19.46.150 include minimum and maximum requirements for off-street parking spaces and bicycle parking (number and type of spaces), respectively.

#### *Transportation Demand Management*

The City has an adopted Multi-Family Residential Transportation Demand Management (TDM) Program, which is required as a condition of approval on all residential development projects consisting of 10 or more units in Sunnyvale. Such residential development projects are required to provide a certain number of points depending on the number of units. Activities that can earn points in the TDM Program include, but are not limited to, the following: proximity to major transit routes/stops; provision of affordable housing units; proximity to (i.e., within a quarter or half mile of) commercial uses; and provision of bicycle facilities. For example, a residential development with 62 units would be required to provide a minimum of six (6) TDM points, which can be achieved through the menu of TDM strategies.

For office, industrial, and Research & Development (R&D) developments, the City focuses the objectives and monitoring of TDM programs on the reduction of overall vehicle trips. For private developments, project sponsors can play an effective role in supporting the City's initiatives through the deployment of TDM programs.

#### *Transportation Impact Fees*

Transportation impact fees (TIFs) are charged to new development to fund major transportation projects, including bicycle and pedestrian improvements necessary to support land use plans. The City's TIF program varies by area of the City (north of SR 237 and south of SR 237). The fees are charged to net new development (i.e., new residential units and increased commercial square footage). Existing development is not required to pay transportation impact fees.

### *3.15.3 Impact Analysis and Mitigation Measures*

#### Standards of Significance

The significance criteria used to evaluate project impacts on transportation under CEQA are based on Appendix G of the State CEQA Guidelines, State CEQA Guidelines Section 15064.3, and Sunnyvale Council Policy 1.2.8. A transportation impact is considered significant if the project would:



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3.15 Transportation

- 1) VMT
  - Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).
- 2) Transit Facilities
  - Disrupt existing or planned transit facilities;
  - Generate increased transit demand unable to be accommodated by existing or planned and programmed transit services; or
  - Conflict with a program, plan, ordinance, or policy addressing transit facilities.
- 3) Bicycle Facilities
  - Disrupt or eliminate existing or planned bicycle facilities;
  - Create demand for bicycle facilities unable to be accommodated by existing or planned and programmed bicycle facilities; or
  - Conflict with a program, plan, ordinance, or policy addressing bicycle facilities.
- 4) Pedestrian Facilities
  - Disrupt or eliminate existing or planned pedestrian facilities;
  - Create demand for pedestrian facilities unable to be accommodated by existing or planned and programmed pedestrian facilities; or
  - Conflict with a program, plan, ordinance, or policy addressing pedestrian facilities.
- 5) Transportation Hazards Related to a Geometric Design Feature or Incompatible Uses
  - Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- 6) Emergency Access
  - Result in inadequate emergency access
- 7) Temporary Construction Impacts
  - Result in a temporary but prolonged impact related to lane closures, the need for temporary signals, emergency vehicles access, or traffic hazards to vehicles, bicyclists, and pedestrians.
- 8) Cumulative Transportation Impacts

Project Impacts and Mitigation Measures

**VMT (STANDARD OF SIGNIFICANCE 1)**

**Impact 3.15-1 Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?**



The Specific Plan establishes design standards and guidelines for enhanced transit, pedestrian, bicycle, and automobile circulation specific to the Specific Plan area and allows for development of a maximum of 6,900 residential units and up to 730,000 square feet of commercial development beyond that which has been constructed to date within the Specific Plan area. One of the Specific Plan's stated objectives is to improve pedestrian amenities, bicycle facilities, transit, and landscaping to enhance multimodal environments and promote safe, convenient access to all locations along the corridor and beyond. The area covered by the Specific Plan is generally defined by a one-half-mile radius from both the Sunnyvale Caltrain Station and the Lawrence Caltrain Station.

As described in "Methodology," above, Council Policy 1.2.8 requires that a project meet the following criteria to presume a less than significant VMT impact for a project based on proximity to a major transit stop or high-quality transit corridor:

- Support the multimodal transportation network by facilitating access to multimodal transportation with improved pedestrian facilities, bike lanes, transit stops; does not harm or hinder access to multimodal transportation.
- Does not exceed maximum parking requirements or propose higher than what is allowed per the development standards;
- Is transit-oriented in design:
  - a. has a walkable design that prioritizes pedestrians;
  - b. is sustainable, and compact;
  - c. facilitates ease of bicycle use;
  - d. is focused or centered around transit; and
- Redevelopment of a site which provides at least as many affordable units as previously existed.

The Specific Plan identifies enhanced transit, pedestrian, bicycle, and automobile circulation improvements and develops associated design standards and guidelines. The Specific Plan would require new development to implement public street improvements, including sidewalks, curb ramps, the addition and removal of on-street parking, new pathways or trails, intersection improvements, bicycle facilities, bus stop improvements, lighting, wayfinding signage, and other public amenities. Therefore, the Specific Plan would support the multimodal transportation network by facilitating access to multimodal transportation with improved pedestrian facilities, bicycle facilities, transit stops; and would not harm or hinder access to multimodal transportation. In addition, the Specific Plan would not exceed maximum parking requirements or propose higher parking requirements than what is allowed per the development standards provided in the SMC parking requirements.



The Specific Plan was designed to promote a mix of land uses and residential densities, including nearby and accessible transit options. These qualities align with the three statutory goals contained in SB 743 and the stated purpose of Council Policy 1.2.8 of reducing GHG emissions, increasing multimodal transportation networks, and facilitating mixed use development. The proposed housing density associated with implementation of the Specific Plan would serve to further enhance the transit-oriented nature of the Specific Plan area by locating a greater number of residents in a mixed-use environment, and in close proximity to the Sunnyvale Caltrain Station and the Lawrence Caltrain Station and high-quality transit corridors. Therefore, the Specific Plan is transit-oriented in nature.

As described in State CEQA Guidelines Section 15064.3(b)(2), transportation projects that reduce, or have no impact on, VMT should be presumed to cause a less than significant transportation impact. Additionally, as detailed in Council Policy 1.2.8 above, multimodal improvements that promote walking, bicycling, and transit generally reduce VMT, and thus, are presumed to cause a less than significant impact on transportation. Therefore, because the transportation improvements included in the Specific Plan were developed to enhance transit, pedestrian, and bicycle facilities and connectivity in the project area, they would not result in a substantial or measurable increase in VMT. Additionally, the proposed intersection improvements provided in the project's *Transportation Impact Analysis* prepared by Hexagon Transportation Consultants (2020) would serve to improve access to the Sunnyvale Caltrain Station and the Lawrence Caltrain Station, improve multimodal safety, and enhance the overall transit-oriented nature of the project area. Therefore, as detailed in Council Policy 1.2.8, these types of roadway improvements would not result in a substantial or measurable increase in VMT.

Although a project's effect on LOS is no longer considered an impact under CEQA, Council Policy 1.2.8 may require LOS operational analysis as part of the planning process to ensure intersection and roadway efficiency, and to comply with the Congestion Management Program. As mentioned above, Hexagon Transportation Consultants conducted the LOS operational analysis for the Specific Plan, which is included in the project's *Transportation Impact Analysis (2020)* and attached as **Appendix D** of this EIR. The LOS operational analysis identified potential improvements to address LOS deficiencies resulting from implementation of the Specific Plan. Subsequent development projects proposed after adoption of the Specific Plan would be required to identify potential improvements to address LOS deficiencies resulting from implementation of the project and pay a fair share contribution and/or construct needed improvements as a condition of approval. The potential improvements identified in the project's *Transportation Impact Analysis* primarily consist of the installation or reconfiguration of traffic lanes to provide for new turn lanes at multiple intersections in the Specific Plan area, and multimodal improvements that promote walking, bicycling, and transit. As detailed in Council Policy 1.2.8, these types of roadway improvements would not result in a substantial or measurable increase in VMT, and thus, would not result in a substantial or measurable increase in VMT.



While the Specific Plan currently proposes land uses consistent with the City VMT Policy, it is recognized that over the extended implementation period of the Specific Plan, implementing projects could potentially fail to meet the density requirements for a Transit Supportive Project as defined by Council Policy 1.2.8 relative to floor area ratio and/or dwelling units per acre. Accordingly, Mitigation Measure TRA-1 requires that in the event that a proposed development does not meet the floor area ratio and/or dwelling unit per acre requirements outlined in Council Policy 1.2.8, the project will be required to prepare a project specific VMT analyses to confirm that the proposed development would not result in a potential increase in VMT. For the reasons detailed above, implementation of the project would result in a **less than significant with mitigation** impact relative to VMT.

### Mitigation Measures

**TRA-1** Prior to Planning Permit Completeness, the City of Sunnyvale shall review site-specific development within the El Camino Real Specific Plan area for consistency with the floor area ratio and/or dwelling units per acre requirements specified in the City’s Transportation Analysis Policy (referred to as “Council Policy 1.2.8”). In the event that a proposed development does not meet the floor area ratio and/or dwelling units per acre requirements or the required threshold specified in Council Policy 1.2.8, a project-specific vehicle miles travelled (VMT) analysis shall be conducted to evaluate and disclose transportation-related environmental impacts and identify measures to avoid and minimize VMT impacts. If the VMT analysis determines the potential for an increase in VMT that cannot be mitigated, a subsequent environmental analysis shall be prepared.

### Level of Significance

Less than significant with mitigation.

## TRANSIT FACILITIES (STANDARD OF SIGNIFICANCE 2)

**Impact 3.15.2** Would the project disrupt existing or planned transit facilities; generate increased transit demand unable to be accommodated by existing or planned and programmed transit services; or conflict with a program, plan, ordinance, or policy addressing transit facilities?

As discussed in Section 3.15.1 above, transit services are provided by Caltrain and the Santa Clara County Valley Transportation Authority (VTA). Seven VTA bus routes currently serve the Specific Plan area. Additionally, Caltrain provides commuter rail service between San Francisco and Gilroy within the City via the Sunnyvale Caltrain Station and the Lawrence Caltrain Station.

The Specific Plan would result in the additional development potential of 6,900 new housing units within the Specific Plan Area. It is anticipated that the potential increase in new housing units and nearby residents will generate additional demand for transit facilities and service. Transit travel



time impacts were evaluated by comparing the bus route travel times in the study area to existing and year 2035 cumulative conditions. The analysis concluded that it is expected that all transit routes under year 2035 cumulative conditions will experience increased route travel times ranging from 1 minute to 7 minutes compared to existing conditions (TIA, 2020).

However, the Specific Plan would require new development in the Plan Area to implement a variety of transit, pedestrian, bicycle, and automobile circulation improvements and develop associated design standards and guidelines. As shown, the Specific Plan would focus on improving bicycle, pedestrian, and transit connections, and therefore, would enhance connectivity and access to existing transit.

The Specific Plan also contains various policies that prioritize mass transit vehicles over single-occupant vehicles, which would shift the design and policy decisions to reflect multimodal transit options. Therefore, implementation of the Specific Plan would enhance, not disrupt, existing or planned transit facilities. Additionally, the project would not conflict with a program, plan, ordinance, or policy addressing transit facilities. The increase in transit demand generated by the project would be accommodated by existing and potential future transit services as required by the Specific Plan. Therefore, the project would result in a **less than significant impact** to transit facilities.

### Mitigation Measures

None required.

### Level of Significance

Less than significant.

## BICYCLE FACILITIES (STANDARD OF SIGNIFICANCE 3)

**Impact 3.15.3**      **Would the project disrupt existing or planned bicycle facilities; generate increased bicycle facility demand unable to be accommodated by existing or planned and programmed bicycle facility services; or conflict with a program, plan, ordinance, or policy addressing bicycle facilities?**

The Specific Plan has identified various policies to improve pedestrian and bicycle facilities within the area. The relevant policies are listed below:

- Circ-1:**      Promote modes of travel and actions that provide safe access to city streets and reduce single occupant vehicle trips and trip lengths locally and regionally. The priority order of consideration of transportation users shall be:
  - A. Pedestrians
  - B. Non-automotive
  - C. Mass transit vehicles

- D. Delivery Vehicles
- E. Single-occupant automobiles

**Circ-2:** Further develop El Camino Real as a Complete Street, with a focus on:

- A. Providing safe, convenient, accessible facilities for all modes including motor vehicles, transit, pedestrians, and bicyclists.
- B. Design and policy decisions regarding El Camino Real will reflect multimodal priorities and provide for safe, convenient and accessible travel by all modes of transportation including driving, walking, bicycling and riding transit.
- C. In making decisions regarding El Camino Real, the needs of more vulnerable road users such as children, seniors, and people with disabilities will be prioritized.
- D. Design and policy decisions regarding El Camino Real will seek to increase pedestrian activity, reduce pedestrian-related collisions, and enhance pedestrian-friendly conditions along the corridor.

The Specific Plan would require new development in the Plan Area to implement a variety of transit, pedestrian, bicycle, and automobile circulation improvements and develop associated design standards and guidelines. Improvements associated with enhancing bicycle facilities, connectivity, and safety will be as shown in the City's adopted Active Transportation Plan, including Class IV separated bikeway, which could result in the removal of on-street parking, and bicycle and pedestrian crossings. On the Auto Row section of El Camino Real, the proposed bicycle improvement would be a Class I shared-use path on both side of the street, and the removal of on-street vehicle parking is not required. The final configuration will be determined during the redevelopment phase. Therefore, the project would improve bicycle facilities within the Specific Plan area and provide additional bicycle capacity. Additionally, the project would not conflict with the policies concerning bicycle facilities within the Specific Plan and would provide increased connectivity consistent with adopted plans and policies.

The project would result in the additional development potential of 6,900 new housing units within the Specific Plan area. An increase in housing units will generate demand for bicycle facilities. However, implementation of the Specific Plan bicycle improvements, policies, and requirements would accommodate the increased demand for bicycle facilities associated with this potential increase in housing units and residents.

In summary, the Specific Plan would enhance, not disrupt, any existing or planned bicycle facilities and would not conflict with a program, plan, ordinance, or policy addressing bicycle facilities. Additionally, any new demand for bicycle facilities generated by the increase in housing density associated with the project would be satisfied by the multimodal improvements required of new development based on Specific Plan policies.

Therefore, the project would result in a **less than significant** impact relative to bicycle facilities.



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3.15 Transportation

Mitigation Measures

None required.

Level of Significance

Less than significant.

**PEDESTRIAN FACILITIES (STANDARD OF SIGNIFICANCE 4)**

**Impact 3.15.4**      **Would the project disrupt existing or planned pedestrian facilities; generate increased pedestrian facility demand unable to be accommodated by existing or planned and programmed pedestrian facility services; or conflict with a program, plan, ordinance, or policy addressing pedestrian facilities?**

According to the LUTE, El Camino Real is classified as a Class I arterial, which should have sidewalks with a width of 11 to 13 feet. However, portions of the current sidewalk widths along El Camino Real do not comply with General Plan standards. As discussed in Impact 3.15.3 above, the Specific Plan would require new development in the Plan Area to implement a variety of transit, pedestrian, bicycle, and automobile circulation improvements and develop associated design standards and guidelines. Improvements associated with enhancing pedestrian facilities, connectivity, and safety could include sidewalks, curb ramps, Class I shared-use paved trails, pathways, and bicycle and pedestrian crossings. Therefore, the project would enhance pedestrian facilities and overall connectivity within the Specific Plan Area, and thus, provide additional pedestrian capacity. Additionally, the project would not conflict with the policies concerning pedestrian facilities within the Specific Plan and would provide enhanced connectivity consistent with adopted plans and policies.

The potential for the increase of new housing units could generate demand for pedestrian facilities. However, implementation of the Specific Plan's pedestrian improvements, policies, and requirements would accommodate the increased demand for pedestrian facilities associated with this potential increase in housing units and residents.

Therefore, the project would result in a **less than significant** impact relative to pedestrian facilities.

Mitigation Measures

None required.

Level of Significance

Less than significant.

**SUBSTANTIALLY INCREASE HAZARDS DUE TO A GEOMETRIC DESIGN FEATURE OR INCOMPATIBLE USES (STANDARD OF SIGNIFICANCE 5)****Impact 3.15.5      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)?**

The Specific Plan incorporates a “complete streets” approach for circulation planning that accommodates all travel modes and contains circulation network improvements to provide improved access throughout the Specific Plan Area to minimize the potential for pedestrian/bicycle and vehicle conflicts, and thus, improve overall safety for all users.

The Specific Plan would require new development in the area to implement a variety of additional transit, pedestrian, bicycle, and automobile circulation improvements and develop associated design standards and guidelines. These improvements include, but are not limited to, sidewalks, curb ramps, new bicycle facilities, and bicycle and pedestrian crossings. The design standards in the Specific Plan would ensure that the new improvements associated with the Specific Plan would be developed in accordance with industry-accepted engineering and design practices. Additionally, consistent with the Specific Plan, all new roadway, bicycle, pedestrian, and transit infrastructure improvements under the project would be subject to, and designed in accordance with, City design and safety standards.

Therefore, the project would result in a **less than significant** impact relative to transportation hazards.

**Mitigation Measures**

None required.

**Level of Significance**

Less than significant.

**EMERGENCY ACCESS (STANDARD OF SIGNIFICANCE 6)****Impact 3.15.6      Would the project result in inadequate emergency access?**

The Specific Plan includes a number of roadway network improvements that would provide improved access throughout the plan area. These improvements include, but are not limited to, intersection improvements at multiple intersections in the Specific Plan area and street typology adjustments. These improvements would provide improved circulation, and thus, improved emergency access throughout the Specific Plan area.

The Specific Plan would require new development in the Plan Area to implement a variety of transit, pedestrian, bicycle, and automobile circulation improvements and develop associated design standards and guidelines. The Specific Plan incorporates a “complete streets” approach for circulation planning that accommodates all travel modes, and would include improvements such as sidewalks, curb ramps, the addition and removal of on-street parking, new pathways and trails,



intersection improvements, buffered bicycle lanes, bus stop improvements, lighting, wayfinding signage, and other public amenities. Therefore, implementation of the Specific Plan would enhance circulation in the Plan Area and would not adversely affect emergency access.

Additionally, consistent with the Specific Plan, emergency access for any future developments under the Specific Plan would be subject to review by the City and responsible emergency service agencies, thus, ensuring the project would be designed to meet all City emergency access and design standards.

Therefore, the project would result in a **less than significant** impact relative to emergency access.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

### TEMPORARY CONSTRUCTION IMPACTS (STANDARD OF SIGNIFICANCE 7)

**Impact 3.15.7** Would the project result in a temporary but prolonged impact related to lane closures, the need for temporary signals, emergency vehicles access, or traffic hazards to vehicles, bicyclists, and pedestrians?

During project construction, disruptions to the transportation network in the vicinity of the project site could occur, including the possibility of temporary lane closures, street closures, sidewalk closures, and bikeway closures. Construction would occur adjacent to and within the public roadway right-of-way; thus, it would likely require temporary lane closures and could result in unexpected slowing of vehicular traffic if not properly planned and managed. The hauling of heavy machinery (e.g., bulldozers, excavators) and operation of large trucks associated with construction activities could necessitate travel along roadways not designated as truck routes and could potentially cause damage to the roadbed. Construction transportation impacts would be localized and temporary; however, project construction activities could potentially result in temporary but prolonged impacts. As such, a potentially significant impact could occur during project construction.

Therefore, mitigation would reduce potentially significant impacts. As provided for in Mitigation Measure TRA-2 below, a temporary traffic control (TTC) plan will be required by the City and the City would determine the construction truck routes. The duration of construction, number of trucks, truck routing, number of employees, truck idling, lane closures, and a variety of other construction-related activities are unknown at this time, however, they would be determined upon development of the construction management plan. With implementation of Mitigation Measure TRA-2, construction impacts would be reduced to a less than significant level.

## Mitigation Measures

**TRA-2** Before construction or issuance of building permits, the developer or the construction contractor for the project shall prepare a temporary traffic control (TTC) plan to the satisfaction of the City Department of Public Works, Division of Transportation and Traffic and subject to review by all affected agencies. The TTC shall include all information required on the City TTC Checklist and conform to the City's TTC Guidelines. At a minimum, the plan shall include the following elements:

- provide vicinity map including all streets within the work zone properly labeled with names, posted speed limits and north arrow;
- provide existing roadway lane and bike lane configuration and sidewalks where applicable including dimensions;
- description of proposed work zone;
- description of detours and/or lane closures (pedestrians, bicyclists, vehicular);
- description of no parking zone or parking restrictions;
- provide appropriate tapers and lengths, signs, and spacing;
- provide appropriate channelization devices and spacing;
- description of buffers;
- provide work hours/work days;
- dimensions of above elements and requirements per latest CA—MUTCD Part 6 and City's SOP for bike lane closures;
- provide proposed speed limit changes if applicable;
- description of bus stops, signalized and non-signalized intersection impacted by the work;
- show plan to address pedestrians, bicycle and ADA requirement throughout the work zone per CA-MUTCD Part 6 and City's SOP for Bike lane closures;
- indicate if phasing or staging is requested and duration of each;
- description of trucks including: number and size of trucks per day, expected arrival/departure times, truck circulation patterns;
- provide all staging areas on the project site; and
- ensure that the contractor has obtained and read the City's TTC Guidelines and City's SOP for bike lane closures; and
- ensure traffic impacts are localized and temporary.

### Level of Significance

Less than significant with mitigation.

## CUMULATIVE IMPACTS

### Impact 3.15.8 Would the project result in a cumulative impact to transportation?



Cumulative projects that would have the potential to be considered in a cumulative context with the proposed project's incremental contribution, and that are included in the analysis of cumulative impacts relative to transportation, were identified in Section 3.0 of this EIR.

As discussed in Impacts 3.15.1 through 3.15.6 above, the project would not result in impacts relative to VMT; existing or planned transit/bicycle/pedestrian facilities or conflicts with programs, plans, ordinances, or policies addressing transit/bicycle/pedestrian facilities; increased hazards due to geometric design; or emergency access. The proposed project is anticipated to result in a less than significant cumulative impact relative to VMT because the proposed compact, higher density, mixed-use development would facilitate lower VMT given its proximate location to transit and other destinations. Other similar cumulative projects, particularly those located within one-half mile of an existing major transit stop or a stop along an existing high-quality transit corridor, are anticipated to result in similar cumulative VMT impacts.

Additionally, the City will consider the environmental effects of new facilities at a project-level relative to VMT, existing or planned transit/bicycle/pedestrian facilities or conflicts with programs, plans, ordinances, or policies addressing transit/bicycle/pedestrian facilities, geometric roadway design, and emergency access at the time when proposed. Therefore, the proposed project's contribution to cumulative environmental impacts associated with VMT, existing or planned transit/bicycle/pedestrian facilities or conflicts with programs, plans, ordinances, or policies addressing transit/bicycle/pedestrian facilities, geometric roadway design, and emergency access would be **less than significant**.

As discussed in Impact 3.15.7 above, the project may result in potentially significant construction-related impacts involving disruptions to the transportation network in the vicinity of the project site. Implementation of Mitigation Measure TRA-2, which requires the project to prepare a construction management plan for approval by the City that identifies the duration of construction, number of trucks, truck routing, number of employees, truck idling, and lane closures, would reduce project-related construction impacts to a less than significant level. Future projects that would be constructed under the Specific Plan would also be required to implement similar measures during construction on a project-level basis. Therefore, cumulative construction impacts relative to transportation would be reduced to **less than significant with mitigation**,

#### Mitigation Measures

Refer to Mitigation Measures TRA-1 and TRA-2.

#### Level of Significance

Less than significant with mitigation.

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## 3.16 Utilities and Service Systems

This section describes the utilities and service systems that would serve the project site. This section further provides a description of existing facilities and infrastructure, identifies applicable service goals, and evaluates potential environmental impacts that may result from project implementation. Supporting information for this section is included in **Appendix E**.

### 3.16.1 Existing Setting

#### California Water Plan

Water Code Sections 10004 through 10013 describe the components and characteristics of the California Water Plan prepared by the California Department of Water Resources. The plan addresses the coordinated control, protection, conservation, development, and utilization of the State's water resources. Updated every 5 years, the most recent water plan is the California Water Plan Update 2018.

Senate Bill 610 (SB 610) amended Water Code sections 10910 and 10912 to create a direct relationship between water supply and land use.

The California Water Code, as amended by SB 610, requires that a water supply assessment (WSA) address the following questions:

- Is there a public water system that will service the project?
- Is there a current urban water management plan (UWMP) that accounts for the project demand?
- Is groundwater a component of the supplies for the project?
- Are there sufficient supplies to serve the project over the next 20 years?

Senate Bill 610 requires water suppliers to prepare a WSA for inclusion in the California Environmental Quality Act (CEQA) process for new development. Section 15155 of the CEQA Guidelines details the types of projects that require a WSA per SB 610. A WSA is required if (among other conditions):

- A project would result in the construction of more than 500 residential units and/or require a water demand equivalent to, or greater than, a 500 dwelling-unit project;
- A shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A commercial office building that would employ more than 1,000 persons or have more than 250,000 square feet of floor space;
- A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- A project would include a hotel or motel, or both, having more than 500 rooms;
- A mixed-use project that includes one or more of the projects specified above; and/or



- For public water systems with fewer than 5,000 service connections, a project that meets the following criteria:
  1. A proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of a public water system's existing service connections; or
  2. A mixed-use project that would demand an amount of water equivalent to, or greater than, the amount of water required by residential development that would represent an increase of 10 percent or more in the number of the public water system's existing service connections.

The proposed project would guide the development of a new mixed-use corridor along approximately 4 miles of El Camino Real within the Sunnyvale City limits. The project would allow for up to 6,900 new residential units and 730,000 square feet of new commercial development, which is 2,700 residential units and 220,000 square feet above that allowed by the City's current General Plan. Therefore, a WSA was conducted to ensure that adequate water supply and reliability within the City, now and into the future, is available to serve the growth envisioned in the Specific Plan (Michael Baker International 2019); refer to **Appendix E**.

#### *San Francisco Public Utilities Commission (SFPUC) Supply*

The City receives water from the City and County of San Francisco's Regional Water System (RWS), operated by SFPUC. This supply is predominantly from the Sierra Nevada, delivered through the Hetch Hetchy aqueducts, but also includes treated water produced by the SFPUC from its local watersheds and facilities in Alameda and San Mateo Counties. Approximately 50% of the City's water supply (9 million gallons per day) is from the SFPUC's Hetch Hetchy System (City of Sunnyvale 2019a).

The business relationship between the SFPUC and Sunnyvale is largely defined by the "Water Supply Agreement between the City and County of San Francisco and Wholesale Customers in Alameda County, San Mateo County, and Santa Clara County" entered into in July 2009 and amended in November 2018 (City of Sunnyvale 2019a). The Water Supply Agreement is supplemented by an individual Water Supply Contract between SFPUC and each individual wholesale customer. These contracts expire in 25 years (June 2034). The City of Sunnyvale has an Individual Supply Guarantee (ISG) of 12.58 million gallons a day (mgd) (or approximately 14,100 acre-feet<sup>1</sup> per year [AFY]) (City of Sunnyvale 2016). Although the Water Supply Agreement and accompanying Water Supply Contract expire in 2034, the ISG (which quantifies San Francisco's obligation to supply water to its individual wholesale customers) survives their expiration and continues indefinitely. The Sunnyvale contract also includes a minimum purchase amount of 8.93

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<sup>1</sup> An acre foot is equal to the volume of a sheet of water one acre in area and one foot in depth (about 325,850 gallons).



mgd (10,003 AFY), which Sunnyvale agrees to buy, regardless of whether sales drop below this level (City of Sunnyvale 2020).

### Water Supply and Services

#### *Water Supply*

The project site is supplied potable water by the City of Sunnyvale. The City has three different sources of potable water supply readily available: (1) Hetch Hetchy Reservoir and Sunol Valley water supply from the San Francisco Public Utilities Commission (SFPUC); (2) purchased treated surface water from the Santa Clara Valley Water District (SCVWD); and (3) local groundwater from six City-owned operating wells. The City also has an additional stand-by well for emergency use and emergency interties to the City of Cupertino, the City of Mountain View, the City of Santa Clara, and Cal Water. Additionally, non-potable (recycled) water is produced at the Sunnyvale water pollution control plant (WPCP) (City of Sunnyvale 2020). The California Water Service Company (Cal Water), an investor-owned water utility, also retails potable drinking water from Cal Water-owned groundwater wells in pocket areas of the City (Michael Baker International 2019).

#### *SFPUC Water Supply Reliability*

The wholesale customers and the City of San Francisco adopted a Water Shortage Allocation Plan in 2009 to allocate water from the regional water system to retail and wholesale customers during system-wide shortages. In order to enhance the ability of the SFPUC water supply system to meet identified service goals for water quality, seismic reliability, delivery reliability, and water supply, the SFPUC has implemented its Water System Improvement Program (WSIP), certified by the San Francisco Planning Commission October 30, 2008 (SFPUC 2009). The program consists of 87 projects, including 35 local projects located within San Francisco and 52 regional projects spread over seven counties from the Sierra foothills to San Francisco. As of August 2018, over 96 percent of the local and regional improvements identified in the WSIP had been completed (SFPUC 2018).

In September 2009, the Bay Area Water Supply and Conservation Agency (BAWSCA) adopted the Water Conservation Implementation Plan. The BAWSCA represents 26 water suppliers in San Mateo, Santa Clara, and Alameda counties. BAWSCA's water management objective is to ensure that a reliable, high-quality supply of water is available where and when people in the BAWSCA service area need it. Several member agencies have elected to participate in the BAWSCA regional water conservation programs, and BAWSCA continues to work with individual member agencies to incorporate the savings identified in the Water Conservation Implementation Plan into their future water supply portfolios. Under the plan, The City of Sunnyvale conservation standard during a drought is 16 percent (BAWSCA 2016).

As discussed in the SFPUC 2020 Urban Water Management Plan, in December 2018, the State Water Resources Control Board (SWRCB) adopted amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento–San Joaquin Delta Estuary (Bay-Delta Plan) to establish water quality objectives with the stated goal of increasing salmonid populations in three San



Joaquin River tributaries (the Stanislaus, Merced, and Tuolumne Rivers) and the Bay-Delta. It remains unclear how or if the Bay-Delta Plan Amendment will be implemented. In acknowledgment of the uncertainty of whether and when the Bay-Delta Plan Amendment will come into effect, the SFPUC 2020 UWMP presents future supply scenarios both with and without it. The two scenarios provided are intended to bookend the potential future supply conditions for the RWS. If the Bay-Delta Plan Amendment is implemented, the SFPUC will be able to meet the projected water use demands presented in this UWMP in normal years but would experience significant supply shortages in single dry years and multiple dry years. Implementation of the Bay-Delta Plan Amendment will require rationing in all single dry years and multiple dry years. Without the implementation of the Bay-Delta Plan Amendment, the SFPUC will not experience shortages until the 4th and 5th year of a multi-year drought at 2045 levels of projected demand (SFPUC 2020).

The Bay-Delta Plan Amendment includes a statement that the State Water Board will take actions as necessary to ensure that the implementation of the Bay-Delta Plan's flow objectives does not impact supplies of water for minimum health and safety needs, particularly during drought periods. Actions may include, but are not limited to, assistance with funding and development of water conservation efforts and regional water supply reliability projects and regulation of public drinking water systems and water rights (SWRCB 2018).

#### *SCVWD Supply*

SCVWD supplies the City of Sunnyvale with treated surface water through an entitlement of imported Central Valley Project (CVP) water and the State Water Project (SWP), as well as surface water from local reservoirs. The current contractual agreement between the City and SCVWD went into effect in 1981 with a 70-year term, and therefore sunsets in 2051.

SCVWD's imported water is conveyed through the Sacramento-San Joaquin Delta then pumped and delivered to the county through three main pipelines: the South Bay Aqueduct, which carries water from the SWP, and the Santa Clara Conduit and Pacheco Conduit, which bring water from the federal CVP.

#### *Local Groundwater*

The City of Sunnyvale has six operating wells operating in full production capacity and one well maintained in stand-by mode for emergencies. The six operating wells are used by the City as a supplemental source to the imported SFPUC and SCVWD water supplies. Historically, the wells produced more than 8,000 AFY. Local groundwater supplies up to half of Santa Clara County's water supply during normal years (City of Sunnyvale 2020). Water demand has been reduced due to conservation, building code changes, and large manufacturing operations relocating out of State and overseas. As a result, the City now utilizes treated water first to meet its take-or-pay contract provisions before using groundwater. Groundwater is also used to meet customer demands in the event SFPUC or SCVWD supplies are disrupted.



### *Recycled Water*

The City of Sunnyvale provides recycled water to a variety of customers through the reclamation of a portion of collected wastewater. The predominant end use of recycled water is irrigation of parks, golf courses, and commercial landscaping. A portion of recycled water is also used within commercial buildings for urinal and toilet flushing (dual-plumbing). The recycled water program was originally developed in 1991 when the City first identified short-term goals of recycling wastewater of 20 percent to 30 percent of high-quality effluent from the Sunnyvale water pollution control plant. Since that time, the program has been updated to reflect the current demand of approximately 1 mgd of recycled water annually.

Sunnyvale has completed Phases I and II of the 2000 Recycled Water Program Master Plan, which serves Baylands Park, the Lockheed/Martin Area, the Sunnyvale Municipal Golf Course, and other parks and industrial areas in the northern part of the City. A storage tank was built in the year 2000 to allow more recycled water to be developed and stored in order to keep up with demand on the system once the area is built out. In September 2013, the City Council approved the Recycled Water Feasibility Study which identifies possible extensions of the recycled water system to serve additional areas of the City, including the south end of Sunnyvale (City of Sunnyvale 2016).

### *Water Supply Reliability*

#### *SFPUC Water*

In July 2009, in connection with the Water Supply Agreement, the wholesale customers and the City of San Francisco adopted a Water Shortage Allocation Plan (WSAP) to allocate water from the regional water system to retail and wholesale customers during system-wide shortages of up to 20 percent (the Tier One Plan). The Tier One Plan replaced the prior Interim WSAP, adopted in 2000, which also allocated water during shortages up to 20 percent. The Tier One Plan also allows voluntary transfers of shortage allocations between the SFPUC and any wholesale customer and between wholesale customers themselves. In addition, water “banked” by a wholesale customer, though greater than required reductions in usage, may also be transferred. The Tier One Plan will expire at the end of the term of the WSA in 2034 unless mutually extended by SFPUC and the wholesale customers (City of Sunnyvale 2016).

In 2010, the wholesale customers negotiated and adopted the Tier Two Plan, the second component of the WSAP, which allocates the collective wholesale customer share among each of the 26 wholesale customers. In order to enhance the ability of the SFPUC water supply system to meet identified service goals for water quality, seismic reliability, delivery reliability, and water supply, the SFPUC has undertaken the Water System Improvement Program, approved October 2008. The program will deliver capital improvements aimed at enhancing the SFPUC’s ability to meet its water service mission of providing high quality water to customers in a reliable, affordable, and environmentally sustainable manner.



In February 2005, the SFPUC Water Quality Bureau published a City Emergency Drinking Water Alternatives report. The purpose of this project was to develop a plan for supplying emergency drinking water in the City after damage and/or contamination of the SFPUC raw and/or treated water systems resulting from a major disaster. The report addresses immediate response after a major disaster. Since the publication of this report, the SFPUC has implemented multiple projects to increase its capability to support the provision of emergency drinking water during an emergency (City of Sunnyvale 2016).

### Well Water

The SCVWD's Groundwater Management Plan ensures that local groundwater resources are sustained and protected. SCVWD programs to sustain and protect groundwater resources are described in detail in the SCVWD's Groundwater Management Plan of 2016.

### SCVWD Water

The SCVWD obtains its local and imported water supplies from a variety of sources to maintain maximum efficiency, flexibility, and reliability. The SCVWD augments natural groundwater recharge with a managed recharge program to offset groundwater pumping, sustain storage reserves, and minimize the risk of land subsidence. Through these recharge activities, the SCVWD works to keep groundwater basins "full" to protect against drought. Storing surplus water in the groundwater basins enables part of the supply to be carried over from wet years to dry years. The SCVWD maintains a contract for 100,000 AFY from the State Water Project and 152,500 AFY from the Central Valley Project (CVP) (City of Sunnyvale 2016). However, the actual amount of water delivered is typically significantly less than these contractual amounts and depends on hydrology, conveyance limitations, and environmental regulations, including regulatory constraints to protect water quality and aquatic wildlife. On a long-term average basis, 83 percent of the CVP supply is delivered for municipal and industrial use, and 17 percent is delivered for irrigation use (City of Sunnyvale 2016). The SCVWD routinely acquires supplemental imported water to meet the county's needs from the water transfer market, water exchanges, and groundwater banking activities.

In 2003, the SCVWD initiated the Water Utility Infrastructure Reliability Project to determine the current reliability of its water supply infrastructure (pipes, pump stations, treatment plants) and to appropriately balance level of service with cost. The project measured the baseline performance of critical facilities in emergency events and identified system vulnerabilities. The study concluded that the SCVWD's water supply system could suffer up to a 60-day outage if a major event, such as a 7.9 magnitude earthquake on the San Andreas fault, were to occur. Less severe hazards, such as other earthquakes, flooding, and regional power outages, had less of an impact on the SCVWD, with outage times ranging from 1 to 45 days. The level of service goal identified for the Infrastructure Reliability Project was "potable water service at average winter flow rates available to a minimum of one turnout per retailer within seven days, with periodic 1-day interruptions for repairs." In order to meet this level of service goal, the project identified various improvements to reduce the potential outage times (such as stockpiling emergency pipeline repair materials,

developing a list of contractors available on stand-by, participating in a mutual aid network for water and wastewater utilities, seismic retrofits at area dams, upgrading retail water service systems, etc.) which the SCVWD has been implementing over time (City of Sunnyvale 2016).

### *Drought Planning*

#### *Average/Normal Water Year*

The “normal” year for the purposes of this Plan, is a year in the historical sequence that most closely represents median runoff levels and patterns. For planning purposes, the SFPUC “normal year” is based on historical hydrology under conditions that allow the reservoirs to be filled over the course of the snowmelt season, allowing full deliveries to their customers. SCVWD used the Water Evaluation and Planning (WEAP) model developed by Stockholm Environment Institute to assess their water service reliability and determine base years for all year types. SCVWD’s WEAP water supply planning model operates on a monthly time-step that simulates the water supply and demand over 94 years, using the historic hydrologic sequence of 1922 through 2015. SCVWD used the average annual supply over the 94 modeled years to represent the average year condition.

The City selected the average of the period from 1922-2015 as a representation of a “normal” or “average” water year to stay consistent with the average year determined by SCVWD (City of Sunnyvale 2020).

#### *Single Dry Year Supply*

The single dry year supply is defined as the year with the minimum usable supply. The hydrology of 1977 represents the minimum total supply that has been observed in the historical record, according to the SCVWD. The City selected 1977 as the single dry year since groundwater managed by the SCVWD will be relied upon to make up the deficit from water wholesalers (City of Sunnyvale 2020).

#### *Multiple Dry Year Supply*

Multiple dry year scenario analysis is useful, particularly in the evaluation of carryover storage. Evaluating the availability of the county’s water supplies requires an understanding of the driest periods that can reasonably be expected to occur. The SFPUC combined historical data with a hypothetical drought more severe than what the RWS has historically experienced to assess reliability over a multi-year drought. The design drought sequence used by the SFPUC for reliability planning is an 8.5-year period comprised of:

- Historical hydrology from July 1986 to June 1992;
- A prospective drought that includes the 1976-77 drought (to represent a drought sequence worse than historical); and
- A system recovery period for the last six months of the design drought.



SCVWD's WEAP modeling results indicate that the county's water supply system is more vulnerable to successive dry years, such as those that occurred in 1988 through 1992 and in 2012 through 2016. Multiple dry year periods deplete water storage reserves in local and imported supply reservoirs and in the groundwater subbasins. Although the supply in each year may be greater than in a single very dry year, as drought lingers, storage reserves are relied on more.

Imported water allocations to SCVWD are provided in the draft 2019 DWR State Water Project Delivery Capability Report (DCR), which does not include projected future regulations nor the hydrologic sequence for the most recent 2012 to 2016 drought. Since imported water allocations were not available from DWR DCR 2019 for the 2012 to 2016 drought, SCVWD chose the period from 1988 to 1992 as their five dry-year base period. The period from 1988 to 1992 represents an extended drought within historic record and WEAP modeling period.

The City chose 1988 to 1992 as the five-year drought base period to match the period used by SCVWD and SFPUC (City of Sunnyvale 2020).

### Supply Availability

In the event of a decrease of local supplies, the City would respond by pursuing demand reduction programs in accordance with the severity of the supply shortage. Any supply deficit would be compensated for by increased conservation levels and restrictions in consumption. The City's 2020 Urban Water Management Plan (UWMP) indicates that supplies would be available to meet demands even in times of drought, with no reduction of supply necessary until the fifth year and beyond of a multi-year drought (City of Sunnyvale 2020). The UWMP notes that Sunnyvale would be able to increase the amount of groundwater pumped to meet reasonably anticipated deficiencies from other sources; thus, supply is projected to be sufficient to meet demand out to 2040. The Santa Clara Subbasin underlying Sunnyvale is not adjudicated, which means the right to pump groundwater from the basin has not been given by judgment of a court or board.

Five-year dry periods analyzed in the UWMP indicate that supplies will be able to meet demands through increased groundwater pumping and implementation of drought conservation programs. The City will be able to address the projected demands without rationing (City of Sunnyvale 2021).

The City's current estimated average total potable and recycled demand for year 2025 is 20,183 AFY and is projected to increase to 25,618 AFY by year 2040 (City of Sunnyvale 2020). Because the City is largely built-out, it is expected that water use will continue to rise in future years primarily due to increasing population (City of Sunnyvale 2020).

### Distribution System

The City owns, operates, and maintains a closed water supply and distribution system consisting of three different pressure zones. Sunnyvale's elevation varies from sea level at its northern end to approximately 300 feet above sea level at its southwest corner. Zone I extends roughly from El Camino Real northward to the San Francisco Bay and is supplied primarily by SFPUC water. Zone II consists of everything south of Zone I, with the exception of the southwest corner of Sunnyvale,



and is served by a supply mixture of SFPUC water, City groundwater, and SCVWD treated water. Zone III serves the southwest section of the City, with Hollenbeck Avenue on the east side and Fremont Avenue on the north side, and is served by a combination of SCVWD treated water and City groundwater (City of Sunnyvale 2020).

Water pressure in the distribution system is maintained in a range of 40 pounds per square inch (psi) to 105 psi throughout all three zones. A Supervisory Control and Data Acquisition (SCADA) system allows the City to maintain a balanced system, generally keeping water deliveries between those pressure readings. The average operating pressure is 68 psi. Zone I receives direct downstream pressure from the SFPUC pipeline system with an operating pressure of approximately 130 psi, though that pressure is reduced through the use of pressure-regulating valves before it is delivered to customers (City of Sunnyvale 2020).

Several pocketed areas in Sunnyvale's city boundaries, located primarily along Fremont Avenue and Sunnyvale-Saratoga Road, receive water from the California Water Service Company (Cal Water). These areas were at one time part of unincorporated Santa Clara County but have since been annexed by the City of Sunnyvale. Cal Water produces its own water from wells the company owns exclusively. The City, through a cooperative effort, provides emergency connections to Cal Water's system to improve fire flows when needed (City of Sunnyvale 2020).

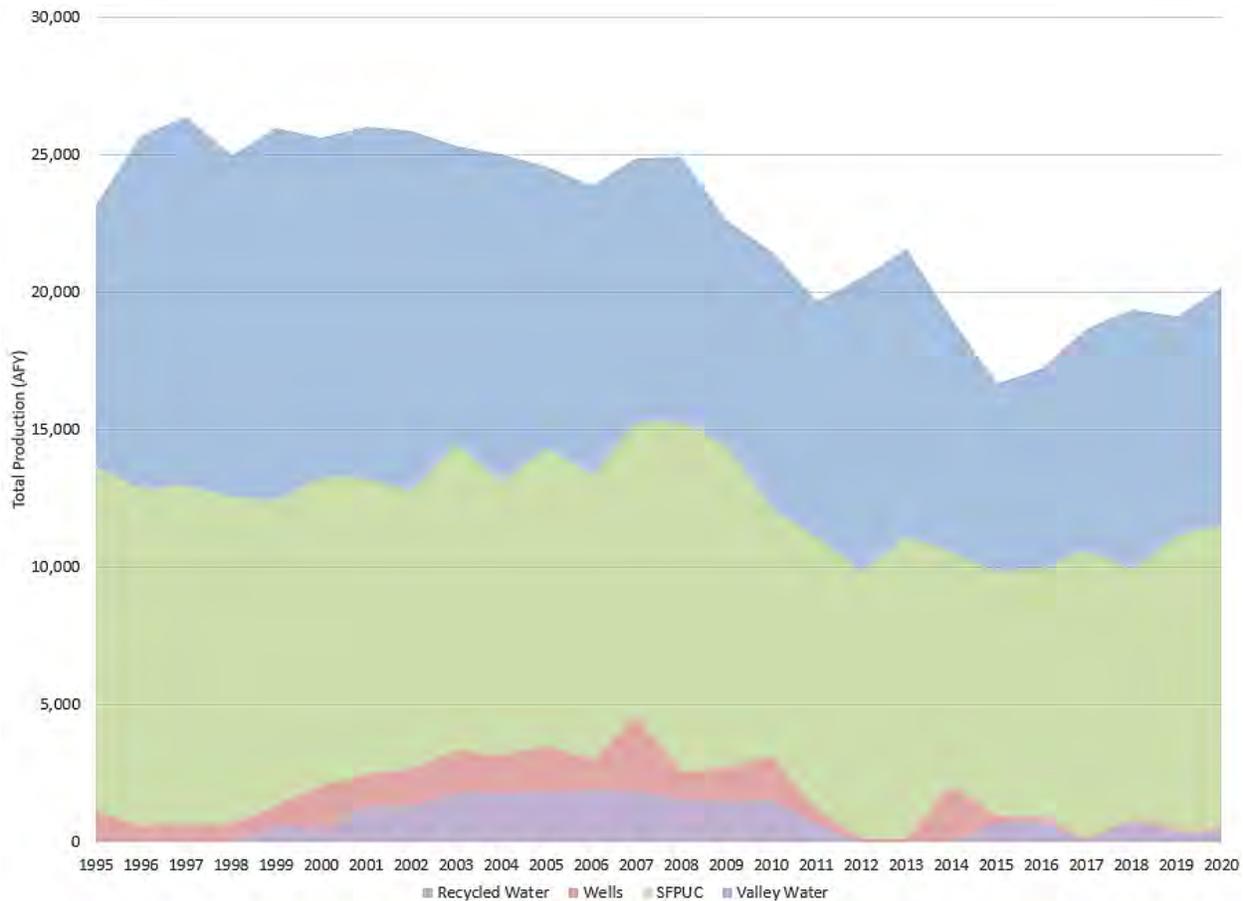
Eight potable water storage reservoirs at four different locations throughout Sunnyvale have a total storage capacity of 26.5 million gallons (81 AF). There is also one recycled water reservoir with a storage capacity of 2 million gallons (6 AF). This volume of water can meet at least one day of average water demand during the summer for the entire City. Over 80 percent of the distribution and trunk lines in the city were installed in the 1960s and are nearing the end of their estimated 50-year service life, so rehabilitation and/or replacement including upsizing is needed to minimize the need for emergency repairs (City of Sunnyvale 2020).

### *Water Demand*

Water use varies throughout the years depending on several natural factors, including the weather and the extension of seasons, but is also dependent on other factors such as the business climate and the economy. Recognizing long-term general trends in water requirements is valuable in projecting future supply needs.

**Figure 3.16-1** reflects the total annual water production in AFY by Sunnyvale since 1995 through 2020. Water use in Sunnyvale generally increased from 1995 to 2001. After 2002, water use began to steadily decline in response to drought-related conservation measures, economic factors, and contractual limitations previously negotiated. The City purchases water from Valley Water and SFPUC, so the increase in deliveries from one source will generally be accompanied by a decrease from the other. The sharp decline in water use from 2013 to 2015 was due to drought conditions and implementation of local and regional water conservation measures. Water use since 2015 has partially recovered, which can be attributed to recovery from the drought (City of Sunnyvale 2020).

**Figure 3.16-1  
Historical, Present, and Projected Water Production (AFY)**



Source: Sunnyvale 2020

The City categorizes its water accounts into seven broad customer categories: single-family, multi-family, commercial/industrial, institutional, landscape irrigation, fire services, and system losses (estimated as the difference between actual water sales and water supplied). Current and projected water use in Sunnyvale is summarized by classification of the water delivered to all customers in **Table 3.16-1** and by source in **Table 3.16-2**. Total annual potable water use in 2020 was approximately 3,000 AF less than the projected 2020 water use from the previous UWMP. However, overall demand increased from 2015 to 2020. This increase in water use can be attributed to the relaxation of water rationing mandates and measures related to the drought (City of Sunnyvale 2020).

It is noted that water use patterns for 2020 were greatly affected by the Coronavirus (COVID-19) pandemic. The pandemic began in early 2020 and led to several Regional Shelter-In-Place/Stay-at-Home Orders and local emergency restrictions. These restrictions caused a shift in water demand from all sectors to majority residential use. Most nonessential businesses shifted to remote work, and several businesses were unable to continue operation due to the Stay-at-Home

Orders. It is expected that water use patterns will return to historical trends in the future, once returning to normal (post-pandemic) conditions (City of Sunnyvale 2020).

**Table 3.16-1**  
**Current and Projected Water Use by Customer Type (AFY)**

Customer Type	2020	2025	2030	2035	2040
Single-family residential	6,285	5,884	5,939	7,234	7,805
Multi-family residential	5,614	5,301	5,295	6,379	6,835
Commercial/Industrial (combined)	3,364	4,111	4,257	4,583	4,770
Institutional	229	280	289	362	395
Landscape Irrigation (potable)	2,233	2,346	2,471	2,702	2,843
Other (fire lines)	11	7	7	9	9
System Losses	1,457	1,358	1,381	1,632	1,729
Total potable	19,193	19,287	19,639	22,901	24,386

Source: Sunnyvale 2020

Current supply and supply projections for the City's four sources of potable and non-potable water provide a basis for assessing water supply reliability. The breakdown of total supply by source was determined using the City's contractual agreements with each wholesaler and historical production trends. Current and projected water supply is listed by source in **Table 3.16-2**.

**Table 3.16-2**  
**Current and Projected Water Supply by Source (AFY)**

Customer Type	2020	2025	2030	2035	2040
SFPUC	11,052	14,100	14,100	14,100	14,100
SCVWD	8,665	9,215	9,338	11,226	11,923
Wells	87	8,000	8,000	8,000	8,000
Recycled Water	383	896	1,010	1,120	1,232
Total Demand	20,187	32,211	32,448	34,446	35,255

Source: Sunnyvale 2020

## Wastewater Services

### *Existing Wastewater Facilities*

Wastewater from homes and businesses (toilets, showers, kitchen sinks, etc.) in the City is carried by sanitary sewer lines to the Sunnyvale WPCP where it is treated before being discharged to local waterways that flow into the San Francisco Bay. The amount and quality of this effluent is regulated by the San Francisco Bay Regional Water Quality Control Board. The board's purpose is to protect beneficial uses of the San Francisco Bay in compliance with the California Water Code and the federal Clean Water Act.

Sunnyvale's wastewater collection system has the capacity to convey all sewage and industrial wastes generated when the City is fully developed in accordance with the land use projections.



Five major trunk networks terminate at the WPCP, referred to as the Lawrence, Borregas, Lockheed, Moffett, and Cannery trunks.

As sanitary sewers become older, gaps from cracks, joints, aging gaskets, and leaking services tend to allow some groundwater or rainwater to enter the system. This process is called infiltration. A certain amount of rainwater may also find its way into the wastewater system as inflow. Inflow can result from direct connections of storm drains or downspouts to the wastewater system, either in the right-of-way or on private property. Components of the system itself, such as piping, manholes, pumps, etc., will also require replacement as they exceed their life expectancy.

*Water Pollution Control Plant*

The WPCP is located at 1444 Borregas Avenue and is currently designed for an ultimate flow treatment capacity of 29.5 mgd, though current flows through the plant average approximately 13 mgd (City of Sunnyvale 2016). The amount of influent wastewater handled by the WPCP varies with the time of day and with the seasonal changes in demand. The WPCP collects wastewater from the sanitary sewer system; the water must then be treated before it can be discharged to the lower San Francisco Bay (City of Sunnyvale 2016). This treatment occurs at the plant, which is an advanced tertiary treatment plant consisting of primary treatment (sedimentation), secondary treatment (oxidation), and tertiary treatment (filtration and disinfection).

These processes provide treatment to a level that will meet National Pollutant Discharge Elimination System (NPDES) discharge requirements. Most of the treated water is discharged to the southern San Francisco Bay via the Guadalupe Slough. Approximately 5 percent of the WPCP flow is treated to a higher level to meet necessary recycled water quality and is delivered to customers for non-potable uses, primarily irrigation. The City anticipates an average level of 15 mgd for plant influent over the next 25 years (City of Sunnyvale 2016). **Table 3.16-3** presents information on the total amount of wastewater collected and treated in 2015 (City of Sunnyvale 2016).

**Table 3.16-3**  
**Recycled Water – Average Wastewater Collection, Treatment, and Discharge 2018-2020 (AFY)**

Wastewater Collected	Wastewater Treated	Discharged Treated Water	Recycled within Service Area	Recycled Outside of Service Area
17,392	17,392	14,488	622	0

Source: Sunnyvale 2016

Note: Between 2018-2020, the City produced an average of 622 AF of recycled water annually. Potable water is blended with recycled to improve water quality for plants and offset differences in production and demand. On average, 604 AF of potable water was added, resulting in a total of 1,226 AF of water was produced through the recycled water system.

### *Future Water Pollution Control Plant Improvements*

Sunnyvale's General Plan states that WPCP capacity was deemed sufficient based on use in 2001 and the updated projections. The US Environmental Protection Agency (EPA) requires that when flows reach 75 percent of design capacity, agencies begin to evaluate future needs and develop plans for expansion, if appropriate. Based on 2001 figures, it was not anticipated that this milestone would be reached in Sunnyvale and it would not be necessary to evaluate ways to provide additional capacity at the WPCP during the following 5 to 10 years. This overall projection is attributed to changes in land use, changes in water consumption patterns, and the overall reduced rate of growth.

Portions of the WPCP were first constructed in 1956 and are now over 50 years old. In addition, the nature of wastewater treatment itself presents an adverse environment for facilities and equipment. In order to maintain this infrastructure and ensure the ongoing ability to meet effluent and recycled water quality requirements, it is necessary to have in place a strategy for the ongoing refurbishment and replacement of components of the WPCP.

An asset condition assessment conducted in 2005 identified several critical plant structures as at risk and in need of rehabilitation. In 2007, a Capital Project Strategic Infrastructure Plan was put in place to set future direction of plant process enhancements and physical improvements. In 2014, the City began construction on upgrades that are part of a 20-year improvement program to update the plant and to accommodate new regulations and technology (City of Sunnyvale, 2020a).

### Stormwater Drainage System

Local storm drainage facilities in Sunnyvale are owned by the City of Sunnyvale and maintained by the City's Environmental Services Department. The system consists of approximately 3,200 storm drain inlets, five pump stations, and approximately 295 miles of storm drains (Sunnyvale 2015). The local system discharges into a regional system under the jurisdiction of the SCVWD. In lower-elevation areas, pump stations collect runoff from low-lying urban areas and discharge to creeks and sloughs in higher elevations. The local system then conveys storm runoff to San Francisco Bay.

SCVWD facilities in the Specific Plan Area include the East El Camino Storm Drain Channel (East Channel). The East Channel is approximately 6 miles long and stretches from Interstate 280 to Guadalupe Slough.

### Solid Waste Services

The City of Sunnyvale serves the recycling and garbage disposal needs of residents and businesses, advocating the reduction, reuse, and recycling of household and commercial waste. The City offers a multitude of services, workshops, and special events to encourage waste reduction, recycling, and safe waste disposal.



### Garbage and Recycling Services

Garbage and cardboard recycling collection service is provided to Sunnyvale businesses by the City's franchised hauler, Specialty Solid Waste & Recycling. Customers can choose to use hauler-provided carts or bins or can choose to provide their own containers and compactors.

### Transfer Station

The Sunnyvale Materials Recovery and Transfer Station (SMaRT Station<sup>®</sup>) is the focal point for the transfer and processing of solid waste and recyclable materials collected in the City. The station, which opened in October 1993 and is located on a 9-acre site north of Caribbean Drive, has a total floor area of over 110,000 square feet, including a tipping floor and recycling/processing area. The SMaRT Station has the capacity to receive and process for removal of recyclables in the amount of 1,500 tons of solid waste per day (CalRecycle 2019a). The station currently processes approximately 1,000 tons per day and 260,000 tons annually, and serves the cities of Sunnyvale, Mountain View, and Palo Alto (BCWS 2020). The unused capacity of the station is available, at an appropriate price, to other public or private enterprises outside of the City. The current contracted service provider for the operation of the SMaRT Station is Bay Counties Waste Services.

### Landfill Disposal

The solid waste generated in Sunnyvale is hauled from the SMaRT Station to the Kirby Canyon Landfill 27 miles away in south San Jose. The City of Sunnyvale has contracted for disposal capacity, ending on December 31, 2031. In addition, some solid waste from Sunnyvale is disposed of at the Zanker Road Landfill and other disposal sites around the State. **Table 3.16-4** summarizes the permitted throughput, estimated remaining capacity, and estimated closure date for these facilities.

**Table 3.16-4  
Solid Waste Disposal Facilities**

Facility	Permitted Daily Throughput (tons per day)	Estimated Remaining Capacity (CY)	Estimated Closure Date
SMaRT Station	1,500	N/A	N/A
Kirby Canyon Landfill	2,600	16,191,600	2059

Source: CalRecycle 2019a, 2019b; BCWS 2020  
cy=cubic yards

### Solid Waste Source Reduction Program

The City has completed a comprehensive waste reduction and recycling plan in compliance with Assembly Bill (AB) 939, which required every city in California to reduce the waste it sends to landfills by 50 percent by the year 2000. For the years 2018-2019, Sunnyvale was recycling or otherwise diverting approximately 60 percent of its solid waste, thereby complying with the standards established by AB 939 (BCWS 2020).



The City is working to comply with AB 1826 (Chaptered on September 28, 2014), which requires that businesses separate and arrange for composting the food waste and compostable organics that they generate. The City operates a pilot food waste collection route that is transitioning into a regular collection service for this material.<sup>2</sup>

On December 9, 2008, the Sunnyvale City Council adopted the Zero Waste Policy, which calls for a reduction in the amount of waste being disposed, as well as efforts to minimize upstream impacts on materials through sustainable manufacturing and consumerism. As a result, on April 23, 2013, the City Council adopted the Zero Waste Strategic Plan, which included both a waste characterization study and a long-term plan. The plan provides options for implementing the Zero Waste Policy along with quantifiable goals and analysis of the diversion potential associated with each option. The plan concluded that the City will need to significantly expand its source separation programs and significantly increase the diversion of materials through the SMaRT Station if it is to achieve its goal of a 75 percent diversion rate (City of Sunnyvale 2013).

### Dry Utilities

#### *Electrical and Natural Gas Services*

Electric and natural gas service in Sunnyvale is provided by the Pacific Gas and Electric Company (PG&E). PG&E provides gas and electric service to approximately 16 million people throughout a 70,000-square-mile service area in Northern and Central California (PG&E 2020).

#### *Electric Services*

Electricity purchased from PG&E by local customers is generated and transmitted by a statewide network of power plants and transmission lines. Various transmission and distribution lines traverse Sunnyvale, serving to carry electrical power from power plants within and outside the City to electrical substations where power is converted to voltages suitable for distribution to end-users.

**Table 3.16-5** shows electricity consumption by land use for PG&E's service area from 2015 to 2019 expressed in millions of kilowatt-hours (kWh). Santa Clara County's electricity consumption from 2015 to 2019 is shown in **Table 3.16-6**.

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<sup>2</sup> In brief, AB 1826 requires that businesses generating organic waste arrange for recycling services for that waste. A business must take this action if it generates: 8 cubic yards or more per week of organic waste on April 1, 2016; 4 cubic yards or more of organic waste on January 1, 2017; and 4 cubic yards or more of commercial solid waste per week on January 1, 2019. The bill also requires jurisdictions to implement an organic waste recycling program for businesses.

**Table 3.16-5**  
**Electricity Consumption for PG&E's Service Area (in millions of kWh) 2015–2019**

Year	Agri & Water Pump	Commercial Building	Commercial Other	Industry	Mining & Construction	Residential	Streetlight	Total Usage
2015	7,581	31,180	4,551	10,818	2,139	29,166	372	85,807
2016	6,692	30,662	4,546	10,620	1,909	28,625	355	83,408
2017	5,100	30,753	4,353	10,515	1,765	29,138	321	81,945
2018	5,832	30,148	4,266	10,519	1,594	27,700	311	80,369
2019	4,490	29,560	4,349	9,710	1,642	28,014	308	78,072

Source: CEC 2016a

**Table 3.16-6**  
**Santa Clara County Electricity Consumption (in millions of kWh) 2015–2019**

Year	Residential	Nonresidential	Total
2015	3,849	12,946	16,795
2016	3,802	13,013	16,815
2017	3,958	13,058	17,017
2018	3,851	12,852	16,704
2019	4,046	12,619	16,665

Source: CEC 2016b

### Natural Gas Service

**Table 3.16-7** shows natural gas consumption by land use for PG&E's service area from 2015 to 2019 expressed in millions of therms.

**Table 3.16-7**  
**Natural Gas Consumption for PG&E's Service Area (in millions of therms) 2015–2019**

Year	Ag & Water Pump	Commercial Building	Commercial Other	Industry	Mining & Construction	Residential	Total Usage
2015	35	817	59	1,762	56	1,690	4,419
2016	36	843	63	1,810	70	1,746	4,567
2017	36	865	68	1,701	171	1,873	4,715
2018	37	900	59	1,775	190	1,833	4,794
2019	34	927	62	1,847	170	1,903	4,942

Source: CEC 2016c

Santa Clara County's natural gas consumption between 2015 and 2019 is shown in **Table 3.16-8**.

**Table 3.16-8**  
**Santa Clara County Natural Gas Consumption (in millions of therms) 2015–2019**

Year	Residential	Nonresidential	Total
2015	216	196	412
2016	219	203	422
2017	239	206	445
2018	234	206	440
2019	244	216	460

Source: CEC 2016d

### *Telecommunications Services*

Several purveyors provide telecommunications services such as telephone service, cable/satellite television, and Internet service in Sunnyvale. Telephone and Internet service providers include Verizon Wireless, Sprint, AT&T, Metro PCS, Pacific Bell, and Comcast. Cable/satellite television providers include Comcast, AT&T, Dish Network, and DirecTV. Cable fibers and underground and aerial telephone transmission lines are generally collocated and installed concurrently with other utility infrastructure.

### *3.16.2 Regulatory Setting*

#### Water Supply and Services

##### *Federal*

##### Safe Drinking Water Act of 1974

The Safe Drinking Water Act authorizes the U.S. Environmental Protection Agency (EPA) to set national health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in drinking water. The EPA, States, and water systems then work together to make sure that these standards are met. Originally, Safe Drinking Water Act focused primarily on treatment as the means of providing safe drinking water at the tap. The 1996 amendments greatly enhanced the existing law by recognizing source water protection, operator training, funding for water system improvements, and public information as important components of safe drinking water. This approach ensures the quality of drinking water by protecting it from source to tap. The Safe Drinking Water Act applies to every public water system in the United States.

##### *State*

##### California Water Plan Update 2018

The California Water Plan is the State's blueprint for integrated water management and sustainability. The California Department of Water Resources (DWR) updates the Water Plan approximately every five years. The California Water Plan Update 2018 is the latest edition of the water plan. The California Water Plan provides framework and resource management strategies promoting two major initiatives: integrated regional water management that enables regions to



implement strategies appropriate for their own needs and helps them become more self-sufficient, and improved statewide water management systems that provide for upgrades to large physical facilities, such as the State Water Project, and statewide management programs essential to the California economy.

### Urban Water Management Plan Act

The Urban Water Management Plan Act (UWMP Act) was passed in 1983 and codified as California Water Code Sections 10610 through 10657. Since its passage in 1983, the Act has been amended on several occasions. In 2004, the Act was amended to require additional discussion of transfer and exchange opportunities, non-implemented demand management measures, and planned water supply projects. Most recently, in 2005, the Act was amended to require water use projections (required by California Water Code Section 10631) to include projected water use for single-family and multi-family residential housing needed for lower income households. In addition, Government Code Section 65589.7 was amended to require local governments to provide a copy of the adopted housing element to water and sewer providers. The Act requires “every urban water supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000-acre feet of water annually, to prepare and adopt, in accordance with prescribed requirements, an urban water management plan.” Urban water suppliers must file these plans with the California Department of Water Resources every five years describing and evaluating reasonable and practical efficient water uses, reclamation, and conservation activities. As required by the *Memorandum of Understanding Regarding Urban Water Conservation in California* and Assembly Bill 11, the 2005 UWMP Act, incorporated water conservation initiatives, and a Water Shortage Contingency Plan.

### Senate Bill 610

Water Code Sections 10610 to 10656 require water suppliers to prepare an UWMP to promote water demand management and efficient use in their service areas. UWMPs are included with the environmental document for specified projects.

Concerning water supply, the Water Code requires preparation of a Water Supply Assessment for certain projects.<sup>3</sup> The Water Code requires that a Water Supply Assessment be prepared for any “project” which would consist of one or more of the following:<sup>4</sup>

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;

<sup>3</sup> Water Code Sections 10910–10915.

<sup>4</sup> Water Code Section 10912(a).



- A proposed hotel or motel, or both, having more than 500 rooms;
- A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- A mixed-use project that includes one or more of the projects specified above; or
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project.

### Assembly Bill 901

Assembly Bill (AB) 901 requires Urban Water Management Plans to include information relating to the quality of existing sources of water available to an urban water supplier over given time periods and the manner in which water quality affects water management strategies and supply.

### California Urban Water Conservation Council

The California Urban Water Conservation Council (CUWCC) was created in 1991 by numerous urban water agencies, public interest organizations, and private entities throughout California to assist in increasing water conservation in the State. The goal of the CUWCC is to integrate best management practices (BMPs) into the planning and management of California's water resources.

A Memorandum of Understanding Regarding Urban Water Conservation in California was signed by these agencies in 2007 to formalize an agreement to implement the BMPs and to form a cooperative effort to reduce the consumption of California's water resources. Cal Water is a signatory of the memorandum. By signing the council's memorandum, members agree to implement 14 best management practices to conserve water in urban areas. The council's BMPs were updated in 2008 to include current technology and to credit agencies for innovative water conservation programs. The 14 BMPs are organized into five categories. Two categories, Utility Operations and Education, are foundational BMPs because they are considered essential water conservation activities by any utility and are adopted for implementation by all signatories to the Memorandum of Understanding as ongoing practices with no time limits. The remaining BMPs are programmatic and are organized into residential, commercial, industrial, institutional, and landscape categories.

### 20x2020 Water Conservation Program

On February 28, 2008, California Governor Schwarzenegger introduced a seven-part comprehensive plan for improving the Sacramento-San Joaquin Delta. As part of the plan, the governor directed State agencies to prepare and implement a program to achieve a 20 percent reduction in statewide average per capita water use by year 2020 (20x2020 Water Conservation Plan). Several State agencies involved in water planning and management joined to form an agency team to direct the development and implementation of the 20x2020 Program. The program's focus is to understand current urban water use patterns in order to propose a practical and effective conservation strategy. The process of developing this program involves five steps:

- Data analysis



- Baseline definition
- Preliminary targets development
- Conservation potential identification
- Implementation planning

The draft of this plan served as a basis for legislation that was enacted in November 2009 to incorporate into law (Senate Bill X7 7) the goal to achieve a 20 percent reduction in urban per capita water use in California by 2020 (SWRCB 2018). Cal Water is currently implementing BMPs as identified above in order to begin working toward this goal. It is anticipated that further BMPs will be implemented in coming years as funding allows and as approved by the California Public Utilities Commission (Cal Water 2010).

### Senate Bill 221

Senate Bill 221 (SB 221),<sup>5</sup> amended State law, effective January 1, 2002, to improve the link between information on water supply availability and land use at the tentative map preparation phase of a project. SB 610 and SB 221 are companion measures which seek to:

- Promote more collaborative planning between local water suppliers and cities and counties;
- Require detailed information regarding water availability be provided to city and county decision-makers prior to approval of specific large development projects;
- Require that this detailed information be included in the administrative record that serves as the evidentiary basis for an approval action by the city or county on such projects; and,
- Recognize local control and decision making regarding the availability of water for projects and the approval of projects.

SB 221 pertains only to residential projects and establishes the relationship between the Water Supply Assessment prepared for a project and the project approval under the Subdivision Map Act.

### *Local*

#### Santa Clara Valley Water District Water Supply Master Plan

The SCVWD adopted its Water Supply Master Plan 2040 in November 2019. The Water Supply Master Plan (Master Plan) explains Valley Water's strategy for providing a reliable and sustainable water supply in a cost-effective manner for future generations. The Master Plan informs investment decisions by describing the type and level of water supply investments Valley Water is planning to make through 2040; discusses the adopted water supply level of service goal, Valley

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<sup>5</sup> Business and Professions Code Section 11010 and Government Code Section 66473.4.

Water's water supply strategy to meet that goal, and SCVWD's portfolio of water supply projects; and the framework for the annual monitoring and assessment plan.

### Sunnyvale Green Building Program

On May 7, 2019, the City Council revised the green building standards for new construction, additions, and remodels of buildings. Incentives are offered for projects that exceed the minimum green building standards and are offered to encourage project applicants and developers to provide additional green building features. Mixed-use projects are required to meet the appropriate Build It Green standard for the residential portion and Leadership in Energy and Environmental Design (LEED) for the nonresidential portion. These measures include efficient irrigation systems, insulation of hot water pipes, and water-efficient fixtures. Such requirements apply to projects with a planning application that is deemed complete on or after July 1, 2019. For projects that do not require a planning application, such requirements apply to building permits submitted on or after July 1, 2019 (City of Sunnyvale 2019b).

### Sunnyvale Water Conservation Programs

The City collaborates with the Santa Clara Valley Water District, which administers various water conservation programs for businesses, residents, and landscaping, including site evaluations and water efficiency rebate programs.

### Wastewater Services

#### *Federal*

#### Clean Water Act (33 USC Sections 1251, et seq.)

The Clean Water Act's (CWA) primary goals are to restore and maintain the chemical, physical, and biological integrity of the nation's waters and to make all surface waters fishable and swimmable. The CWA forms the basic national framework for the management of water quality and the control of pollution discharges; it provides the legal framework for several water quality regulations, including the National Pollutant Discharge Elimination System (NPDES), effluent limitations, water quality standards, pretreatment standards, antidegradation policy, nonpoint-source discharge programs, and wetlands protection. The EPA has delegated the responsibility for administration of CWA portions to State and regional agencies. In California, the SWRCB administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The SWRCB works in coordination with the Regional Water Quality Control Boards (RWQCB) to preserve, protect, enhance, and restore water quality.

#### *State*

#### Recycled Water Policy

To establish uniform requirements for the use of recycled water, the SWRCB adopted a statewide Recycled Water Policy on February 3, 2009. The policy's purpose is to increase the use of recycled water from municipal wastewater sources that meets the definition in Water Code Section



13050(n) in a manner that implements State and federal water quality laws. The policy describes permitting criteria that are intended to streamline the permitting of most recycled water projects. The intent of this streamlined permit process is to expedite the implementation of recycled water projects in a manner that implements State and federal water quality laws while allowing the RWQCBs to focus on projects that require substantial regulatory review due to unique site-specific conditions.

### Statewide General Permit for Landscape Irrigation Uses of Recycled Water

The SWRCB is also developing a statewide general permit for landscape irrigation uses of recycled water (General Permit). The intent of the law is to develop a uniform interpretation of State standards to ensure the safe, reliable use of recycled water for landscape irrigation uses, consistent with State and federal water quality law, and for which the California Department of Public Health has established uniform statewide standards. The law is also intended to reduce costs to producers and users of recycled water by streamlining the permitting process for using recycled water for landscape irrigation.

### Division of Drinking Water

The SWRCB's Division of Drinking Water is responsible for establishing criteria to protect public health in association with recycled water use. The criteria issued by this division are found in the California Code of Regulations, Title 22, Division 4, Chapter 3, entitled Water Recycling Criteria. Commonly referred to as Title 22 Criteria, the criteria contain treatment and effluent quality requirements that vary based on the proposed type of water reuse. Title 22 sets bacteriological water quality standards on the basis of the expected degree of public contact with recycled water. For water reuse applications with a high potential for the public to come into contact with the reclaimed water, Title 22 requires disinfected tertiary treatment. For applications with a lower potential for public contact, Title 22 requires three levels of secondary treatment, basically differing by the amount of disinfectant required.

Title 22 also specifies the reliability and redundancy for each recycled water treatment and use operation. Treatment plant design must allow for efficiency and convenience in operation and maintenance and provide the highest possible degree of treatment under varying circumstances. For recycled water piping, the division has requirements for preventing backflow of recycled water into the public water system and for avoiding cross-connection between the recycled and potable water systems.

### *Local*

#### Sunnyvale Municipal Code

Title 12, Water and Sewers, of the Sunnyvale Municipal Code (SMC) regulates wastewater use in Sunnyvale. Specifically, SMC Chapter 12.40 lays out wastewater capacity allocation, including initial allocations and baseline limits, monitoring of wastewater flows, need for wastewater capacity evaluations, and declarations of restrictions.

## Solid Waste Services

### *Federal*

#### Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA), an amendment to the Solid Waste Disposal Act of 1965, was enacted in 1976 to address the huge volumes of municipal and industrial solid waste generated nationwide. The RCRA gives the US Environmental Protection Agency the authority to control hazardous waste from “cradle to grave.” This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. The RCRA also sets forth a framework for the management of nonhazardous solid wastes. The federal Hazardous and Solid Waste Amendments are the 1984 amendments to the RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for the EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program. Amendments to the RCRA in 1986 enabled the EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

### *State*

#### California Integrated Waste Management Act of 1989 (AB 939)

The California Integrated Waste Management Act of 1989 (AB 939) requires all California cities and counties to achieve a 50 percent diversion rate by 2000. Additional solid waste statutes are included in California’s Public Resources Code, Government Code, and Health and Safety Code, among others. The California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires each development project to provide an adequate storage area for collection and removal of recyclable materials.

## Dry Utilities

### *State*

#### California Public Utilities Commission

The California Public Utilities Commission (CPUC) is the State agency that regulates privately owned telecommunications, electric, natural gas, water, railroad, rail transit, and passenger transportation companies, in addition to authorizing video franchises. The CPUC grants operating authority, regulates service standards, sets rates, and monitors utility operations for safety, environmental stewardship, and public interests.

#### California Building Energy Efficiency Standards

Title 24, Part 6, of the California Code of Regulations, known as the Building Energy Efficiency Standards, was established in 1978 in response to a legislative mandate to reduce California’s

energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2013 Building Energy Efficiency Standards went into effect on July 1, 2014 and were last updated in 2019. All buildings for which permit applications are dated on or after January 1, 2020 are required to comply with the 2019 Standards. The California Energy Commission updates the standards every three years (CEC 2021).

### California Energy Commission

The California Energy Commission (CEC) is the State's primary energy policy and planning agency. The CEC was created by the California Legislature in 1974 and is responsible for the following: forecasting future energy needs and keeping historical energy data; licensing thermal power plants 50 megawatts or larger; promoting energy efficiency by setting the State's appliance and building efficiency standards; supporting public interest energy research that advances energy science and technology; supporting renewable energy by providing market support to existing, new, and emerging renewable technologies; developing and implementing the State Alternative and Renewable Fuel and Vehicle Technology Program to reduce the State's petroleum dependency and help attain the State climate change policies; administering more than \$300 million in American Reinvestment and Recovery Act funding through State programs; and planning for and directing the State response to energy emergencies.

#### *3.16.3 Impact Analysis and Mitigation Measures*

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. For the purposes of this EIR, the proposed project is evaluated against the following thresholds for the potential to result in a significant impact:

- 1) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities the construction or relocation of which could cause significant environmental effects.
- 2) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.
- 3) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- 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.
- 5) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

**REQUIRE NEW OR EXPANDED FACILITIES (STANDARD OF SIGNIFICANCE 1)**

**Impact 3.16.1** Would the project require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities or expansion of existing facilities, the construction or relocation of which could cause significant environmental effects?

Water Supply and Services

As described previously, the City relies on four sources for its long-term water supply: 1) City owned groundwater wells; 2) imported water from SFPUC's Regional Water System; 3) imported water from SCVWD; and 4) recycled water from a wastewater reclamation program which supplies non-potable water for uses such as parks and golf courses. The City has plans to expand the program to produce approximately 16,800 AFY. Analysis in the 2019 WSA estimates that implementation of the Specific Plan would add approximately 600 AFY of demand to the City's water system. The potable water demand for the project is estimated to be 967 AFY under normal conditions by the buildout year 2025 (Michael Baker International 2019).

The 2019 WSA determined that the City can meet future water demands, including the demands associated with buildout of the Specific Plan, during drought years by utilizing a combination of groundwater, conservation, recycled water, and the available SFPUC and SCVWD contractual water supply limits. The WSA found that the City has an adequate supply of water to provide water service to the project throughout 2035 under normal and drought conditions (Michael Baker International 2019). Therefore, the project would not require any new or expanded water supply facilities; refer also to Impact 3.16.2 below.

Wastewater Services

As stated above, the City's WPCP has an existing treatment capacity of 29.5 mgd. Current flows average approximately 13 mgd (City of Sunnyvale 2016). Thus, the WPCP has approximately 16.5 mgd of unused capacity. Projected wastewater flows generated by future buildout of the project would represent a small percentage of this unused capacity. Thus, there is adequate capacity to treat the additional wastewater that would result with project implementation. No new or expanded wastewater facilities would be necessary.

However, as previously stated, in order to maintain the City's aging WPCP infrastructure and ensure the ability to meet future effluent and recycled water quality requirements, ongoing refurbishment and replacement of components of the WPCP is required over time. In 2014, the City began construction on upgrades that are part of a 20-year improvement program to update the plant and to accommodate new regulations and technology (City of Sunnyvale 2020a). Additionally, all new development occurring with future project buildout would be subject to City discretionary and/or CEQA review to ensure the adequacy of wastewater treatment services and facilities and to address any potential environmental effects that may result from new or expanded infrastructure improvements. Refer also to Impact 3.16.3 below.



### Stormwater Drainage Facilities

New development projects accommodated under the proposed project would be required to provide stormwater drainage system improvements and/or connections as needed to ensure the Citywide drainage system has adequate capacity to accommodate existing and future uses; refer also to Section 3.9, Hydrology and Water Quality. Applicants for future development within the project area would be required to pay the capital costs of public facilities and services needed to serve such development. Potential environmental effects for construction of future stormwater drainage improvements are evaluated in Section 3.9 of this EIR. Construction of any new stormwater drainage improvements would be subject to compliance with all applicable local, State, and federal laws, ordinances, and regulations, as well as the specific mitigation measures identified in this EIR. Compliance with the relevant laws, ordinances, and regulations, as well as any relevant mitigation measures, would ensure that project-related environmental impacts are reduced to less than significant.

### Dry Utilities

Implementation of the Specific Plan would result in the renovation of existing buildings and/or development of new buildings. Therefore, it is anticipated that project implementation would increase demand for electric, natural gas, and telecommunications services at the project site compared to current conditions. PG&E currently provides electrical and natural gas services to the project site and would continue to provide these services. The site is already connected to PG&E's electrical and natural gas lines, as well as to telecommunications lines. The assessment for future services expansion, and associated environmental impacts, cannot be identified at this time because that evaluation requires future speculation under unknown circumstances, such as timing and location. All future electrical, natural gas, and telecommunication services expansion would require City discretionary review and/or environmental review under CEQA, as appropriate.

With the implementation of City policies, regulations, and standards for new development, including the payment of development fees, project implementation is not anticipated to require or result in the relocation or construction of new or expanded facilities for utility or service provision, the construction or relocation of could cause significant environmental effects. Impacts would be **less than significant**.

### Mitigation Measures

None required.

### Level of Significance

Less than significant.

## REQUIRE NEW OR EXPANDED WATER SUPPLIES (STANDARD OF SIGNIFICANCE 2)

**Impact 3.16.2** Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?



The Specific Plan would guide the development of a new mixed-use corridor along 4 miles of El Camino Real in the City limits. The Specific Plan would allow for future development of up to 6,900 residential units and 730,000 square feet of commercial development, which is 2,700 new residential units above and 220,000 square feet of new commercial use less than that currently allowed under the adopted General Plan. Therefore, a WSA was conducted to ensure that adequate water supply and reliability within the City, now and into the future, is available to serve the growth envisioned in the Specific Plan (Michael Baker International 2019).

The 2019 WSA includes an analysis of water demands for the City's existing service area and the proposed project through 2035, evaluation of reliability of the City's water supplies, identification of potential impacts to the City's water suppliers, and an analysis of available water supply during normal, single-dry, and multiple dry years over a 20-year planning period. However, the WSA does not identify infrastructure needs for service distribution with project buildout.

The WSA for the 2035 LUTE specifically addressed increased water demand associated with updating and increasing land use within the City limits. Although the Specific Plan was included in the General Plan growth areas for the 2035 LUTE, the WSA for the 2035 LUTE was based on the 2010 UWMP demand estimates. Therefore, the WSA for the Specific Plan used a conservative approach by using the 2015 UWMP as a baseline and added the additional growth and water demand estimates from the Specific Plan to the WSA analysis (Michael Baker International 2019).

The 2015 UWMP evaluates water demand and water supply for a 20-year planning period in 5-year increments. Based on **Table 4-1** of the 2015 UWMP, the 2015 total potable water demand was 15,090 AFY, and the estimated 2035 potable demand is 25,216 AFY. As mentioned in Impact 3.16.1, the City relies on four sources for its long-term water supply; City owned groundwater wells, imported water from SFPUC's Regional Water System; imported water from SCVWD; and recycled water from a wastewater reclamation program which supplies non-potable water for uses such as parks and golf courses. The City has plans to expand the program to produce approximately 16,800 AFY. Analysis in the 2019 WSA estimates that implementation of the Specific Plan would add approximately 600 AFY of demand to the City's water system. The potable water demand for the project is estimated to be 967 AFY under normal conditions by the buildout year 2035 (Michael Baker International 2019).

The 2019 WSA concluded that the City can meet future water demands, including the demands from associated with buildout from the Specific Plan, during drought years by utilizing a combination of groundwater, conservation, recycled water, and the available SFPUC and SCVWD contractual water supply limits (Michael Baker International 2019). The 2019 WSA found that supplies of imported water are expected to remain relatively stable throughout the forecast period and that water conservation and increased local well production would balance the demand for water in the City. Analysis of water demand and supply projections for the City finds that the existing water supply contracts, groundwater, conservation, and recycled water programs would sufficiently meet the increased water demand from implementation of the Specific Plan through

the year 2035. Reliability of future water supplies to the region is based on implementation of the regional projects, implementation of local agency programs, and combined efforts and programs among agencies, including all water retailers, and the SFPUC, SCVWD, RWQCB, and BAWSCA. Furthermore, analysis in the 2019 WSA also demonstrates that possible reductions in imported water deliveries due to drought conditions do not prevent the City from satisfying its anticipated demands (Michael Baker International 2019).

Therefore, sufficient water supplies would be available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. Impacts would be **less than significant**.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

### INADEQUATE WASTEWATER TREATMENT CAPACITY (STANDARD OF SIGNIFICANCE 3)

**Impact 3.16.3** Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

As discussed under Impact 3.16.1, project implementation would add approximately 600 AFY of demand to the water system by development buildout which would increase the City's total demand from 23,804 to 24,404 AFY by 2025 under normal water year conditions (Michael Baker International 2019). Therefore, demands for wastewater treatment would similarly increase with the increased demand in water use resulting from project development.

As stated above, the WPCP has an existing treatment capacity of 29.5 mgd. The amount of influent wastewater handled by the plant varies with the time of day and with seasonal changes in demand. Current flows average approximately 13 mgd (City of Sunnyvale 2016). Thus, the WPCP has approximately 16.5 mgd of unused capacity. Projected wastewater flows generated by future buildout of the project would represent a small percentage of this unused capacity. Thus, there is adequate capacity to treat the additional wastewater that would result with project implementation. Further, all future development within the project area would be subject to the City's discretionary process and CEQA review to ensure the adequacy of public utilities and to identify any potential environmental effects, as appropriate.

Therefore, the wastewater treatment provider would have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. Impacts would be **less than significant**.



Mitigation Measures

None required.

Level of Significance

Less than significant.

**GENERATE SOLID WASTE IN EXCESS OF STATE OR LOCAL STANDARDS (STANDARD OF SIGNIFICANCE 4)**

**Impact 3.16.4** 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?

Future demolition and/or construction activities, and operation of new development facilitated by the proposed project, would generate additional solid waste requiring recycling and/or disposal. According to the City’s website, “all solid waste from residential and nonresidential construction, demolition, remodeling, or cleanup projects must be collected and disposed of in containers provided by the City’s franchised hauler, Specialty Solid Waste & Recycling. Certain activities are exempt from this requirement. Violators of this requirement are subject to citation, fines, and impoundment of unauthorized collection containers” (City of Sunnyvale 2020b). Applicants would be required to submit a demolition and/or construction plan to the City prior to the issuance of any related permits for future development within the Specific Plan Area.

The City currently provides collection services for cardboard, mixed paper, and beverage containers to meet its target diversion rates pursuant to AB 939. Remaining waste can be hauled to the SMaRT Station for processing. For the years 2018-2019, it is estimated that approximately 107,464 tons of the 259,609 tons (total) of solid waste received and processed at the SMaRT Station were diverted from landfill disposal. Specifically for solid waste generated in the City of Sunnyvale, for the years 2018-2019, an estimated 67,734 tons of 149,245 tons (total) of solid waste received and processed at the SMaRT Station were diverted from landfill disposal (BCWS 2020). As discussed previously, the SMaRT Station has approximately 500 tons per day remaining capacity and would be capable of serving the project. Given Sunnyvale’s current community-wide diversion rate of 65 percent, it is assumed that, after source-separation, then SMaRT Station processing, the remaining waste would be transferred from the SMaRT Station to the Kirby Canyon Landfill. As shown in **Table 3.16-5**, the Kirby Canyon Landfill has sufficient capacity to accept solid waste generated over time with project implementation.

Development under the Specific Plan would not be served by a landfill with insufficient permitted capacity to accommodate the project’s solid waste disposal needs and would not violate applicable federal, State, and local statutes and regulations related to solid waste. Therefore, impacts would be **less than significant**.

Mitigation Measures

None required.

### Level of Significance

Less than significant.

## COMPLY WITH FEDERAL, STATE AND LOCAL STATUTES AND REGULATIONS FOR SOLID WASTE (STANDARD OF SIGNIFICANCE 5)

### **Impact 3.16.5 Would the project comply with federal, State, and local management and reduction statutes and regulations related to solid waste?**

Refer to Impact 3.16-4, above. The project would generate solid waste during construction and operation activities, thus requiring consideration of waste reduction and recycling measures. The 1989 California Integrated Waste Management Act (AB 939) requires that specific waste diversion goals be achieved for all California cities and counties, including an overall reduction in solid waste produced by 50 percent by the year 2000. In addition, the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires expanded or new development projects to incorporate storage areas for recycling bins into the proposed design. Additionally, California Assembly Bill 341 (2011) established a State goal to reduce, recycle or compost no less than 75 percent of waste generated by the year 2020.

Solid waste produced during construction would be properly disposed of in accordance with applicable statutes and regulations. Similarly, any waste generated during operations/occupancy would be required to be properly managed and disposed of in a licensed, off-site landfill or recycled. All future development within the project area would be required to comply with applicable federal, State, and local statutes and regulations related to solid waste. Therefore, impacts would be **less than significant**.

### Mitigation Measures

None required.

### Level of Significance

Less than significant.

## CUMULATIVE IMPACTS

### **Impact 3.16.6 Would the project increase the cumulative demand for utilities and service systems?**

#### Water Supply and Services

The cumulative setting for water services, including supplies and related infrastructure, consists of the City's four sources for its long-term water supply: 1) City owned groundwater wells; 2) imported water from SFPUC Regional Water System; 3) imported water from SCVWD; and 4) recycled water from a wastewater reclamation program which supplies non-potable water for uses such as parks and golf courses. The cumulative setting includes all existing, planned, proposed, approved, and reasonably foreseeable development within the City and boundary of the SFPUC and SCVWD.

As noted under Impact 3.16.1, analysis in the 2019 WSA estimates that implementation of the Specific Plan would add approximately 600 AFY of demand to the water system by development buildout in 2025 which would increase the City's total demand from 23,804 AFY to 24,404 AFY by 2025 under normal water year conditions. However, water supplies would be available to meet demands even in times of drought, with no reduction of supply necessary to meet the projected growth outlined in the Specific Plan. Further, during drought events the City would implement demand reduction programs in order to address potential reductions in water supply. The project site is currently connected to the City's water supply system and would not require any new or expanded off-site water supply infrastructure.

Local and regional growth may result in the need for new water supply infrastructure. However, it is anticipated that such infrastructure would be evaluated on a project-by-project basis and that any necessary improvements would be required to be installed on an as-needed basis as individual developments are undertaken. The project would not require any new or expanded off-site water supply infrastructure. Therefore, the project's contribution to this impact would be **less than significant**.

#### Wastewater Services

Because wastewater services are provided by the City, the cumulative setting for wastewater services includes full buildout of Sunnyvale, which is expected to occur in 2035. It also includes the Rancho Rinconada area in Cupertino.

As identified under the Existing Setting subsection, additional wastewater treatment and infrastructure capacity improvements would be needed to serve future development in the City. Implementation of the Specific Plan would increase the allowable development potential within the project area. An increase in housing units and non-residential development would equate to an increase in wastewater that would be conveyed to City facilities for treatment. The projected wastewater flows for the WPCP in 2035 is 19.5 mgd of average dry weather flow (ADWF) (City of Sunnyvale 2019). Projected flows were based on historic and existing flow data and population and growth assumptions in the City's LUTE. The WPCP's future planned, permitted capacity (19.5 mgd of ADWF) is equivalent to the projected 2035 ADWF (19.5 mgd). Therefore, there would not be sufficient planned capacity at the WPCP to treat wastewater for existing and planned development, as well as buildout of the Specific Plan. The City will be updating the WPCP Master Plan in the near future to include sufficient treatment capacity for existing and planned development and additional growth, and subsequent environmental review for the WPCP Master Plan update shall be completed by the City. The specific design and improvements needed are unknown at this time. Therefore, it is speculative to evaluate the environmental impacts of those undetermined improvements at this time. Thus, the project's contribution to this impact would be **cumulatively considerable and significant and unavoidable**.



### Stormwater Drainage Facilities

Cumulative development, in addition to the proposed project, could have the potential to result in the construction of new stormwater drainage facilities or the expansion of existing facilities. As development is proposed over time, the City would ensure cumulative development pays the cost of its infrastructure and services needs and require new development to pay the capital costs of public facilities and services needed to serve those development. The City would continue to collect and apply development impact fees to pay for infrastructure improvements, including future stormwater facilities. Thus, overall cumulative impacts relative to stormwater drainage would be reduced to less than significant.

Buildout of the Specific Plan is not anticipated to involve significant impacts concerning stormwater drainage following conformance with applicable laws, ordinances, and regulations in place for stormwater drainage (i.e., existing General Plan policies and implementation measures, and payment of development impact fees). Further, as buildout of the Specific Plan is anticipated to gradually occur over the next several decades, the City would effectively plan for increases in population and demands for stormwater drainage improvements or expansion as site-specific development occurs. Therefore, the proposed project would not contribute to a **significant cumulative impact** relative to stormwater facilities.

### Solid Waste Services

The cumulative setting for solid waste includes Santa Clara County and the surrounding region. The cumulative setting includes all existing, planned, proposed, approved, and reasonably foreseeable development in the area. The project, as well as future development in the surrounding region, would result in an incremental cumulative demand for solid waste collection and disposal in regional landfills.

As described in Impact 3.16.3, implementation of the Specific Plan would result in an increase in solid waste generation as a result of construction/demolition activities, operations of additional land uses, and addition of residential units in the area. However, solid waste management is generally provided by the respective jurisdiction and not on a regional basis. Based on current conditions and future projections, it is anticipated that the SMaRT Recycling Center and Kirby Canyon Landfill would have adequate capacity to accommodate recycling and solid waste generation from the project, as well as from buildout of the City and from other surrounding communities. Therefore, the project's contribution to this impact would be **less than significant**.

### Dry Utilities

The cumulative setting for electrical, natural gas, and telecommunications services encompasses the service areas of each particular service provider (PG&E, Comcast, Verizon, etc.). The cumulative setting includes all existing, planned, proposed, approved, and reasonably foreseeable development in these service areas that currently place demand on these services or that are expected to place demand on them in the future.



The project, along with other existing, planned, proposed, approved, and reasonably foreseeable development in the areas served by PG&E and the various telecommunications purveyors in the region, would result in a cumulative increase in demand for electrical, natural gas, and telecommunications services, and associated infrastructure. The environmental effects of specific infrastructure projects needed to accommodate future growth in the region would be evaluated in greater detail for each specific energy-related project. In general, such infrastructure would be collocated and constructed concurrently with other utilities within roadway rights-of-way to lessen or eliminate potential environmental effects. It is not anticipated that the project would result in future development that would contribute to a substantial increase in the demand for such utilities or service systems. Therefore, this impact would be **less than significant**.

#### Mitigation Measures

None required.

#### Level of Significance

Less than significant.

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## 4.0 Effects Found Not to be Significant

In the course of evaluating the Specific Plan, the project was determined to have no impact relative to certain issue areas identified in the CEQA Appendix G checklist. As allowed under CEQA Guidelines Section 15128, this section discusses why impacts to these environmental topics were determined to have a less than significant impact or no impact and are therefore not discussed in detail in Section 3.0.

### 4.1 Agriculture and Forestry Resources

#### Standards of Significance

Based on Appendix G of the CEQA Guidelines, agricultural and forestry resource impacts are considered to be significant if the project would result in any of the following:

- 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 nonagricultural use.
- 2) Conflict with existing zoning for agricultural use, or a Williamson Act contract.
- 3) Conflict with existing zoning for, or cause rezoning of, forestland (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)).
- 4) Result in the loss of forestland or conversion of forestland to non-forest use.
- 5) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forestland to non-forest use.

According to the Santa Clara County Important Farmland Map (DOC 2014), the project site and all adjacent properties are designated as Urban and Built-Up Land. The project site does not contain any agricultural uses.

No lands within the Specific Plan Area are used for any type of agricultural or forestry use, nor are any such lands zoned for agriculture or forestland. As such, the site is not subject to a Williamson Act contract. The project site does not meet the definition of forestland in Public Resources Code Section 12220(g) and is located in an urbanized and developed area. Therefore, the project would not conflict with existing zoning for agricultural or forestland, nor would it convert agricultural land to nonagricultural uses or forestland to non-forest use. The project would have **no impact** on agriculture and forestry resources.



### Cumulative Impacts

There is no agricultural land or forestland on the project site. Therefore, the project would not contribute to the cumulative conversion of agricultural land or forestland in the area. Project impacts would be **less than cumulatively considerable**.

## 4.2 Aesthetics

### Standards of Significance

Per Appendix G of the CEQA Guidelines, an aesthetics impact is considered significant if the project would result in any of the following:

- 1) Have a substantial adverse effect on a scenic vista.
- 2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway.

### Impact Analysis

Scenic vistas generally encompass long-range or expansive views to natural environmental, historical, or architectural features of visual or aesthetic value to the community. A scenic vista is visible typically from elevated vantage points or open areas. There are no designated scenic vistas within the City of Sunnyvale. Therefore, there would be **no impact**.

In regard to scenic resources within a State scenic highway, the California Scenic Highway Mapping System does not identify any officially designated State scenic highways within or adjacent to the Specific Plan Area (Caltrans 2020). Therefore, there would be **no impact**.

## 4.3 Biological Resources

### Standards of Significance

An impact to biological resources is considered significant if project implementation would:

- 1) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- 2) 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?
- 3) 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.
- 4) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or approved local, regional, or State habitat conservation plan.



### Impact Analysis

As discussed in Section 3.3, Biological Resources, the only waterways in the Specific Plan Area are concrete lined drainage basins which bisect El Camino Real at various locations (Kennedy/Jenks Consultants, 2011). These channels are manmade and do not support wetland or riparian vegetation. All other areas in the Specific Plan Area are completely developed or disturbed and no longer support natural communities. As a result, the project would not involve substantial adverse effects on any riparian habitat, sensitive natural communities, or State or federally protected wetlands. **No impact** would occur in this regard.

Wildlife movement is affected when physical constraints impede the ability of wildlife to search for food, water, shelter, and mates. Urban development has the potential to fragment open space or create obstacles that could hinder movement of species within established wildlife corridors. The Specific Plan Area does not function as a wildlife corridor, as it is completely surrounded by dense urban land cover that impairs wildlife movement. **No impact** would occur in this regard.

The Santa Clara Valley Habitat Plan was approved and adopted in 2013. The plan encompasses all of unincorporated Santa Clara County, the Santa Clara Valley Water District, and the Santa Clara Valley Transportation Authority, as well as the cities of Gilroy, Morgan Hill, and San Jose. However, Sunnyvale is not in the planning area for the Habitat Plan. Therefore, there would be **no impact** related to conflict with a habitat conservation plan or natural community conservation plan.

## 4.4 Mineral Resources

### Standards of Significance

Per Appendix G of the CEQA Guidelines, a mineral resources impact is considered significant if the project would result in any of the following:

- 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.
- 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.

### Impact Analysis

The Specific Plan does not propose improvements or changes to existing land use designations that would have the potential to result in the loss of availability of a known mineral resource or of a locally important mineral resource recovery site. Further, future buildout of the Specific Plan Area would occur within the City of Sunnyvale, which is an urbanized area that contains no known significant mineral resources or resource recovery sites. Therefore, there would be **no impact**.



### Cumulative Impacts

The Specific Plan Area does not contain any known mineral resources and the project would not result in the loss of any locally important mineral resources. Project impacts would be **less than cumulatively considerable**.

## 4.5 Geology and Soils

### Standards of Significance

Per Appendix G of the CEQA Guidelines, a geology and soils impact is considered significant if the project would result in any of the following:

- 1) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence or other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42.
  - iii) Seismic-related ground failure, including liquefaction.
  - iv) Landslides.
- 2) 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.

### Impact Analysis

The Alquist-Priolo Earthquake Fault Zoning Act (Act) (Public Resources Code 2621-2624, Division 2 Chapter 7.5) was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act requires the State Geologist to establish regulatory zones, known as "Earthquake Fault Zones," around the surface traces of active faults and to issue appropriate maps. Local agencies must regulate most development projects within these zones. Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed buildings would not be constructed across active faults. An evaluation and written report of a specific site must be prepared by a licensed geologist. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (typically 50-foot setbacks are required). The Specific Plan Area is not affected by a State-designated Alquist-Priolo Earthquake Fault Zone. Thus, project implementation would not directly or indirectly cause potential substantial adverse effects involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map. **No impact** would occur in this regard.



Liquefaction occurs when loose sand and silt that is saturated with water behaves like a liquid when shaken by an earthquake. The soil can lose its ability to support structures, flow down even very gentle slopes, and erupt to the ground surface to form sand boils. Many of these phenomena are accompanied by settlement of the ground surface, usually in uneven patterns, that can damage buildings, roads, and pipelines. These effects usually occur in soft, fine-grained, water-saturated alluvium, as generally found in the Santa Clara Valley. The Specific Plan Area is not designated as a liquefaction hazard area (Sunnyvale 2006; Cal OES 2015). **No impact** would occur in this regard.

The Specific Plan Area is not identified as being located within a landslide hazard zone and has been extensively developed with pavements, hardscapes, and structures (ABAG 2016). Therefore, project implementation would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. **No impact** would occur in this regard.

No development is proposed as part of the Specific Plan that could involve septic tanks or alternative wastewater disposal systems. Further, wastewater from in the City is carried by sanitary sewer lines to the Sunnyvale Water Pollution Control Plant, where it is treated before being discharged to local waterways that flow into the San Francisco Bay. All future development within the project area would be required to connect to existing sewer mainlines and service lines. Therefore, **no impact** would occur in this regard.

## 4.6 Land Use and Planning

### Standards of Significance

Per Appendix G of the CEQA Guidelines, impacts associated with land use and planning are considered significant if the project would:

- 1) Physically divide an established community.

### Impact Analysis

Given that the Specific Plan Area is largely built out in terms of available land development, the project would not physically divide any established communities. All future development in the Specific Plan Area would be evaluated at a project-specific level for consistency with the proposed land use plan to ensure the development is consistent with the Specific Plan and does not physically divide an established community. Additionally, resulting future development with implementation of the project is aimed at enhancing the sense of neighborhood and community by creating residential development that includes an improved and safer transportation corridor with amenities attractive to area residents. The Specific Plan would allow for future renovation of existing buildings as well as mixed-use, high-density development that promotes pedestrian- and bike-friendly infrastructure, and would not have the potential to physically divide the surrounding community of Sunnyvale. Instead, the creation of open space, community gathering places, and



high-density development would integrate local neighborhoods and the community of Sunnyvale. As such, there would be **no impact**.

## 4.7 Wildfire

### Standards of Significance

Per Appendix G of the CEQA Guidelines, impacts associated with wildfires are considered significant if the project would result in any of the following:

- 1) Substantially impair an adopted emergency response plan or emergency evacuation plan.
- 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.
- 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.
- 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.

### Impact Analysis

The Specific Plan Area is not affected by a State-designated Alquist-Priolo Earthquake Fault Zone.

The Specific Plan Area within the City of Mountain View runs along El Camino Real from Bernardo Avenue to the Lawrence Expressway and is bordered by the City of Cupertino to the west and the City of Santa Clara to the east. The Specific Plan Area forms a corridor through Sunnyvale that consists of varied land uses, including general retail, auto dealerships, auto-related services, hotels, restaurants, and high-density residential. The Specific Plan Area covers a highly developed urban area that is not adjacent to large open spaces susceptible to the risk of wildfire.

According to the Santa Clara County Fire Hazard Severity Zones Map (DOC 2014) Sunnyvale is not located within a State Responsibility Area (SRA) for wildfire. Therefore, the risk of wildfire is considered to be low due to the urbanized setting of the City. The Specific Plan Area lies approximately 4 miles from the nearest Fire Hazard Severity Zone, which is located in the foothills to the west of Interstate 280.

The Specific Plan Area is generally flat and does not support slopes or other topographical conditions that may exacerbate wildfire risks or expose occupants of the area to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. The Specific Plan Area is also not susceptible to the risks of downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Additionally, all electrical power lines



would be undergrounded over time with implementation of the Specific Plan, which therefore may contribute to a reduced fire risk relative to aboveground power lines.

Future development occurring with implementation of the Specific Plan would be subject to local policies and actions, in addition to other regulations and standards for new development, including appropriate standards for emergency access roads, emergency water supply, and fire preparedness, capacity, and response that would ensure that adequate fire protection services and emergency medical services are available to serve the City. Furthermore, as implementation of the Specific Plan would generate additional annual revenue in the City in the form of increased local property and sales taxes, the increased demand for fire protection and emergency medical services would be offset by funding increases for additional firefighters, administrative personnel, training, and equipment (see also Section 3.13, Public Services). No physical improvements are proposed that would impair an adopted emergency response plan or emergency evacuation plan or require the installation or maintenance of associated infrastructure that may exacerbate fire risk. Future development projects within the Specific Plan Area would be evaluated on a project-specific basis for any potential effects on emergency response and/or for any effects on infrastructure improvements relative to wildfire. Thus, the proposed project would result in **no impacts** related to wildfire.

#### Cumulative Impacts

The City is not located within an SRA, which means the risk of wildfire is low. For the reasons discussed above, the project would not substantially contribute to a cumulative impact relative to wildfire when considered in combination with other anticipated future development. Project impacts would be **less than cumulatively considerable**.

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## 5.0 Alternatives

### 5.1 Introduction

In accordance with CEQA Guidelines Section 15126.6, this section describes a range of reasonable alternatives to the project, or to the location of the project. The analysis focuses on alternatives capable of avoiding or substantially lessening the project's significant environmental effects, even if the alternative would impede, to some degree, the attainment of the proposed project objectives, or would be more costly. The range of required alternatives is governed by the "rule of reason" that requires the analysis to set forth only those alternatives necessary to permit a reasoned choice. The alternatives are limited to ones that would avoid or substantially lessen any of the project's significant effects. Of those alternatives, only the ones that the lead agency has determined could feasibly attain most of the basic project objectives are examined in detail.

#### 5.1.1 Project Objectives

As stated above, an EIR must only discuss in detail an alternative that is capable of feasibly attaining most of the basic objectives associated with the action, while at the same time avoiding or substantially lessening any of the significant effects associated with the proposed project. Thus, a summary of the goals and objectives is provided below:

- Increase opportunities for new mixed-use developments and encourage the development of unique, smaller-scale housing types such as studios and micro-units.
- Provide opportunities for a variety of housing options to serve residents at all income levels and various stages of life.
- Facilitate the efficient flow of traffic for all modes of travel and prioritize environmentally-efficient modes of transportation.
- Improve pedestrian amenities, bicycle facilities, transit, and landscaping to enhance multi-modal environments and promote safe, convenient access to all locations along the corridor and beyond.
- Promote high-quality and appropriately-scaled buildings that preserve quality of life for adjacent neighborhoods and contribute to an attractive, comfortable, and safe streetscape along the corridor.
- Support local and regional-serving commercial uses that highlight the corridor's history and support economic vitality.
- Support coexistence of auto-dealerships and other businesses with a regional draw with nearby small businesses and residences.



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## 5.0 Alternatives

- Provide a diverse range of shopping and dining options within walking distance of surrounding residences.
- Encourage a focus on sustainable options in building design, transportation, construction, site planning, energy, stormwater management, and greenhouse gas emissions reduction.

### 5.1.2 Summary of Significant Impacts

The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making. The range of potential alternatives to the proposed project shall also include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, General Plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (or the site is already owned by the proponent). Only locations that would avoid or substantially lessen any of the project's significant effects need be considered for inclusion. An alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative need not be considered.

Only those impacts found significant and unavoidable are relevant in making the final determination of whether an alternative is environmentally superior or inferior to the proposed project. As such, a description of significant impacts associated with the proposed project is provided below. This information is based on the analysis provided within Section 3.1 through 3.16 of this EIR.

- Air Quality: Individual and Cumulative Construction-Related Air Quality Emissions

Throughout the following analysis, the alternatives' impacts are analyzed for each environmental issue area, as examined in Section 3.1 through 3.16 of this EIR. In this manner, each alternative can be compared to the proposed project on an issue-by-issue basis. The end of this section provides an overview of the alternatives analyzed and a comparison of each alternative's impact in relation to the proposed project. This section also identifies alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process. Section 5.8, Comparison of Alternatives/Environmentally Superior Alternative, references the "environmentally superior" alternative, as required by the CEQA Guidelines.

## 5.2 Alternatives Considered but Rejected from Further Analysis

In accordance with CEQA Guidelines Section 15126.6(c), an EIR should identify any alternatives that were considered for analysis but rejected as infeasible and briefly explain the reasons for their rejection. According to the CEQA Guidelines, among the factors that may be used to eliminate alternatives from detailed consideration are the alternative's failures to meet most of the basic project objectives, the alternative's infeasibility, or the alternative's inability to avoid significant



environmental impacts. One alternative that has been considered and rejected as infeasible is the "Alternative Location" Alternative. As a land use planning project, the City has had the goal of revitalizing El Camino Real since adoption of the Precise Plan for El Camino Real in 1993. There are no other areas of the City that are available and optimal for the proposed project based on its unique variety of uses, including mixed-use, commercial uses, as well as a variety of housing types. In addition, selection of an alternative site would not achieve any of the objectives identified in Section 5.1.1, Project Objectives. Thus, the Alternative Site Alternative was not carried forward for additional analysis.

### 5.3 Alternatives Under Consideration

As described in Chapter 2.0, "Project Description," the Sunnyvale City Council initially convened in 2014 to update and clarify policies in the 2007 Precise Plan for El Camino Real. After kicking off the update of the Precise Plan in 2015, the City assembled a citizen's advisory committee to guide the process, and land use alternatives for the corridor were developed. In September 2016, the City began presenting a series of ongoing public workshops to report on recent project activities and support an open discussion on the City's Vision Statement, Vision Priorities, and Land Use Alternatives that would guide the project moving forward. In August 2017, the City Council identified a Preferred Land Use Alternative, and studies began to assess and refine the details of the proposed land use mix.

Based on the community planning process undertaken by the City, alternatives were identified for this analysis that would provide decision-makers with a reasonable range of alternatives with which to compare to the proposed project. The alternatives selected for evaluation in this analysis are:

- **Alternative 1- No Project Alternative.** Under this alternative, the Specific Plan would not be adopted. In the absence of the Specific Plan, the project area would continue to be governed by existing zoning and General Plan designations. Development in the project area would be expected to occur, consistent with the Land Use and Transportation Element (LUTE) that was adopted in 2017.
- **Alternative C- Commercial Focus Alternative.** Under this alternative, the Specific Plan would be adopted and the overall intensity of development would be similar to the proposed project, but the mix of uses would be modified to allow for more commercial uses and fewer residential uses than permitted under the proposed project.
- **Alternative M- Mixed-Use Focus.** Under this alternative, the Specific Plan would be adopted and the mix of uses would be modified so that there would be fewer commercial uses and more residential uses than Alternative C. When compared to the proposed project, Alternative M would have more commercial uses and fewer residential uses.

- **Alternative R- Residential Focus Alternative.** Under this alternative, the Specific Plan would be adopted and commercial use would remain the same as the proposed project, but there would be fewer residential uses.

**Table 5-1, Development Conditions Summary** shows the amount of existing development in the project area and the anticipated future conditions with the proposed project and the three alternatives under consideration.

**Table 5-1**  
**Development Conditions Summary**

	Commercial Area (Square Feet)		Residential Units	
	Total	Net Change from 2017 LUTE	Total	Net Change from 2017 LUTE
Existing Built	3,250,000	-	1,600	-
2017 LUTE	4,200,000	-	5,800	-
Alternative 1	4,200,000	0	5,800	0
Alternative C	4,400,000	200,000	5,000	-800
Alternative M	4,100,000	-100,000	6,100	300
Alternative R	3,980,000	-220,000	6,700	900
Proposed Project	3,980,000	-220,000	8,500	2,700

Source: City of Sunnyvale

## 5.4 Alternative 1—No Project Alternative

Alternative 1 is the No Project Alternative, which is required to be considered and analyzed pursuant to CEQA Guidelines Section 15126.6(e)(1). The purpose of describing and analyzing a No Project Alternative is to allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the project.

### 5.4.1 Description of Alternative

Under the No Project Alternative, the 2017 LUTE update to the Sunnyvale General Plan would remain in effect and would guide new development in the El Camino Real corridor. The 2017 LUTE includes a series of land use and transportation goals, policies, and actions that provide direction for how Sunnyvale would change and grow, and where the growth would take place for an approximate 20-year horizon, to 2035. The LUTE also provides a framework for the City to continue to provide transportation facilities to support planned land uses, with an increasing focus on multi-modal and active transportation. The El Camino Real corridor is identified as a Transformation Site in the LUTE.



With implementation of the LUTE, the El Camino Real corridor would support new and retain existing community and regional retail uses and accommodate residential uses in several areas along the corridor, including up to 4,200 additional housing units (over existing levels) consisting primarily of mixed-use commercial and residential projects and higher-density apartments. This growth would be consistent with the policies in the approved 2007 Precise Plan for El Camino Real.

As shown in **Table 5-1**, when comparing Alternative 1 (No Project Alternative) to the proposed project, Alternative 1 would result in 220,000 more square feet of commercial uses but 2,700 fewer residential than the proposed project.

#### 5.4.2 Environmental Analysis

The following analysis is based on the significant environmental impacts identified in Sections 3.1 through 3.16 of this EIR. Each subsection below presents a brief discussion of Alternative 1's potential impacts on the respective resource area as compared to the proposed project. The analysis is based on a qualitative assessment, and approximate data is presented, where available.

##### Aesthetics

As indicated in Section 3.1, Aesthetics, the proposed project would be consistent with applicable zoning and regulations related to scenic quality. Under the No Project Alternative, development within the Specific Plan Area would be guided by the 2017 LUTE rather than the Land Use and Development Standards and Urban Design Guidelines included in the Specific Plan, which have been crafted to promote high-quality and appropriately scaled buildings that preserve quality of life for adjacent neighborhoods and contribute to an attractive, comfortable, and safe streetscape along the corridor. As discussed in Impact 3.1.1, the Specific Plan's Land Use and Development Standards and Urban Design Guidelines would enhance the character and quality of the Specific Plan Area by creating a more pedestrian-oriented streetscape environment that would enhance, rather than degrade, the existing urban environment. Thus, the No Project Alternative would have a greater potential to result in impacts to scenic quality than the proposed project.

Concerning light and glare, the proposed project's short-term and long-term impacts to lighting would be reduced to less than significant levels following conformance with the lighting requirements included in the Specific Plan's Land Use and Development Standards and the City's Urban Design Guidelines. Further, in accordance with Sunnyvale Municipal Code (SMC) Chapter 19.80, any proposed use requiring a discretionary land use permit that includes new construction, changes to the exterior of a building or other site modification within the Specific Plan Area would be subject to the City's Design Review Process. Like the proposed project, development under the No Project Alternative would be subject to conformance with SMC Chapter 19.80 and the City's Design Review Process. Impacts related to light and glare would be similar in this regard.



### Air Quality

Under the No Project Alternative, the Specific Plan Area would be developed as currently permitted under the 2017 LUTE. Compared to the proposed project, the reduced development intensity allowed under the 2017 LUTE would proportionally reduce the project's short-term construction and long-term operational air quality emissions. As concluded in Section 3.2, Air Quality, implementation of the proposed project would result in significant unavoidable impacts related to short-term construction emissions. Based on the No Project Alternative's potential to reduce these impacts to less than significant levels, this alternative would be environmentally superior to the proposed project.

### Biological Resources

As concluded in Section 3.3, Biological Resources, no special-status plants were identified within the Specific Plan Area. However, American peregrine falcon and burrowing owl have a low potential to occur within the Specific Plan Area. Upon implementation of Mitigation Measure BIO-1, which would ensure a pre-construction clearance survey is conducted by a qualified biologist for nesting birds and burrowing owl, impacts to potential special-status wildlife species would be reduced to less than significant levels. As concluded in Impact 3.3.2, future development occurring within the Specific Plan Area with the potential to impact the four heritage trees at 871 East Fremont Avenue would have the potential to impact heritage trees. However, compliance with existing General Plan policies and SMC Sections 13.16 and 19.94 would reduce impacts to heritage trees to less than significant levels.

Given that development occurring as part of the No Project Alternative would involve the same project footprint as the Specific Plan, implementation of mitigation and existing General Plan policies and SMC requirements would ensure development of the Specific Plan Area pursuant to the 2017 LUTE involves less than significant impacts to biological resources. This alternative would be neither environmentally superior nor inferior to the proposed project in this regard.

### Cultural and Tribal Cultural Resources

As concluded in Section 3.4, Cultural and Tribal Cultural Resources, the proposed project's impacts to historical, archeological, and tribal cultural resources would be less than significant with implementation of Mitigation Measures CUL-1, CUL-2, and existing regulations and policies. Given that development occurring as part of the No Project Alternative would involve the same project footprint as the Specific Plan, implementation of mitigation and existing regulations and policies would ensure development of the Specific Plan Area pursuant to the 2017 LUTE involves less than significant impacts to historical, archeological, and tribal cultural resources. This alternative would be neither environmentally superior nor inferior to the proposed project in this regard.

### Energy

Compared to the proposed project, impacts from energy usage related to electricity and natural gas consumption would proportionally decrease given that the development intensity allowed under the 2017 LUTE would be less than proposed for the project. However, this reduction in



energy consumption would still be considered less than significant which is the same as the proposed project. As concluded in Section 3.5, Energy, the high density mixed-use nature of the project and its support of active modes of transportation (i.e. walking, biking, and public transit) would reduce transportation-related fuel consumption by reducing vehicle miles traveled (VMT). Since the No Project Alternative would not incorporate transportation-related fuel consumption reduction measures, this alternative would be environmentally inferior to the proposed project.

### Geology and Soils

As discussed in Section 3.6, Geology and Soils, geologic and seismic hazards associated with the proposed project would be reduced to less than significant levels following conformance with the established regulatory framework (i.e., California Building Code (CBC), SMC, National Pollutant Discharge Elimination System [NPDES] requirements). Conformance with General Plan Action LT-1.10f would ensure project impacts related to paleontological resources are reduced to less than significant levels. As such, the proposed project would not result in cumulatively considerable impacts related to geology, soils, and paleontological resources.

Development of the site pursuant to existing 2017 LUTE would similarly introduce structures and people to existing geologic and seismic hazards and would require conformance with the established regulatory framework. Given that development occurring as part of the No Project Alternative would involve the same project footprint as the Specific Plan, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Greenhouse Gas Emissions

Compared to the proposed project, the reduced development intensity allowed under the 2017 LUTE would proportionally reduce the project's greenhouse gas (GHG) emissions. However, this reduction in GHG emissions would still be considered less than significant which is the same as the proposed project. Further, this alternative would not achieve several plays included within the City's Climate Action Playbook (i.e., Play 3.1 [Increase opportunities for and encourage development of mixed-use sites to reduce vehicle miles per person] and Play 3.2 [Increase transportation options and support shared mobility]). In comparison, the proposed project proposes a mixed-use corridor consisting of commercial and high density residential uses in a PDA. Therefore, the project would facilitate lower VMT given its proximity to transit and other destinations. As such, this alternative would be environmentally inferior to the proposed project.

### Hazards and Hazardous Materials

Development of the site pursuant to existing 2017 LUTE would similarly allow for development that could involve construction-related impacts and operational impacts (the use, transport, and storage of hazardous materials) related to hazards and hazardous materials. As with the proposed project, development and redevelopment occurring under the No Project Alternative would be subject to compliance with all applicable federal and State laws and regulations related to the routine use, transport, and disposal of hazardous materials, or the accidental release of hazardous materials. In addition, future development projects occurring under the No Project Alternative



that are located within the Moffett Federal Airfield Airport Influence Area (AIA) would require compliance with Mitigation Measures HAZ-1 and HAZ-2 to ensure the development (including construction equipment) would not result in an aviation hazard. Given that development occurring as part of the No Project Alternative would involve the same project footprint as the Specific Plan and would involve similar uses, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Hydrology and Water Quality

Like the proposed project, the No Project Alternative does not propose site-specific development and would not significantly impact drainage courses and hydrologic flows since the Specific Plan Area is almost entirely developed with hardscapes. Future development projects would be required to mitigate specific hydrology and water quality impacts on a project-by-project basis pursuant to all applicable federal, State, and local stormwater regulations and requirements under both the No Project Alternative and proposed project. Impacts associated with future development in Specific Plan Area would be addressed at a site-specific level to ensure impacts to hydrology and water quality would be less than significant. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Land Use and Planning

As identified in Section 3.10, Land Use and Planning, the project would not conflict with any applicable land use plans, policies, or regulations. As with the proposed project, development occurring pursuant to the 2017 LUTE would be analyzed to ensure consistency with the goals, objectives, and policies of the General Plan, SMC, and Plan Bay Area 2040. However, development pursuant to the No Project Alternative would fail to achieve several General Plan policies. For example, the No Project Alternative would not uphold the City's policy to integrate land use planning in Sunnyvale and the regional transportation system (General Plan Policy LT-6) nor would the No Project Alternative reduce regional vehicle miles traveled by supporting active modes of transportation including walking, biking, and public transit (General Plan Policy LT-7). The No Project Alternative would not promote modes of travel and actions that provide safe access to City streets and reduce single-occupant vehicle trips and trip lengths locally and regionally (General Plan Policy LT-24), nor would this alternative encourage nodes of interest and activity, public open spaces, well-planned development, mixed-use projects, signature commercial uses, and buildings and other desirable uses, locations, and physical attractions (General Plan Policy LT-50). The No Project Alternative also would not achieve relevant Plan Bay Area 2040 goals and targets as well as the proposed project. For example, the No Project Alternative would allow for an increase of 2,700 dwelling units (or 8,500 dwelling units total) over that currently allowed with future buildout of the General Plan, thus better fulfilling Plan Bay Area 2040 Adequate Housing, Target 2 (House the region's population). The No Project Alternative would also fail to achieve Plan Bay Area 2040 Transportation System Effectiveness, Target 11 (Increase non-auto mode share), since the improved streetscapes, and safer, more enjoyable environments for walking,



bicycling, and other modes of transportation proposed under the project would not be developed. As such, this alternative would be environmentally inferior to the proposed project.

### Noise

As discussed, the No Project Alternative would allow development in accordance with the 2017 LUTE. Compared to the proposed project, development in accordance with the No Project Alternative would be expected to result in similar construction and operational impacts on noise based on the similar land use types which would be permitted. Thus, although the reduced development intensity allowed under the No Project Alternative would proportionally reduce the project's impacts related to noise, this reduction in would still be considered less than significant with mitigation which is the same as the proposed project. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Population and Housing

As concluded in Section 3.12, Population and Housing, project implementation would potentially allow for future population growth of an estimated 6,400 people and 2,700 new housing units over that currently allowed with buildout of the General Plan. Using the City's current (2020) estimated average of 2.61 persons per household, the increase of 6,400 people would result in the need for 2,452 housing units, which would be accommodated within the number of new housing units allowed by the project as proposed. Additionally, such potential growth would occur in an area already served by infrastructure and public services and would be considered "smart growth," rather than placing new housing in rural areas that are far removed from existing services and jobs. Thus, future development associated with the proposed project is not anticipated to induce substantial unplanned population growth, either directly or indirectly.

Since Alternative 1 would result in fewer residential units and people in the planning area than the proposed project, this alternative would slightly reduce potential impacts to population and housing. However, this reduction in severity would still be considered less than significant which is the same as the proposed project. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Public Services

Compared to the proposed project, Alternative 1 would result in 220,000 SF of additional commercial development and 2,700 fewer residential units. Residential uses result in a greater demand for certain public services than commercial uses, particularly for schools and parks. Since Alternative 1 would result in fewer residents in the project area, implementation of this alternative would reduce potential impacts when compared to the proposed project. Demand for police and fire protection services would likely be similar to that of the project. However, this reduction in severity would still be considered less than significant which is the same as the proposed project. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.



### Recreation

As described above for public services, Alternative 1 would result in fewer residents than the proposed project. With fewer residents, Alternative 1 would create less new demand for additional open space and recreation areas. Therefore, this alternative would have a less severe impact on parks and recreational services than the proposed project. However, this reduction in severity would still be considered less than significant which is the same as the proposed project. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Transportation

As discussed in Section 3.15, Transportation, the project would not result in impacts relative to vehicle miles (VMT); existing or planned transit/bicycle/pedestrian facilities or conflicts with programs, plans, ordinances, or policies addressing transit/bicycle/pedestrian facilities; increased hazards due to geometric design; or emergency access. Like the proposed project, development occurring under the No Project Alternative would be subject to conformance with Mitigation Measure TRA-1, which requires the project to prepare a construction management plan for approval by the City of Sunnyvale that identifies the duration of construction, number of trucks, truck routing, number of employees, truck idling, and lane closures, would reduce project-related construction impacts to a less than significant level.

As elaborated in Section 3.15, the compact, higher density, mixed-use development proposed under the project would reduce VMT given its proximate location to transit and other destinations. In contrast, the No Project Alternative would be expected to result in greater VMT than the proposed project, since development projects would not be required to implement the enhanced transit, pedestrian, bicycle, and automobile circulation improvements identified by the Specific Plan. As such, this alternative would be environmentally inferior to the proposed project.

### Utilities and Service Systems

Since the proposed project's development potential would allow for a future population growth of an estimated 6,400 people and 2,700 new housing units over that currently allowed with buildout of the General Plan, buildout of the Specific Plan Area based on under existing 2017 LUTE would proportionally reduce anticipated operational impacts on utilities. As described in Section 3.16, Utilities and Service Systems, the proposed project would involve less than significant impacts to utilities with implementation of existing federal, State, and local laws, ordinances, and regulations. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

## 5.5 Alternative C—Commercial Focus Alternative

### *5.5.1 Description of Alternative*

Alternative C is the Commercial Focus Alternative, which would result in more commercial use and less residential use than the proposed project. As shown in **Table 5-1**, Alternative C would result in 4,400,000 square feet of commercial use, which represents an increase of 420,000 square feet



over the proposed project (3,980,000 square feet), but 3,500 fewer residential units (5,000 instead of 8,500).

### 5.5.2 Environmental Analysis

The following analysis is based on the significant environmental impacts identified in Sections 3.1 through 3.16 of this EIR. Each subsection below presents a brief discussion of Alternative C's potential impacts on the respective resource area as compared to the proposed project. The analysis is based on a qualitative assessment, and approximate data is presented, where available.

#### Aesthetics

As indicated in Section 3.1, the proposed project would be consistent with applicable zoning and regulations related to scenic quality. Like the proposed project, development under the Commercial Focus Alternative would still be guided by the Land Use and Development Standards and Urban Design Guidelines included in the Specific Plan, which have been crafted to promote high-quality and appropriately scaled buildings that preserve quality of life for adjacent neighborhoods and contribute to an attractive, comfortable, and safe streetscape along the corridor. As discussed in Impact 3.1.1, the Specific Plan's Land Use and Development Standards and Urban Design Guidelines would enhance the character and quality of the Specific Plan Area by creating a more pedestrian-oriented streetscape environment that would enhance, rather than degrade, the existing urban environment. Thus, the Commercial Focus Alternative would have similar less than significant impacts to scenic quality than the proposed project.

Concerning light and glare, the Commercial Focus Alternative's short-term and long-term impacts to lighting would be reduced to less than significant levels following conformance with lighting requirements identified in the Specific Plan's Land Use and Development Standards and the City's Urban Design Guidelines. Further, in accordance with SMC Chapter 19.80, any proposed use requiring a discretionary land use permit that includes new construction, changes to the exterior of a building or other site modification within the Specific Plan Area would be subject to the City's Design Review Process. Like the proposed project, development under the Commercial Focus Alternative would be subject to conformance with SMC Chapter 19.80 and the City's Design Review Process. Impacts related to light and glare would be similar in this regard.

As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

#### Air Quality

Compared to the proposed project, the Commercial Focus Alternative would result in additional commercial development and fewer residential units. The compact, higher density, mixed-use development proposed under the project would reduce VMT given its proximate location to transit and other destinations, upholding several transportation control measures included in the 2017 Clean Air Plan. In contrast, the Commercial Focus Alternative would be expected to result in greater VMT than the proposed project, based on the overall reduction of residential uses

proposed under this alternative. As such, this alternative would have the potential of conflicting with the 2017 Clean Air Plan. Compared to the proposed project, this alternative would likely result in similar short-term construction and long-term operational air quality emissions and is not expected to reduce the project's significant unavoidable impacts related to short-term construction emissions. Based on this alternative's potential to conflict with the 2017 Clean Air Plan, this alternative would be environmentally inferior to the proposed project.

### Biological Resources

As concluded in Section 3.3, no special-status plants were identified within the Specific Plan Area. However, American peregrine falcon and burrowing owl have a low potential to occur within the Specific Plan Area. Upon implementation of Mitigation Measure BIO-1, which would ensure a pre-construction clearance survey is conducted by a qualified biologist for nesting birds and burrowing owl, impacts to potential special-status wildlife species would be reduced to less than significant levels. As concluded in Impact 3.3.2, future development occurring within the Specific Plan Area with the potential to impact the four heritage trees at 871 East Fremont Avenue would have the potential to impact heritage trees. However, compliance with existing General Plan policies and SMC Sections 13.16 and 19.94 would reduce impacts to heritage trees to less than significant levels.

Given that development occurring as part of the Commercial Focus Alternative would involve the same project footprint as the Specific Plan, implementation of mitigation and existing General Plan policies and SMC requirements would ensure development of the Specific Plan Area pursuant to the Commercial Focus Alternative involves less than significant impacts to biological resources. This alternative would be neither environmentally superior nor inferior to the proposed project in this regard.

### Cultural and Tribal Cultural Resources

As concluded in Section 3.4, the proposed project's impacts to historical, archeological, and tribal cultural resources would be less than significant with implementation of Mitigation Measures CUL-1, CUL-2, and existing regulations and policies. Given that development occurring as part of the Commercial Focus Alternative would involve the same project footprint as the Specific Plan, implementation of mitigation and existing regulations and policies would ensure development of the Specific Plan Area pursuant to the Commercial Focus Alternative involves less than significant impacts to historical, archeological, and tribal cultural resources. This alternative would be neither environmentally superior nor inferior to the proposed project in this regard.

### Energy

As concluded in Section 3.5, the high density mixed-use nature of the project and its support of active modes of transportation (i.e., walking, biking, and public transit) would reduce transportation-related fuel consumption by reducing VMT. Compared to the proposed project, the Commercial Focus Alternative would result in additional commercial development and less residential units, thereby reducing the jobs/housing balance and increasing VMT. Since the



Commercial Focus Alternative would likely result in greater transportation-related fuel consumption, this alternative would be environmentally inferior to the proposed project.

### Geology and Soils

As discussed in Section 3.6, geologic and seismic hazards associated with the proposed project would be reduced to less than significant levels following conformance with the established regulatory framework (i.e., CBC, SMC, and NPDES requirements). Conformance with General Plan Action LT-1.10f would ensure project impacts related to paleontological resources are reduced to less than significant levels. As such, the proposed project would not result in cumulatively considerable impacts related to geology, soils, and paleontological resources.

Development of the site pursuant to the Commercial Focus Alternative would similarly introduce structures and people to existing geologic and seismic hazards and would require conformance with the established regulatory framework. Given that development occurring as part of the Commercial Focus Alternative would involve the same project footprint as the Specific Plan, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Greenhouse Gas Emissions

Compared to the proposed project, the Commercial Focus Alternative would be expected to result in greater VMT than the proposed project, based on the overall reduction of residential uses proposed under this alternative. As a result, it would be assumed that the Commercial Focus Alternative would result in greater mobile source emissions than the proposed project. Further, this alternative would not achieve Climate Action Playbook Play 3.1 (Increase opportunities for and encourage development of mixed-use sites to reduce vehicle miles per person) as well as the proposed project. In comparison, the proposed project proposes a mixed-use corridor consisting of commercial and high density residential uses in a PDA. Therefore, the project would facilitate lower VMT given its proximity to transit and other destinations. As such, this alternative would be environmentally inferior to the proposed project.

### Hazards and Hazardous Materials

Development of the site pursuant to the Commercial Focus Alternative would similarly allow for development that could involve construction-related impacts and operational impacts (the use, transport, and storage of hazardous materials) related to hazards and hazardous materials. As with the proposed project, development and redevelopment occurring under the Commercial Focus Alternative would be subject to compliance with all applicable federal and State laws and regulations related to the routine use, transport, and disposal of hazardous materials, or the accidental release of hazardous materials. In addition, future development projects occurring under the Commercial Focus Alternative that are located within the Moffett Federal AIA would require compliance with Mitigation Measures HAZ-1 and HAZ-2 to ensure the development (including construction equipment) would not result in an aviation hazard. Given that development occurring as part of the Commercial Focus Alternative would involve the same

project footprint as the Specific Plan and would involve similar uses, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Hydrology and Water Quality

Like the proposed project, the Commercial Focus Alternative does not propose site-specific development and would not significantly impact drainage courses and hydrologic flows since the Specific Plan Area is almost entirely developed with hardscapes. Future development projects would be required to mitigate specific hydrology and water quality impacts on a project-by-project basis pursuant to all applicable federal, State, and local stormwater regulations and requirements under both the Commercial Focus Alternative and proposed project. Impacts associated with future development in Specific Plan Area would be addressed at a site-specific level to ensure impacts to hydrology and water quality would be less than significant. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Land Use and Planning

As identified in Section 3.10, the project would not conflict with any applicable land use plans, policies, or regulations. As with the proposed project, development facilitated by the Commercial Focus Alternative would be analyzed to ensure consistency with the goals, objectives, and policies of the General Plan, SMC, and Plan Bay Area 2040. However, development pursuant to the Commercial Focus Alternative would not achieve the City's General Plan Policy LT-63's intent to allow higher-residential density zoning districts in El Camino Real nodes to the extent of the proposed project. The Commercial Focus Alternative also would not achieve Plan Bay Area 2040 Adequate Housing, Target 2 (House the region's population) to the extent of the proposed project, allowing for 3,500 fewer residential units than the proposed project. As such, this alternative would be environmentally inferior to the proposed project.

### Noise

Compared to the proposed project, development in accordance with the Commercial Focus Alternative would be expected to result in similar construction and operational impacts on noise based on the similar land use types which would be permitted. Thus, impacts would still be considered less than significant with mitigation, which is the same as the proposed project. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Population and Housing

As concluded in Section 3.12, project implementation would potentially allow for future population growth of an estimated 6,400 people and 2,700 new housing units over that currently allowed with buildout of the General Plan. Using the City's current (2020) estimated average of 2.61 persons per household, the increase of 6,400 people would result in the need for 2,452 housing units, which would be accommodated within the number of new housing units allowed by the project as proposed. Additionally, such potential growth would occur in an area already served by infrastructure and public services and would be considered "smart growth," rather than



placing new housing in rural areas that are far removed from existing services and jobs. Thus, future development associated with the proposed project is not anticipated to induce substantial unplanned population growth, either directly or indirectly.

Since the Commercial Focus Alternative would result in fewer residential units and people in the planning area, this alternative would slightly reduce potential impacts to population and housing. However, this reduction in severity would still be considered less than significant, which is the same as the proposed project. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Public Services

Compared to the proposed project, the Commercial Focus Alternative would result in additional commercial development and fewer residential units. Residential uses result in a greater demand for certain public services than commercial uses, particularly for schools and parks. Since the Commercial Focus Alternative would result in fewer residents in the project area, implementation of this alternative would reduce potential impacts when compared to the proposed project. Demand for police and fire protection services would likely be similar to that of the project. However, this reduction in severity would still be considered less than significant which is the same as the proposed project. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Recreation

As described above for public services, the Commercial Focus Alternative would result in fewer residents than the proposed project. With fewer residents, the Commercial Focus Alternative would create less new demand for additional open space and recreation areas. Therefore, this alternative would have a less severe impact on parks and recreational services than the proposed project. However, this reduction in severity would still be considered less than significant which is the same as the proposed project. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Transportation

As discussed in Section 3.15, the project would not result in impacts relative to VMT; existing or planned transit/bicycle/pedestrian facilities or conflicts with programs, plans, ordinances, or policies addressing transit/bicycle/pedestrian facilities; increased hazards due to geometric design; or emergency access. Like the proposed project, development occurring under the Commercial Focus Alternative would be subject to conformance with Mitigation Measure TRA-1, which requires the project to prepare a construction management plan for approval by the City of Sunnyvale that identifies the duration of construction, number of trucks, truck routing, number of employees, truck idling, and lane closures, would reduce project-related construction impacts to a less than significant level.



As elaborated in Section 3.15, the compact, higher density mixed-use development proposed under the project would reduce VMT given its proximate location to transit and other destinations. In contrast, the Commercial Focus Alternative would be expected to result in greater VMT than the proposed project, based on the overall reduction of residential uses proposed under this alternative. As such, this alternative would be environmentally inferior to the proposed project.

### Utilities and Service Systems

Compared to the proposed project, the Commercial Focus Alternative would result in additional commercial development and fewer residential units. As described in Section 3.16, the proposed project would involve less than significant impacts to utilities with implementation of existing federal, State, and local laws, ordinances, and regulations. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

## 5.6 Alternative M – Mixed-Use Alternative

### *5.6.1 Description of Alternative*

Alternative M is the Mixed-Use Alternative, which would result in less commercial use and more residential use than Alternative C, but more commercial use and less residential uses than the proposed project. As shown in **Table 5-1**, Alternative M would result in 120,000 SF of additional commercial use compared to the proposed project (4,100,000 instead of 3,980,000 SF), but 2,400 fewer residential units (6,100 instead of 8,500).

### *5.6.2 Environmental Analysis*

The following analysis is based on the significant environmental impacts identified in Sections 3.1 through 3.16 of this EIR. Each subsection below presents a brief discussion of Alternative M's potential impacts on the respective resource area as compared to the proposed project. The analysis is based on a qualitative assessment, and approximate data is presented, where available.

### Aesthetics

As indicated in Section 3.1, the proposed project would be consistent with applicable zoning and regulations related to scenic quality. Like the proposed project, development under the Mixed-Use Alternative would still be guided by the Land Use and Development Standards and Urban Design Guidelines included in the Specific Plan, which have been crafted to promote high-quality and appropriately scaled buildings that preserve quality of life for adjacent neighborhoods and contribute to an attractive, comfortable, and safe streetscape along the corridor. As discussed in Impact 3.1.1, the Specific Plan's Land Use and Development Standards and Urban Design Guidelines would enhance the character and quality of the Specific Plan Area by creating a more pedestrian-oriented streetscape environment that would enhance, rather than degrade, the existing urban environment. Thus, the Mixed-Use Alternative would have similar less than significant impacts to scenic quality than the proposed project.



Concerning light and glare, the Mixed-Use Alternative's short-term and long-term impacts to lighting would be reduced to less than significant levels following with lighting requirements identified in the Specific Plan's Land Use and Development Standards and the City's Urban Design Guidelines. Further, in accordance with SMC Chapter 19.80, any proposed use requiring a discretionary land use permit that includes new construction, changes to the exterior of a building or other site modification within the Specific Plan Area would be subject to the City's Design Review Process. Like the proposed project, development under the Mixed-Use Alternative would be subject to conformance with SMC Chapter 19.80 and the City's Design Review Process. Impacts related to light and glare would be similar in this regard.

As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Air Quality

Compared to the proposed project, the Mixed-Use Alternative would result in 120,000 SF of additional commercial use compared to the proposed project (4,100,000 instead of 3,980,000 SF), but 2,400 fewer residential units (6,100 instead of 8,500). The Mixed-Use Alternative would be expected to result in greater VMT than the proposed project, based on the overall reduction of residential uses proposed under this alternative. As such, this alternative would have the potential of conflicting with the 2017 Clean Air Plan. Compared to the proposed project, this alternative would likely result in similar short-term construction and long-term operational air quality emissions and is not expected to reduce the project's significant unavoidable impacts related to short-term construction emissions. Based on this alternative's potential to conflict with the 2017 Clean Air Plan, this alternative would be environmentally inferior to the proposed project.

### Biological Resources

As concluded in Section 3.3, no special-status plants were identified within the Specific Plan Area. However, American peregrine falcon and burrowing owl have a low potential to occur within the Specific Plan Area. Upon implementation of Mitigation Measure BIO-1, which would ensure a pre-construction clearance survey is conducted by a qualified biologist for nesting birds and burrowing owl, impacts to potential special-status wildlife species would be reduced to less than significant levels. As concluded in Impact 3.3.2, future development occurring within the Specific Plan Area with the potential to impact the four heritage trees at 871 East Fremont Avenue would have the potential to impact heritage trees. However, compliance with existing General Plan policies and SMC Sections 13.16 and 19.94 would reduce impacts to heritage trees to less than significant levels.

Given that development occurring as part of the Mixed-Use Alternative would involve the same project footprint as the Specific Plan, implementation of mitigation and existing General Plan policies and SMC requirements would ensure development of the Specific Plan Area pursuant to the Mixed-Use Alternative involves less than significant impacts to biological resources. This

alternative would be neither environmentally superior nor inferior to the proposed project in this regard.

### Cultural and Tribal Cultural Resources

As concluded in Section 3.4, the proposed project's impacts to historical, archeological, and tribal cultural resources would be less than significant with implementation of Mitigation Measures CUL-1, CUL-2, and existing regulations and policies. Given that development occurring as part of the Mixed-Use Alternative would involve the same project footprint as the Specific Plan, implementation of mitigation and existing regulations and policies would ensure development of the Specific Plan Area pursuant to the Mixed-Use Alternative involves less than significant impacts to historical, archeological, and tribal cultural resources. This alternative would be neither environmentally superior nor inferior to the proposed project in this regard.

### Energy

As concluded in Section 3.5, the high density mixed-use nature of the project and its support of active modes of transportation (i.e. walking, biking, and public transit) would reduce transportation-related fuel consumption by reducing VMT. Compared to the proposed project, the Mixed-Use Alternative would result in 120,000 SF of additional commercial use compared to the proposed project (4,100,000 instead of 3,980,000 SF), but 2,400 fewer residential units (6,100 instead of 8,500), thereby reducing the jobs/housing balance and increasing VMT. Since the Mixed-Use Alternative would likely result in greater transportation-related fuel consumption, this alternative would be environmentally inferior to the proposed project.

### Geology and Soils

As discussed in Section 3.6, geologic and seismic hazards associated with the proposed project would be reduced to less than significant levels following conformance with the established regulatory framework (i.e., CBC, SMC, and NPDES requirements). Conformance with General Plan Action LT-1.10f would ensure project impacts related to paleontological resources are reduced to less than significant levels. As such, the proposed project would not result in cumulatively considerable impacts related to geology, soils, and paleontological resources.

Development of the site pursuant to the Mixed-Use Alternative would similarly introduce structures and people to existing geologic and seismic hazards and would require conformance with the established regulatory framework. Given that development occurring as part of the Mixed-Use Alternative would involve the same project footprint as the Specific Plan, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Greenhouse Gas Emissions

Compared to the proposed project, the Mixed-Use Alternative would be expected to result in greater VMT than the proposed project, based on the overall increase in commercial uses and reduction of residential uses proposed under this alternative. As a result, it would be assumed that the Mixed-Use Alternative would result in greater mobile source emissions than the proposed



project. Further, this alternative would not achieve Climate Action Playbook Play 3.1 (Increase opportunities for and encourage development of mixed-use sites to reduce vehicle miles per person) as well as the proposed project. In comparison, the proposed project proposes a mixed-use corridor consisting of commercial and high density residential uses in a PDA. Therefore, the project would facilitate lower VMT given its proximity to transit and other destinations. As such, this alternative would be environmentally inferior to the proposed project.

### Hazards and Hazardous Materials

Development of the site pursuant to the Mixed-Use Alternative would similarly allow for development that could involve construction-related impacts and operational impacts (the use, transport, and storage of hazardous materials) related to hazards and hazardous materials. As with the proposed project, development and redevelopment occurring under the Mixed-Use Alternative would be subject to compliance with all applicable federal and State laws and regulations related to the routine use, transport, and disposal of hazardous materials, or the accidental release of hazardous materials. In addition, future development projects occurring under the Mixed-Use Alternative that are located within the Moffett Federal AIA would require compliance with Mitigation Measures HAZ-1 and HAZ-2 to ensure the development (including construction equipment) would not result in an aviation hazard. Given that development occurring as part of the Mixed-Use Alternative would involve the same project footprint as the Specific Plan and would involve similar uses, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Hydrology and Water Quality

Like the proposed project, the Mixed-Use Alternative does not propose site-specific development and would not significantly impact drainage courses and hydrologic flows since the Specific Plan Area is almost entirely developed with hardscapes. Future development projects would be required to mitigate specific hydrology and water quality impacts on a project-by-project basis pursuant to all applicable federal, State, and local stormwater regulations and requirements under both the Mixed-Use Alternative and proposed project. Impacts associated with future development in Specific Plan Area would be addressed at a site-specific level to ensure impacts to hydrology and water quality would be less than significant. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Land Use and Planning

As identified in Section 3.10, the project would not conflict with any applicable land use plans, policies, or regulations. As with the proposed project, development facilitated by the Mixed-Use Alternative would be analyzed to ensure consistency with the goals, objectives, and policies of the General Plan, SMC, and Plan Bay Area 2040. As the Mixed-Use Alternative would result in more commercial use and fewer residential uses than the proposed project, development pursuant to the Mixed-Use Alternative would not achieve the City's General Plan Policy LT-63's intent to allow higher-residential density zoning districts in El Camino Real nodes to the extent of the proposed

project. The Mixed-Use Alternative also would not achieve Plan Bay Area 2040 Adequate Housing, Target 2 (House the region's population) to the extent of the proposed project, allowing for 3,500 fewer residential units than the proposed project. As such, this alternative would be environmentally inferior to the proposed project.

### Noise

Compared to the proposed project, development in accordance with the Mixed-Use Alternative would be expected to result in similar construction and operational impacts on noise based on the similar land use types which would be permitted. Thus, impacts would still be considered less than significant with mitigation which is the same as the proposed project. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Population and Housing

As concluded in Section 3.12, project implementation would potentially allow for future population growth of an estimated 6,400 people and 2,700 new housing units over that currently allowed with buildout of the General Plan. Using the City's current (2020) estimated average of 2.61 persons per household, the increase of 6,400 people would result in the need for 2,452 housing units, which would be accommodated within the number of new housing units allowed by the project as proposed. Additionally, such potential growth would occur in an area already served by infrastructure and public services and would be considered "smart growth," rather than placing new housing in rural areas that are far removed from existing services and jobs. Thus, future development associated with the proposed project is not anticipated to induce substantial unplanned population growth, either directly or indirectly.

Since the Mixed-Use Alternative would result in fewer residential units and people in the planning area, this alternative would slightly reduce potential impacts to population and housing. However, this reduction in severity would still be considered less than significant which is the same as the proposed project. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Public Services

Compared to the proposed project, the Mixed-Use Alternative would result in 120,000 SF of additional commercial use compared to the proposed project (4,100,000 instead of 3,980,000 SF), but 2,400 fewer residential units (6,100 instead of 8,500). Residential uses result in a greater demand for certain public services than commercial uses, particularly for schools and parks. Since the Mixed-Use Alternative would result in fewer residents in the project area, implementation of this alternative would reduce potential impacts when compared to the proposed project. Demand for police and fire protection services would likely be similar to that of the project. However, this reduction in severity would still be considered less than significant which is the same as the proposed project. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.



### Recreation

As described above for public services, the Mixed-Use Alternative would result in fewer residents than the proposed project. With fewer residents, the Mixed-Use Alternative would create less new demand for additional open space and recreation areas. Therefore, this alternative would have a less severe impact on parks and recreational services than the proposed project. However, this reduction in severity would still be considered less than significant which is the same as the proposed project. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Transportation

As discussed in Section 3.15, the project would not result in impacts relative to VMT; existing or planned transit/bicycle/pedestrian facilities or conflicts with programs, plans, ordinances, or policies addressing transit/bicycle/pedestrian facilities; increased hazards due to geometric design; or emergency access. Like the proposed project, development occurring under the Mixed-Use Alternative would be subject to conformance with Mitigation Measure TRA-1, which requires the project to prepare a construction management plan for approval by the City of Sunnyvale that identifies the duration of construction, number of trucks, truck routing, number of employees, truck idling, and lane closures, would reduce project-related construction impacts to a less than significant level.

As elaborated in Section 3.15, the compact, higher density mixed-use development proposed under the project would reduce VMT given its proximate location to transit and other destinations. In contrast, the Mixed-Use Alternative would be expected to result in greater VMT than the proposed project, based on the overall reduction of residential uses proposed under this alternative. As such, this alternative would be environmentally inferior to the proposed project.

### Utilities and Service Systems

Compared to the proposed project, the Mixed-Use Alternative would result in additional commercial development and fewer residential units. As described in Section 3.16, the proposed project would involve less than significant impacts to utilities with implementation of existing federal, State, and local laws, ordinances, and regulations. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

## 5.7 Alternative R - Residential Focus

### *5.7.1 Description of Alternative*

Alternative R is the Residential Focus Alternative, which would result in the same amount of commercial use as the proposed project (3,980,000 SF), but fewer residential units (6,700 instead of 8,500). As shown in **Table 5-1**, Alternative R would result in 1,800 fewer residential units than the proposed project.



### 5.7.2 Environmental Analysis

The following analysis is based on the significant environmental impacts identified in Sections 3.1 through 3.16 of this EIR. Each subsection below presents a brief discussion of Alternative R's potential impacts on the respective resource area as compared to the proposed project. The analysis is based on a qualitative assessment, and approximate data is presented, where available.

#### Aesthetics

As indicated in Section 3.1, the proposed project would be consistent with applicable zoning and regulations related to scenic quality. Like the proposed project, development under the Residential Focus Alternative would still be guided by the Land Use and Development Standards and Urban Design Guidelines included in the Specific Plan, which have been crafted to promote high-quality and appropriately scaled buildings that preserve quality of life for adjacent neighborhoods and contribute to an attractive, comfortable, and safe streetscape along the corridor. As discussed in Impact 3.1.1, the Specific Plan's Land Use and Development Standards and Urban Design Guidelines would enhance the character and quality of the Specific Plan Area by creating a more pedestrian-oriented streetscape environment that would enhance, rather than degrade, the existing urban environment. Thus, the Residential Focus Alternative would have similar less than significant impacts to scenic quality than the proposed project.

Concerning light and glare, the Residential Focus Alternative's short-term and long-term impacts to lighting would be reduced to less than significant levels following conformance with lighting requirements identified in the Specific Plan's Land Use and Development Standards and the City's Urban Design Guidelines. Further, in accordance with SMC Chapter 19.80, any proposed use requiring a discretionary land use permit that includes new construction, changes to the exterior of a building or other site modification within the Specific Plan Area would be subject to the City's Design Review Process. Like the proposed project, development under the Residential Focus Alternative would be subject to conformance with SMC Chapter 19.80 and the City's Design Review Process. Impacts related to light and glare would be similar in this regard.

As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

#### Air Quality

Compared to the proposed project, the Residential Focus Alternative would result in additional residential units and less commercial development. The compact, higher density mixed-use development proposed under the project would reduce VMT given its proximate location to transit and other destinations, upholding several transportation control measures included in the 2017 Clean Air Plan. In contrast, the Residential Focus Alternative would be expected to result in greater VMT than the proposed project, based on the overall reduction of commercial uses proposed under this alternative. As such, this alternative would have the potential of conflicting with the 2017 Clean Air Plan. Compared to the proposed project, this alternative would likely result in similar short-term construction and long-term operational air quality emissions and is not



expected to reduce the project's significant unavoidable impacts related to short-term construction emissions. Based on this alternative's potential to conflict with the 2017 Clean Air Plan, this alternative would be environmentally inferior to the proposed project.

### Biological Resources

As concluded in Section 3.3, no special-status plants were identified within the Specific Plan Area. However, American peregrine falcon and burrowing owl have a low potential to occur within the Specific Plan Area. Upon implementation of Mitigation Measure BIO-1, which would ensure a pre-construction clearance survey is conducted by a qualified biologist for nesting birds and burrowing owl, impacts to potential special-status wildlife species would be reduced to less than significant levels. As concluded in Impact 3.3.2, future development occurring within the Specific Plan Area with the potential to impact the four heritage trees at 871 East Fremont Avenue would have the potential to impact heritage trees. However, compliance with existing General Plan policies and SMC Sections 13.16 and 19.94 would reduce impacts to heritage trees to less than significant levels.

Given that development occurring as part of the Residential Focus Alternative would involve the same project footprint as the Specific Plan, implementation of mitigation and existing General Plan policies and SMC requirements would ensure development of the Specific Plan Area pursuant to the Residential Focus Alternative involves less than significant impacts to biological resources. This alternative would be neither environmentally superior nor inferior to the proposed project in this regard.

### Cultural and Tribal Cultural Resources

As concluded in Section 3.4, the proposed project's impacts to historical, archeological, and tribal cultural resources would be less than significant with implementation of Mitigation Measures CUL-1, CUL-2, and existing regulations and policies. Given that development occurring as part of the Residential Focus Alternative would involve the same project footprint as the Specific Plan, implementation of mitigation and existing regulations and policies would ensure development of the Specific Plan Area pursuant to the Commercial Focus Alternative involves less than significant impacts to historical, archeological, and tribal cultural resources. This alternative would be neither environmentally superior nor inferior to the proposed project in this regard.

### Energy

As concluded in Section 3.5, the high density mixed-use nature of the project and its support of active modes of transportation (i.e. walking, biking, and public transit) would reduce transportation-related fuel consumption by reducing VMT. Compared to the proposed project, the Residential Focus Alternative would result in additional residential units and less commercial development, thereby reducing the jobs/housing balance and increasing VMT. Since the Commercial Focus Alternative would likely result in greater transportation-related fuel consumption, this alternative would be environmentally inferior to the proposed project.



### Geology and Soils

As discussed in Section 3.6, geologic and seismic hazards associated with the proposed project would be reduced to less than significant levels following conformance with the established regulatory framework (i.e., CBC, SMC, and NPDES requirements). Conformance with General Plan Action LT-1.10f would ensure project impacts related to paleontological resources are reduced to less than significant levels. As such, the proposed project would not result in cumulatively considerable impacts related to geology, soils, and paleontological resources.

Development of the site pursuant to the Residential Focus Alternative would similarly introduce structures and people to existing geologic and seismic hazards and would require conformance with the established regulatory framework. Given that development occurring as part of the Residential Focus Alternative would involve the same project footprint as the Specific Plan, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Greenhouse Gas Emissions

Compared to the proposed project, the Residential Focus Alternative would be expected to result in greater VMT than the proposed project, based on the overall reduction of commercial development and increase of residential units proposed under this alternative. As a result, it would be assumed that the Residential Focus Alternative would result in greater mobile source emissions than the proposed project. Further, this alternative would not achieve Climate Action Playbook Play 3.1 (Increase opportunities for and encourage development of mixed-use sites to reduce vehicle miles per person) as well as the proposed project. In comparison, the proposed project proposes a mixed-use corridor consisting of commercial and high density residential uses in a PDA. Therefore, the project would facilitate lower VMT given its proximity to transit and other destinations. As such, this alternative would be environmentally inferior to the proposed project.

### Hazards and Hazardous Materials

Development of the site pursuant to the Residential Focus Alternative would similarly allow for development that could involve construction-related impacts and operational impacts (the use, transport, and storage of hazardous materials) related to hazards and hazardous materials. As with the proposed project, development and redevelopment occurring under the Residential Focus Alternative would be subject to compliance with all applicable federal and State laws and regulations related to the routine use, transport, and disposal of hazardous materials, or the accidental release of hazardous materials. In addition, future development projects occurring under the Residential Focus Alternative that are located within the Moffett Federal AIA would require compliance with Mitigation Measures HAZ-1 and HAZ-2 to ensure the development (including construction equipment) would not result in an aviation hazard. Given that development occurring as part of the Residential Focus Alternative would involve the same project footprint as the Specific Plan and would involve similar uses, this alternative would be neither environmentally superior nor inferior to the proposed project.



### Hydrology and Water Quality

Like the proposed project, the Residential Focus Alternative does not propose site-specific development and would not significantly impact drainage courses and hydrologic flows since the Specific Plan Area is almost entirely developed with hardscapes. Future development projects would be required to mitigate specific hydrology and water quality impacts on a project-by-project basis pursuant to all applicable federal, State, and local stormwater regulations and requirements under both the Residential Focus Alternative and proposed project. Impacts associated with future development in Specific Plan Area would be addressed at a site-specific level to ensure impacts to hydrology and water quality would be less than significant. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Land Use and Planning

As identified in Section 3.10, the project would not conflict with any applicable land use plans, policies, or regulations. As with the proposed project, development facilitated by the Residential Focus Alternative would be analyzed to ensure consistency with the goals, objectives, and policies of the General Plan, SMC, and Plan Bay Area 2040. As commercial use would remain the same as the proposed project, but there would be fewer residential uses than the proposed project, development pursuant to the Residential Focus Alternative would not achieve the City's General Plan Policy LT-63's intent to allow higher-residential density zoning districts in El Camino Real nodes to the extent of the proposed project. The Residential Focus Alternative also would not achieve Plan Bay Area 2040 Adequate Housing, Target 2 (House the region's population) to the extent of the proposed project. As such, this alternative would be environmentally inferior to the proposed project.

### Noise

Compared to the proposed project, development in accordance with the Residential Focus Alternative would be expected to result in similar construction and operational impacts on noise based on the similar land use types which would be permitted. Thus, impacts would still be considered less than significant with mitigation which is the same as the proposed project. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Population and Housing

As concluded in Section 3.12, project implementation would potentially allow for future population growth of an estimated 6,400 people and 2,700 new housing units over that currently allowed with buildout of the General Plan. Using the City's current (2020) estimated average of 2.61 persons per household, the increase of 6,400 people would result in the need for 2,452 housing units, which would be accommodated within the number of new housing units allowed by the project as proposed. Additionally, such potential growth would occur in an area already served by infrastructure and public services and would be considered "smart growth," rather than placing new housing in rural areas that are far removed from existing services and jobs. Thus,



future development associated with the proposed project is not anticipated to induce substantial unplanned population growth, either directly or indirectly.

Since the Residential Focus Alternative would result in fewer residential units and people in the planning area, this alternative would slightly reduce potential impacts to population and housing. However, this reduction in severity would still be considered less than significant which is the same as the proposed project. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Public Services

Compared to the proposed project, the Residential Focus Alternative would result in the same amount of commercial use as the proposed project (3,980,000 SF), but fewer residential units (6,700 instead of 8,500). Residential uses result in a greater demand for certain public services than commercial uses, particularly for schools and parks. Since the Residential Focus Alternative would result in fewer residents in the project area, implementation of this alternative would reduce potential impacts when compared to the proposed project. Demand for police and fire protection services would likely be similar to that of the project. However, this reduction in severity would still be considered less than significant which is the same as the proposed project. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Recreation

As described above for public services, the Residential Focus Alternative would result in fewer residents than the proposed project. With fewer residents, the Residential Focus Alternative would create less new demand for additional open space and recreation areas. Therefore, this alternative would have a less severe impact on parks and recreational services than the proposed project. However, this reduction in severity would still be considered less than significant which is the same as the proposed project. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

### Transportation

As discussed in Section 3.15, the project would not result in impacts relative to VMT; existing or planned transit/bicycle/pedestrian facilities or conflicts with programs, plans, ordinances, or policies addressing transit/bicycle/pedestrian facilities; increased hazards due to geometric design; or emergency access. Like the proposed project, development occurring under the Mixed-Use Alternative would be subject to conformance with Mitigation Measure TRA-1, which requires the project to prepare a construction management plan for approval by the City of Sunnyvale that identifies the duration of construction, number of trucks, truck routing, number of employees, truck idling, and lane closures, would reduce project-related construction impacts to a less than significant level.

As elaborated in Section 3.15, the compact, higher density, mixed-use development proposed under the project would reduce VMT given its proximate location to transit and other destinations.



In contrast, the Residential Focus Alternative would be expected to result in greater VMT than the proposed project, based on the overall reduction of residential uses proposed under this alternative. As such, this alternative would be environmentally inferior to the proposed project.

Utilities and Service Systems

Compared to the proposed project, the Residential Focus Alternative would result in additional commercial development and fewer residential units. As described in Section 3.16, the proposed project would involve less than significant impacts to utilities with implementation of existing federal, State, and local laws, ordinances, and regulations. As such, this alternative would be neither environmentally superior nor inferior to the proposed project.

5.8 Comparison of Alternatives/Environmentally Superior Alternative

Pursuant to CEQA Guidelines Section 15126.6(e)(2), an environmentally superior alternative must be identified from among the other alternatives if the "no project" alternative would otherwise be the environmentally superior alternative. The environmentally superior alternative is the alternative that would result in the fewest or least significant environmental impacts. Table 5-2 summarizes impacts associated with each alternative when compared to the proposed project.

Table 5-2
Alternative Impacts Comparison to Proposed Project

Table with 5 columns: Resource Area, Alternative 1, Alternative C, Alternative M, Alternative R. Rows include Aesthetics, Air Quality, Biological Resources, Cultural and Tribal Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Population and Housing, Public Services, Recreation, Transportation, and Utilities and Service Systems.

Notes:
(+) Level of impact is more severe than the proposed project.
(-) Level of impact is less severe than the proposed project.
(=) Level of impact is equal to the proposed project.

**Table 5-3** provides a summary of each alternative's ability to meet the project objectives.

**Table 5-3**  
**Summary of Ability to Meet Project Objectives**

<b>Project Objective</b>	<b>Alternative 1</b>	<b>Alternative C</b>	<b>Alternative M</b>	<b>Alternative R</b>
Increase opportunities for new mixed-use developments and encourage the development of unique, smaller-scale housing types such as studios and micro-units.	3	2	2	2
Provide opportunities for a variety of housing options to serve residents at all income levels and various stages of life.	2	1	1	1
Facilitate the efficient flow of traffic for all modes of travel and prioritize environmentally-efficient modes of transportation.	3	2	2	2
Improve pedestrian amenities, bicycle facilities, transit, and landscaping to enhance multi-modal environments and promote safe, convenient access to all locations along the corridor and beyond.	3	1	1	1
Promote high-quality and appropriately-scaled buildings that preserve quality of life for adjacent neighborhoods and contribute to an attractive, comfortable, and safe streetscape along the corridor.	3	1	1	1
Support local and regional-serving commercial uses that highlight the corridor's history and support economic vitality.	2	1	1	2
Support coexistence of auto-dealerships and other businesses with a regional draw with nearby small businesses and residences.	1	1	1	1
Provide a diverse range of shopping and dining options within walking distance of surrounding residences.	2	2	2	2



Project Objective	Alternative 1	Alternative C	Alternative M	Alternative R
Encourage a focus on sustainable options in building design, transportation, construction, site planning, energy, stormwater management, and greenhouse gas emissions reduction.	3	2	2	2

- 1. Meets project objectives
- 2. Partially meets project objectives
- 3. Does not meet project objectives

Review of **Table 5-2** indicates the No Project Alternative is the environmentally superior alternative, as it would reduce the project’s significant and unavoidable air quality impacts. According to CEQA Guidelines Section 15126.6(e), “if the environmentally superior alternative is the “no project” alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.” Based on review of **Table 5-2**, Alternative C (Commercial Focus Alternative), Alternative M (Mixed-Use Alternative), and Alternative R (Residential Alternative) would involve similar environmental impacts. Alternative C and Alternative M would equally meet the project objectives, while Alternative R would only partially meet the project’s objective to support local and regional-serving commercial uses that highlight the corridor’s history and support economic vitality; refer to **Table 5-3**. Accordingly, the Commercial Focus Alternative and Mixed-Use Alternative are considered environmentally superior to the proposed project. It should be noted that the Commercial Focus Alternative and Mixed-Use Alternative would be environmentally inferior to the proposed project for five environmental topical areas; refer to **Table 5-2**. In addition, these alternatives would not avoid the proposed project’s significant and unavoidable air quality impacts.

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## 6.0 Other CEQA Considerations

### 6.1 Long-Term Implications of the Proposed Project

Pursuant to CEQA Guidelines Section 15126.2, the following is a discussion of short-term uses of the environment and the maintenance and enhancement of long-term productivity. If the proposed project is approved and constructed, a variety of short- and long-term impacts would occur on a local level. During project-specific grading and construction, portions of surrounding uses would be temporarily impacted by dust and noise. Short-term soil erosion would occur during grading. There would also be an increase in vehicle pollutant emissions caused by grading and construction activities. However, these disruptions would be temporary and may be avoided or lessened to a large degree through mitigation cited in this EIR and through compliance with federal, State, and local regulations; refer to Section 3.0, Environmental Analysis.

Future development associated with implementation of the Specific Plan would create long-term environmental consequences associated with implementation of the project. Development of the proposed project and the subsequent long-term effects could impact the physical, aesthetic, and human environments. Long-term physical consequences of the project include hydrology and water quality impacts and increased energy and natural resource consumption. Incremental degradation of local and regional air quality would also occur as a result of stationary source emissions generated from the consumption of natural gas and electricity.

### 6.2 Significant Irreversible Environmental Changes that would be Involved in the Proposed Action should it be Implemented

Future development associated with implementation of the Specific Plan would consume limited, slowly renewable, and nonrenewable resources. This consumption would occur during the construction phase of the project and would continue throughout its operational lifetime. Although site-specific development proposals are not available at this time, it can be assumed that future development would require a commitment of resources that would include: (1) building materials, (2) fuel and operational materials/resources, and (3) the transportation of goods and people to and from the project site. Construction activities would require the consumption of resources that are not renewable, or which may renew so slowly as to be considered non-renewable. These resources would include construction supplies, such as aggregate materials used in concrete and asphalt, metals, and water. Fossil fuels such as gasoline and oil would also be consumed in the use of construction vehicles and equipment.

The resources that would be committed during future operational activities associated with buildout of the Specific Plan would include energy resources such as electricity and natural gas, petroleum-based fuels required for vehicle trips, fossil fuels, and water. Fossil fuels would represent the primary energy source associated with both construction and ongoing operation of the project and the existing, finite supplies of these natural resources would be incrementally



reduced. Site-specific development proposals accommodated by implementation of the Specific Plan would occur in accordance with California Code of Regulations Title 24, Part 6, which sets forth conservation practices that would limit the amount of energy consumed by the project. However, the energy requirements associated with the project would, nonetheless, represent a long-term commitment of essentially non-renewable resources.

In summary, future construction and operation activities associated with buildout of the Specific Plan would result in the irretrievable commitment of limited, slowly renewable, and nonrenewable resources, which would limit the availability of these particular resource quantities for future generations or for other uses during the life of the project. The project would involve the use of building materials and energy, some of which are non-renewable resources. Consumption of these resources would occur with any development in the region and are not unique to the project. Additionally, increasingly efficient building fixtures, construction practices/materials, and vehicular engines are expected to offset this demand to some degree. Thus, although irreversible environmental changes would result from the project, such changes would not be considered significant.

### 6.3 Growth-Inducing Impacts

Section 15126 of the CEQA Guidelines requires that an EIR discuss the project's potential to foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. The CEQA Guidelines also indicate that it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment. This section analyzes such potential growth-inducing impacts, based on criteria suggested in the CEQA Guidelines.

In general terms, a project may foster spatial, economic, or population growth in a geographic area if it meets any one of the following criteria:

- Removal of an impediment to growth (e.g., establishment of an essential public service and provision of new access to an area);
- Fostering economic expansion or growth (e.g., changes in revenue base and employment expansion);
- Fostering of population growth (e.g., construction of additional housing), either directly or indirectly;
- Establishment of a precedent-setting action (e.g., an innovation, a change in zoning, and general plan amendment approval); or
- Development of or encroachment on an isolated or adjacent area of open space (being distinct from an in-fill project).

Should a project meet any one of the above-listed criteria, it may be considered growth-inducing. The potential growth-inducing impacts of the proposed project are evaluated below. Note that the CEQA Guidelines require an EIR to "discuss the ways" a project could be growth inducing and to "discuss the characteristics of some projects that may encourage...activities that



could significantly affect the environment.” However, the CEQA Guidelines do not require that an EIR predict (or speculate) specifically where such growth would occur, in what form it would occur, or when it would occur. The answers to such questions require speculation, which CEQA discourages; refer to CEQA Guidelines Section 15145.

In accordance with the CEQA Guidelines and based on the above-listed criteria, the project’s potential growth-inducing impacts are evaluated below.

#### Removal of an Impediment to Growth

The Specific Plan envisions improved streetscapes, and safer, more enjoyable environments for walking, bicycling, and other modes of transportation. However, the backbone circulation infrastructure established throughout the El Camino Real Corridor has been established and would be maintained. Roadway infrastructure would be incrementally enhanced to allow for efficient circulation patterns as well as safe and convenient multimodal access. These improvements would not represent a significant extension of infrastructure such that additional growth would be encouraged as a result.

Concerning other infrastructure, the Specific Plan Area is already developed with storm drain, water, and sewer service infrastructure; refer to 3.16, Utilities and Service Systems. New storm drain, water, and sewer service connections will continue to be assessed, planned, and constructed to address service to the existing and undeveloped areas of the Specific Plan as new development occurs. Coordination would occur with utility providers, as future development is proposed, to ensure adequate capacity is provided for all new and existing development.

#### Foster Economic Expansion or Growth

Construction activities associated with future site-specific development proposals would generate a number of design, engineering, and construction jobs. Construction employees would likely be absorbed from the regional labor force, and individual development proposals would not attract new workers to the region.

As concluded in Section 3.12, Population and Housing, based on the amount of feasible development in the foreseeable future (i.e., development through 2035), Specific Plan implementation would not directly induce substantial unplanned population growth in an area by proposing new businesses. Thus, although economic growth could occur within the project area due to project implementation, future economic effects are not expected to significantly affect the environment.

#### Foster Population Growth

A project could induce population growth in an area either directly or indirectly. More specifically, the development of new residences or businesses could induce population growth directly, whereas the extension of roads or other infrastructure could induce population growth indirectly. As noted in the “Removal of an Impediment to Growth” section above, the project



would not indirectly induce substantial population growth through extension of roads or other infrastructure.

As analyzed in detail in Section 3.12, the project would not induce substantial unplanned population growth, either directly or indirectly, in the project area. Thus, growth inducing impacts related to population growth would be less than significant in this regard.

#### Establishment of A Precedent-Setting Action

As detailed in Section 3.0, Project Description, the project requires several discretionary approvals related to land use regulations, including a General Plan Amendment. At present, the development pattern along El Camino Real is commercially oriented, with limited office, public facility, and residential uses. Project implementation would allow for a maximum of 6,900 residential units and up to 730,000 square feet of commercial development beyond that which has been constructed to date within the Specific Plan Area. The approval of the General Plan Amendment would not set a precedent that would make it more likely for other projects in the City to gain approval of similar applications. For example, a future project requesting to redesignate a site would need to undergo the same environmental review as the proposed project and mitigate potentially significant environmental impacts on a project-level. The proposed approvals would only regulate future land development within the Specific Plan Area by limiting permitted uses and requiring future development on-site to comply with regulations included in the Specific Plan. Further, future projects with similar required discretionary actions would also be subject to applicable environmental review on a project-by-project basis. Implementation of the Specific Plan would not establish a procedure that would make future re-designations easier and would be speculative to determine any such effect. As such, the proposed project would not involve a precedent-setting action that could significantly affect the environment.

#### Development or Encroachment of Open Space

The Specific Plan is largely built out and encompasses a mix of commercial, office, public facility, and residential uses; refer to **Figure 2-2, Local Vicinity Map/Specific Plan Area**. There are no existing open space areas within the Specific Plan Area. Therefore, future development in accordance with the proposed project would not develop or encroach on an isolated or adjacent area of open space, resulting in a growth inducing impact. No impacts would occur in this regard.

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## 8.0 References

### 3.1 Aesthetics

Caltrans (California Department of Transportation). 2020. Officially Designated State Scenic Highways. <http://www.dot.ca.gov/hq/LandArch/scenic/schwy.htm>.

Sunnyvale, City of. 2013. City of Sunnyvale Citywide Design Guidelines.

———. 2015. City of Sunnyvale Municipal Code. <http://qcode.us/codes/sunnyvale/>.

———. 2016. *El Camino Real Corridor project: ECR Profile*. <https://static1.squarespace.com/static/55f09921e4b09c801f7c4895/t/57d82c77d2b8575b1458270d/1473784984163/ECR+Profile+-+Existing+Land+Use+and+Circulation+Analysis.pdf>.

———. 2017. *General Plan. Land Use and Transportation Element*. <https://sunnyvale.ca.gov/civicax/filebank/blobdload.aspx?BlobID=23980>

### 3.2 Air Quality

BAAQMD (Bay Area Air Quality Management District). 2017a. Spare the Air, Cool the Climate, A Blueprint for Clean Air and Climate Protection in the Bay Area, Final 2017 Clean Air Plan. [https://www.baaqmd.gov/~/\\_media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a\\_-proposed-final-cap-vol-1-pdf.pdf?la=en](https://www.baaqmd.gov/~/_media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en).

———. 2017b. CEQA Air Quality Guidelines.

———. 2017c. Air Quality Standards and Attainment Status, updated January 5, 2017. <https://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status>.

CAPCOA (California Air Pollution Control Officers Association). 2011. Health Effects of Criteria Air Pollutants. <http://www.capcoa.org/health-effects/>.

CARB (California Air Resources Board). 2016. Ambient Air Quality Standards chart. <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>.

———. 2005. Air Quality and Land Use Handbook: A Community Health Perspective.

———. 2019. ADAM Air Quality Data Statistics, <http://www.arb.ca.gov/adam/>.

EPA (US Environmental Protection Agency). 2002. *Health Assessment Document for Diesel Engine Exhaust*. <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=29060>.



OEHHA (Office of Environmental Health Hazard Assessment). 2007. *Air Toxicology and Epidemiology: Air Pollution and Children's Health*.  
[http://oehha.ca.gov/public\\_info/facts/airkids.html](http://oehha.ca.gov/public_info/facts/airkids.html).

### 3.3 Biological Resources

CDFW (California Department of Fish and Wildlife). 2015a. California Natural Diversity Database QuickView Tool in BIOS 5. Sacramento: CDFW Biogeographic Data Branch.  
<https://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp>.

———. 2015b. BIOS 5 Viewer. Sacramento: CDFW Biogeographic Data Branch.  
<https://map.dfg.ca.gov/bios/?bookmark=327>.

CNPS (California Native Plant Society). 2015. Inventory of Rare, Threatened, and Endangered Plants (online edition, v8-01a). Sacramento: CNPS. <http://www.rareplants.cnps.org/>.

Environmental Laboratory. 1987. Corps of Engineers Wetland Delineation Manual. Technical Report Y-87-1. Vicksburg, MS: USACE Waterways Experiment Station.

Mayer, K. E., and W. F. Laudenslayer, Jr., 1988. *A Guide to Wildlife Habitats of California*. Sacramento: CDFW.

McNab, W. H., D. T. Cleland, J. A. Freeouf, J. E. Keys, Jr., G. J. Nowacki, and C. A. Carpenter, comps. 2007. Description of ecological subregions: sections of the conterminous United States. General Technical Report WO-76B. Washington, DC: USDA, Forest Service.

Sawyer, J., and T. Keeler-Wolf. 1995. *A Manual of California Vegetation*. Sacramento: CNPS.

Santa Clara Valley Habitat Agency. 2012. Santa Clara Valley Habitat Plan. <http://scv-habitatagency.org/178/Final-Habitat-Plan>.

SCVURPPP (Santa Clara Valley Urban Runoff Pollution Prevention Program). 2018. *Calabazas Watershed*. [http://www.scvurppp-w2k.com/ws\\_calabazas.shtml](http://www.scvurppp-w2k.com/ws_calabazas.shtml).

Sunnyvale, City of. 2011. Sunnyvale General Plan (consolidated in 2011).

———. 2014. *Bird Safe Building Design Guidelines*. Adopted January 28, 2014.

———. 2017. *Land Use and Transportation Element*. Adopted April 11, 2017.

USACE (US Army Corps of Engineers). 2007. Jurisdictional Determination Form Instructional Guidebook. USACE and US Environmental Protection Agency.

USDA-NRCS (US Department of Agriculture, Natural Resources Conservation Service). Web Soil Survey. <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>.



USFWS (US Fish and Wildlife Service). 2015a. Information, Planning, and Conservation System (IPaC). <http://ecos.fws.gov/ipac/>.

———. 2015b. Critical Habitat Portal. <http://ecos.fws.gov/crithab/>.

### 3.4 Cultural and Tribal Resources

Brown, Mary. Preservation Planner, San Francisco City and County. 2010. San Francisco Modern Architecture and Landscape Design 1935–1970 Historic Context Statement, pp. 164–206.

California Department of Conservation. 2018. Geologic Map of the San Francisco–San Jose Quadrangle. Accessed April 9, 2018. <http://www.quake.ca.gov/gmaps/RGM/sfsj/sfsj.html>.

California Historical Resources Information System. 2015. Record Search Results for the Stratford School at Partridge Avenue Environmental Impact Report Planning Area.

Corte Madera, Town of. 2008. General Plan Update Draft Environmental Impact Report.

Corte Madera, Town of. 2008. *General Plan Update Draft Environmental Impact Report*. April 2008

Healy, Michal. 2015. Architect, LEED AP, Santa Clara Unified School District, Bond Program Consultant. April 15.

Mountain View, City of. 2012. City of Mountain View Draft 2030 General Plan and Greenhouse Gas Reduction Program Final Environmental Impact Report.

Mountain View, City of. 2012. *City of Mountain View Draft 2030 General Plan and Greenhouse Gas Reduction Program Final Environmental Impact Report*.

National Park Service. 2015. National Register Bulletin.  
[http://www.nps.gov/nr/publications/bulletins/nrb15/nrb15\\_6.htm#crit%20a](http://www.nps.gov/nr/publications/bulletins/nrb15/nrb15_6.htm#crit%20a).

San Jose, City of. 2009. San Jose Modernism Historic Context Statement, June 2009.

Santa Clara. 1965. Santa Clara Record, October 6, 1965.

Santa Clara. 1965. *Santa Clara Record*, October 6.

Sunnyvale, City of. 2011. *Sunnyvale General Plan* (consolidated in 2011).

———. 2017a. *Formal Notification pursuant to Assembly Bill 52 (Public Resources Code 21080.3.1) and Senate Bill 18 (Government Code Section 65352.3) for the City of Sunnyvale's El Camino Real Corridor Specific Plan*.

———. 2017b. *General Plan Land Use and Transportation Element (LUTE)*.

———. 2017c. *Land Use and Transportation Element Draft Environmental Impact Report*.



———. 2020. City of Sunnyvale Heritage Resources Inventory.  
<https://sunnyvale.ca.gov/civicax/filebank/blobdload.aspx?BlobID=25105>.

———. 2011. Sunnyvale General Plan (consolidated in 2011).

SV Modern. 2015. <http://www.svmodern.com/sv-modern-commercial.html>.

### 3.5 Energy

CARB (California Air Resources Board). EMFAC2017 v1.0.2., <https://www.arb.ca.gov/emfac/2017/>

CDTFA (California Department of Tax and Fee Administration). 2020. Net Taxable Gasoline Gallons, <https://www.cdtfa.ca.gov/taxes-and-fees/MVF-10-Year-Report.xlsx>.

CEC (California Energy Commission). Electricity Consumption by County,  
<http://ecdms.energy.ca.gov/elecbycounty.aspx>.

———. Gas Consumption by County, <http://ecdms.energy.ca.gov/gasbycounty.aspx>.

———. 2016. 2016 Energy Standards Overview, <https://www.lgc.org/wordpress/wp-content/uploads/2016/02/2016-Energy-Standards-Overview-California-Energy-Commission.pdf>.

———. 2018. 2019 Building Energy Efficiency Standards.

EIA (U.S. Energy Information Administration). 2018a. Rankings: Total Energy Consumed per Capita, 2018 (million Btu), <https://www.eia.gov/state/rankings/?sid=CA#series/12>.

———. 2018b. Table F33: Total Energy Consumption, Price, and Expenditure Estimates, 2018, [https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep\\_fuel/html/fuel\\_te.html&sid=US](https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_te.html&sid=US).

———. 2018c. California Energy Consumption by End-Use Section, 2018, <https://www.eia.gov/state/?sid=CA#tabs-1>.

PG&E (Pacific Gas & Electric). 2019. Renewable Energy.  
[https://www.pgecorp.com/corp\\_responsibility/reports/2019/bu07\\_renewable\\_energy.html](https://www.pgecorp.com/corp_responsibility/reports/2019/bu07_renewable_energy.html).

Sunnyvale, City of. 2011. Sunnyvale General Plan (consolidated in 2011).

### 3.6 Geology and Soils

ABAG (Association of Bay Area Governments). 2016. Resilience Program, Landslide Maps and Information. Accessed August 23, 2017. <http://resilience.abag.ca.gov/landslides/>.



- CalEMA (California Emergency Management Agency). 2015. MyHazards. <http://myhazards.calema.ca.gov/>.
- Cal OES (California Governor's Office of Emergency Services). 2015. MyHazards. Accessed June 3, 2016. <http://myhazards.caloes.ca.gov/>.
- CGS (California Geological Survey). 2002. Note 32, How Earthquakes and Their Effects Are Measured. Sacramento: CGS.
- . 2010. Fault Activity Map of California, Geological Survey 150th Anniversary, 1:750,000 scale.
- EKI (Erler & Kalinowski, Inc.) 2011. Phase I Environmental Site Assessment Report, 1500 Partridge Avenue, Sunnyvale, California.
- FEMA (Federal Emergency Management Agency). 1989. Establishing Programs and Priorities for the Seismic Rehabilitation of Buildings Supporting Report.
- Jennings. 2010. "Fault Activity Map of California, Geological Survey 150th Anniversary, 1:750,000 scale." International Conference of Building Officials, 1997, Uniform Building Code.
- Michigan State University, Institute of Water Research. 2015. K Factor. <http://www.iwr.msu.edu/rusle/kfactor.htm>.
- Poland, J. F., and R. L. Ireland. 1988. "Land Subsidence in the Santa Clara Valley, California, as of 1982." US Geological Survey Professional Paper 497-F.
- Sunnyvale, City of. 2006. Sunnyvale General Plan.
- . 2011. Sunnyvale General Plan (consolidated in 2011).
- . 2015. City of Sunnyvale Municipal Code. <http://qcode.us/codes/sunnyvale/>.
- . 2017. *General Plan Land Use and Transportation Element*. <https://sunnyvale.ca.gov/civicax/filebank/blobdload.aspx?BlobID=23980>.
- UCD (University of California, Davis). 2015. California Soil Resource Lab Online Soil Survey. <http://casoilresource.lawr.ucdavis.edu/soilweb/>.
- UCMP (University of California Museum of Paleontology). 2018. UCMP Specimen Search [database]. Accessed April 9, 2018 <http://ucmpdb.berkeley.edu/>.
- USDA-NRCS (US Department of Agriculture, Natural Resources Conservation Service). 2015. National Soil Survey Handbook, Title 430-VI. [http://www.soils.usda.gov/wps/portal/nrcs/detail/soils/ref/?cid=nrcs142p2\\_054242](http://www.soils.usda.gov/wps/portal/nrcs/detail/soils/ref/?cid=nrcs142p2_054242).



USGS (US Geological Survey). 2006. About Liquefaction.  
<http://geomaps.wr.usgs.gov/sfgeo/liquefaction/aboutliq.html>.

### 3.7 Greenhouse Gas Emissions

BAAQMD (Bay Area Air Quality Management District). 2017a. Spare the Air, Cool the Climate, A Blueprint for Clean Air and Climate Protection in the Bay Area, Final 2017 Clean Air Plan.  
[https://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a\\_-proposed-final-cap-vol-1-pdf.pdf?la=en](https://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en).

———. 2017b. CEQA Air Quality Guidelines.

CARB (California Air Resources Board). EMFAC2017.

———. 2021. California Greenhouse Gas Emissions for 2000 to 2019.  
[https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000\\_2019/ghg\\_inventory\\_trends\\_00-19.pdf](https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf).

———. 2017. Draft – The 2017 Climate Change Scoping Plan Update: The Proposed Strategy for Achieving California’s 2030 Greenhouse Gas Target,  
<https://www.arb.ca.gov/cc/scopingplan/revised2017spu.pdf>.

California Department of Finance. 2021. Report P-1: State Population Projections (2010-2060),  
<http://www.dof.ca.gov/Forecasting/Demographics/Projections/>.

Caltrans (California Department of Transportation). 2019. Long-Term Socio-Economic Forecasts by County, <https://dot.ca.gov/programs/transportation-planning/economics-data-management/transportation-economics/long-term-socio-economic-forecasts-by-county>.

CNRA (California Natural Resources Agency). 2009. 2009 California Climate Adaptation Strategy.  
[https://resources.ca.gov/CNRALegacyFiles/docs/climate/Statewide\\_Adaptation\\_Strategy.pdf](https://resources.ca.gov/CNRALegacyFiles/docs/climate/Statewide_Adaptation_Strategy.pdf).

DOF (California Department of Finance). 2020. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2020.  
<http://dof.ca.gov/Forecasting/Demographics/Estimates/e-5/>.

EIA (U.S. Energy Information Administration). 2012. Commercial Buildings Energy Consumption Survey (CBECS).  
<https://www.eia.gov/consumption/commercial/data/2012/bc/cfm/b2.php>.

EPA (US Environmental Protection Agency). 2020. Overview of Greenhouse Gases.  
<https://www.epa.gov/ghgemissions/overview-greenhouse-gases>.



- IPCC (International Panel on Climate Change). 2014. Fifth Assessment Report. <https://www.ipcc.ch/assessment-report/ar5/>.
- MTC (Metropolitan Transportation Commission). 2017. Plan Bay Area 2040. <http://files.mtc.ca.gov/library/pub/30060.pdf>.
- Sunnyvale, City of. 2019. Climate Action Playbook. <https://sunnyvale.ca.gov/people/sustainability/default.htm>
- The Climate Registry. 2019. CRIS Public Reports. <https://www.theclimateregistry.org/our-members/cris-public-reports/>.

### 3.8 Hazards and Hazardous Materials

- ABAG (Association of Bay Area Governments). 2010. *Taming Natural Disasters: Multi-Jurisdictional Local Hazard Mitigation Plan for the San Francisco Bay Area*. Adopted 2005; updated 2010. <http://resilience.abag.ca.gov/wp-content/documents/ThePlan-Chapters-Intro.pdf>.
- BAAQMD (Bay Area Air Quality Management District). 2017. *California Environmental Quality Act Air Quality Guidelines*.
- CalEPA (California Environmental Protection Agency). 2018. More about the Unified Program. <http://www.calepa.ca.gov/CUPA/About>.
- Cal Fire (California Department of Forestry and Fire Protection). 2015. Santa Clara County FHSZ Map. Accessed June 2016. [http://www.fire.ca.gov/fire\\_prevention/fhsz\\_maps\\_santaclara.php](http://www.fire.ca.gov/fire_prevention/fhsz_maps_santaclara.php).
- DTSC (California Department of Toxic Substances Control). 2017. EnviroStor. Accessed August 8, 2017. <http://www.envirostor.dtsc.ca.gov/>.
- . 2017b. Department of Toxic Substances Control EnviroStor Database Glossary. <http://www.envirostor.dtsc.ca.gov/public/EnviroStor%20Glossary.pdf>.
- EDR (Environmental Data Resources Inc.) 2012. *EDR DataMap Environmental Atlas*.
- EPA (US Environmental Protection Agency). 2008. California – EPA Map of Radon Zones. <https://www.epa.gov/sites/production/files/2014-08/documents/california.pdf>.
- . 2015. Laws and Regulations. Accessed June 2015. <http://www.epa.gov/lawsregs/index.html>.
- . 2018. National Priorities List (NPL) Superfund Sites. Accessed March 14, 2018. <https://cumulis.epa.gov/supercpad/CurSites/srchsites.cfm>.



- Mountain View, City of. 2012. City of Mountain View Draft 2030 General Plan and Greenhouse Gas Reduction Program Final Environmental Impact Report.
- PHMSA (US Department of Transportation, Pipeline and Hazardous Materials Safety Administration). 2015. Agency website. Accessed June 2016. <http://www.phmsa.dot.gov/>.
- Santa Clara County. 2012. *Santa Clara County Hazard Mitigation Plan*.
- \_\_\_\_\_. 2012. Airport Land Use Commission. *Comprehensive Land Use Plan, Santa Clara County, Moffett Federal Airfield*.  
[https://www.sccgov.org/sites/dpd/DocsForms/Documents/ALUC\\_NUQ\\_CLUP.pdf](https://www.sccgov.org/sites/dpd/DocsForms/Documents/ALUC_NUQ_CLUP.pdf).
- \_\_\_\_\_. 2017. *Santa Clara County Operational Area Hazard Mitigation Plan*. Prepared for the Santa Clara County Office of Emergency Services.
- Sunnyvale, City of. 2011a. *Sunnyvale General Plan* (consolidated in 2011).
- \_\_\_\_\_. 2011b. *Temporary Traffic Control (TRC) Checklist and Guidelines*. Effective May 1, 2011.
- \_\_\_\_\_. 2014a. City website. Accessed June 2015.  
<http://sunnyvale.ca.gov/Departments/PublicSafety/FirePrevention.aspx>.
- \_\_\_\_\_. 2014b. Local Hazard Mitigation Plan.  
<http://sunnyvale.ca.gov/Departments/PublicSafety/LocalHazardMitigationPlan.aspx>.
- SWRCB (State Water Resources Control Board). 2017. GeoTracker. Accessed August 8, 2017.  
<http://geotracker.waterboards.ca.gov/>.
- \_\_\_\_\_. 2017b. Specific Plan Status Definitions.  
<http://geotracker.waterboards.ca.gov/GeoTrackerStatusDefinitions.pdf>

### 3.9 Hydrology and Water Quality

- AEI Consultants. 2014. *Phase I Environmental Site Assessment, Raynor Activity Center*. Prepared for the City of Sunnyvale.
- California Department of Water Resources. SGMA Basin Prioritization Dashboard. 2020.  
<https://gis.water.ca.gov/app/bp-dashboard/final/>
- Cal EMA, CGS, and USC (California Emergency Management Agency, California Geological Survey, and University of Southern California). 2009. Tsunami Inundation Map for Emergency Planning, Mountain View Quadrangle.  
[http://www.conservation.ca.gov/cgs/geologic\\_hazards/Tsunami/Inundation\\_Maps/SantaClara/Documents/Tsunami\\_Inundation\\_MountainView\\_Quad\\_SantaClara.pdf](http://www.conservation.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/SantaClara/Documents/Tsunami_Inundation_MountainView_Quad_SantaClara.pdf).
- FEMA (Federal Emergency Management Agency). 2009. Flood Insurance Rate Map 06085C0226H, effective May 18, 2009.



SCVURPPP (Santa Clara Valley Urban Runoff Pollution Prevention Program). 2016a. *C.3 Stormwater Handbook. Guidance for Implementing Stormwater Requirements for New Development and Redevelopment Projects.*

———. 2016b. *Sunnyvale East and West Channels Flood Protection Project Fact Sheet.*

———. 2018. Construction Industry BMPs. Accessed March 15, 2018. [http://www.scvurppp-w2k.com/construction\\_bmp.shtml](http://www.scvurppp-w2k.com/construction_bmp.shtml).

SCVWD (Santa Clara Valley Water District). 2010. *Draft Flood Protection and Stream Stewardship Master Plan.*

———. 2011a. *Sunnyvale General Plan* (consolidated in 2011).

———. 2011b. *Stormwater Quality BMP Guidance Manual for New and Redevelopment Projects.*

———. 2015a. *Annual Groundwater Report for Calendar Year 2015.*

———. 2016. *Groundwater Management Plan: Santa Clara and Llagas Subbasins.*

———. 2016. *El Camino Real Corridor Specific Plan.*

———. 2017a. Stormwater Requirements: Storm Water Pollution Prevention. Accessed August 3, 2017. <https://sunnyvale.ca.gov/property/water/waterpollution.htm>.

———. 2017b. *General Plan Land Use and Transportation Element (LUTE).*

———. 2018. Groundwater. Accessed March 2018. <https://www.valleywater.org/your-water/where-your-water-comes-from/groundwater>.

Sunnyvale, City of. 2011a. Urban Runoff Management Plan.

———. 2011a. Sunnyvale General Plan (consolidated in 2011).

———. 2011b. City of Sunnyvale Stormwater Quality BMP Guidance Manual for New and Redevelopment Projects.

———. 2015. Stormwater Management Plan Data Form.

SWRCB (State Water Resources Control Board). 2015. National Pollutant Discharge System Discharge Elimination System (NPDES) – General Permits. Accessed August 11, 2017. [http://www.swrcb.ca.gov/water\\_issues/programs/npdes/general\\_permits.shtml](http://www.swrcb.ca.gov/water_issues/programs/npdes/general_permits.shtml).

### 3.10 Land Use and Planning

ABAG and MTC (Association of Bay Area Governments and Metropolitan Transportation Commission). 2016. *Plan Bay Area 2040.*

Sunnyvale, City of. 2010. *Horizon 2035 Existing Land Use Conditions and Background.*



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## 8.0 References

- . 2011. Sunnyvale General Plan (consolidated in 2011).
- . 2013. City of Sunnyvale Citywide Design Guidelines.
- . 2015. Sunnyvale Municipal Code.  
<http://qcode.us/codes/sunnyvale/view.php?&frames=on>.
- . 2017. General Plan Land Use and Transportation Element.  
<https://sunnyvale.ca.gov/civicax/filebank/blobdload.aspx?BlobID=23980>.
- . 2007. City of Sunnyvale Heritage Resources Inventory.

### 3.11 Noise

- Caltrans (California Department of Transportation). 2020. Transportation and Construction Vibration Guidance Manual.
- EPA (U.S. Environmental Protection Agency). 1971. Community Noise.
- FHWA (Federal Highway Administration). 2018. Transit Noise and Vibration Impact Assessment Manual.
- FTA (Federal Transit Administration). 2006. Transit Noise and Vibration Impact Assessment.
- Kariel, H. G. 1991. Noise in Rural Recreational Environments, *Canadian Acoustics* 19(5), 3-10.
- OPR (Governor's Office of Planning and Research). 2017. State of California General Plan Guidelines.
- Sunnyvale, City of. 2011. Sunnyvale General Plan (consolidated in 2011), Safety and Noise Chapter.

### 3.12 Population and Housing

- ABAG (Association of Bay Area Governments). 2016. *Plan Bay Area 2040 Preferred Land Use Scenario Memo*.
- . 2017a. *Plan Bay Area 2040 Final Supplemental Report: Land Use Modeling Report*.
- . 2017b. *Plan Bay Area 2040*. <https://www.planbayarea.org/plan-bay-area-2040>.
- . 2020a. Bay Area Census: City of Sunnyvale Decennial Census Data – 1970 to 1990.  
<http://www.bayareacensus.ca.gov/cities/Sunnyvale70.htm>.
- . 2020b. *Regional Housing Needs Allocation Proposed Methodology: San Francisco Bay Area, 2023-2031*. [https://abag.ca.gov/sites/default/files/rhna\\_methodology\\_report\\_2023-2031\\_finalposting.pdf](https://abag.ca.gov/sites/default/files/rhna_methodology_report_2023-2031_finalposting.pdf).
- . 2020c. *Plan Bay Area 2050*. <https://www.planbayarea.org/plan-bay-area-2050-0>.



- \_\_\_\_\_. 2020d. *Forecasts and Projections*. <https://abag.ca.gov/our-work/economic-analysis/forecasts-projections>.
- DOF (California Department of Finance). 2012. *E-8 Historical Population and Housing Estimates for Cities, Counties, and the State, 2000-2010 – Organized by Geography*. <http://dof.ca.gov/Forecasting/Demographics/Estimates/E-8/2000-10/>.
- \_\_\_\_\_. 2020. *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2020*. <http://dof.ca.gov/Forecasting/Demographics/Estimates/e-5/>.
- EDD (California Economic Development Department). 2020. *Labor Force and Unemployment Rate for Cities and Census Designated Places, November 2020*. <https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html#Data>.
- Sunnyvale, City of. 2014. *Housing Element of the General Plan, January 31, 2015–January 31, 2023*. <https://sunnyvale.ca.gov/civicax/filebank/blobdload.aspx?blobid=23732>.
- \_\_\_\_\_. 2016a. *El Camino Real Corridor Specific Plan: ECR Profile*. <https://static1.squarespace.com/static/55f09921e4b09c801f7c4895/t/57d82c77d2b8575b1458270d/1473784984163/ECR+Profile+-+Existing+Land+Use+and+Circulation+Analysis.pdf>.
- \_\_\_\_\_. 2016b. *LUTE - Draft EIR*. <https://sunnyvale.ca.gov/government/codes/plan.htm>.
- \_\_\_\_\_. 2017. *Land Use and Transportation Element*. <https://sunnyvale.ca.gov/civicax/filebank/blobdload.aspx?BlobID=23980>.
- State of California Employment Development Department. 2020. *Monthly Labor Force Data for Cities and Census Designated Places (CDP)*.

### 3.13 Public Services

- CUSD (Cupertino Union School District). 2020. Schools - Homepage. <https://www.cusdk8.org/domain/96>.
- Ed Data. 2020. Education Data Partnership. District Summary: Sunnyvale. <http://www.ed-data.org/district/Santa-Clara/Sunnyvale>.
- FUHSD (Fremont Union High School District). 2020. District Attendance Boundary Map. <https://resources.finalsite.net/images/v1534114703/fuhsdorg/dynimrawejvyxvzluhob/DistrictBoundaryMap.pdf>.
- SCUSD (Santa Clara Unified School District). 2019. District Map. <https://www.santaclarausd.org/cms/lib/CA49000000/Centricity/shared/homepage/2019%20District%20Map.pdf>.



- Sunnyvale, City of. 2011. *Sunnyvale General Plan* (consolidated in 2011).
- \_\_\_\_\_. 2014. Sunnyvale General Plan Land Use Component and Housing Element Update - EIR Addendum.
- \_\_\_\_\_. 2017a. *Sunnyvale Public Library – About Us*.  
<https://sunnyvale.ca.gov/community/library/about/default.htm>.
- \_\_\_\_\_. 2017b. *Sunnyvale General Plan Land Use and Transportation Element (LUTE)*.
- \_\_\_\_\_. 2018. *El Camino Real Corridor Specific Plan*.
- \_\_\_\_\_. 2020a. City of Sunnyvale. Recommended Budget, City of Sunnyvale, California – Fiscal Year 2020/21. <https://sunnyvale.ca.gov/civicax/filebank/blobdload.aspx?blobid=27049>.
- \_\_\_\_\_. 2020b. Civic Center Modernization Project.  
<https://sunnyvale.ca.gov/business/projects/civic.htm#:~:text=Current%20Status,completion%20date%20is%20April%202023.&text=%20The%20Civic%20Center%20Master%20Plan,the%20project%2C%20see%20Documents%20tab>.
- \_\_\_\_\_. 2020c. Department of Public Safety (DPS). Sunnyvale Crime Information - Crime Statistics – Ten-Year Crime Comparison Report (2010 to 2019).  
<https://sunnyvale.ca.gov/civicax/filebank/blobdload.aspx?BlobID=22968>.
- SSD (Sunnyvale School District). 2020a. Sunnyvale School District – About Us.  
<https://www.sesd.org/domain/295>.
- \_\_\_\_\_. 2020b. Developer Fees. <https://www.sesd.org/Page/662>.

### 3.14 Recreation

- DOF (California Department of Finance). 2020. Table 2: E-5 City/County Population and Housing Estimates, 1/1/2020.  
<http://dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>.
- NRPA (National Recreation and Park Association). 1995. Recreation Size and Occupancy Standards.  
[http://www.webpages.uidaho.edu/css386/Recreation Size and Occupancy Standards.pdf](http://www.webpages.uidaho.edu/css386/Recreation%20Size%20and%20Occupancy%20Standards.pdf).
- Sunnyvale, City of. 2008. Department of Parks & Recreation. *Parks of the Future Plan. Final Plan*.
- \_\_\_\_\_. 2011. *Sunnyvale General Plan* (consolidated in 2011).
- \_\_\_\_\_. 2017. *General Plan Land Use and Transportation Element (LUTE)*.
- \_\_\_\_\_. 2019. Department of Public Works - Parks, Golf, and Trees Division.



- \_\_\_\_\_. 2020a. Recreation and Community – Parks.  
<https://sunnyvale.ca.gov/community/parks/default.htm>.
- \_\_\_\_\_. 2020b. Civic Center Modernization Project.  
<https://sunnyvale.ca.gov/business/projects/civic.htm#:~:text=Current%20Status,completi on%20date%20is%20April%202023.&text=%20The%20Civic%20Center%20Master%20Plan,the%20project%2C%20see%20Documents%20tab>.

### 3.15 Transportation

- Hexagon Transportation Consultants, Inc. 2020. *El Camino Real Specific Plan Draft Traffic Impact Analysis*.
- MTC (Metropolitan Transportation Commission). 2021 Plan Bay Area.
- Sunnyvale, City of. 2005. Citywide Deficiency Plan.
- \_\_\_\_\_. 2011. Sunnyvale General Plan (consolidated in 2011).
- \_\_\_\_\_. 2015. Data Provided by the City of Sunnyvale.
- \_\_\_\_\_. 2011. *City of Sunnyvale General Plan*.
- \_\_\_\_\_. 2017. *Land Use and Transportation Element* (adopted April 2017).
- \_\_\_\_\_. 2014. *Housing Element* (adopted December 16, 2014).
- \_\_\_\_\_. *Municipal Code*.
- Transportation Research Board. 2000. Highway Capacity Manual.
- VTA (Santa Clara Valley Transportation Authority). 2003. Congestion Management Program.
- \_\_\_\_\_. 2018. 2018 CMP Monitoring and Conformance Report.
- \_\_\_\_\_. 2014. Transportation Impact Analysis Guidelines.

### 3.16 Utilities and Service Systems

- BAWSCA (Bay Area Water Supply and Conservation Agency). 2016. *BAWSCA Water Conservation 101*. [http://bawasca.org/uploads/userfiles/files/Water\\_Conservation\\_101\\_15-16.pdf](http://bawasca.org/uploads/userfiles/files/Water_Conservation_101_15-16.pdf).
- BCWS (Bay Counties Waste Services). 2020. SMaRT Station Annual Report 2018-2019.  
<https://sunnyvale.ca.gov/civicax/filebank/blobdload.aspx?blobid=25741>.
- CalRecycle (California Department of Resources Recycling and Recovery). 2019a. Solid Waste Information System (SWIS). SWIS Facility/Site Activity Details: Sunnyvale MRF & Transfer



- Station (43-AA-0009).  
<https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1348?siteID=3376>.
- \_\_\_\_\_. 2019b. Solid Waste Information System (SWIS). SWIS Facility/Site Activity Details: Kirby Canyon Recycling & Disposal Facility (43-AN-0008).  
<https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1370?siteID=3393>.
- CDWR (California Department of Water Resources). 2010. 20x2020 Water Conservation Plan.  
[https://www.waterboards.ca.gov/water\\_issues/hot\\_topics/20x2020/docs/20x2020plan.pdf](https://www.waterboards.ca.gov/water_issues/hot_topics/20x2020/docs/20x2020plan.pdf)
- CEC (California Energy Commission). 2016a. Electricity Consumption by Entity.  
<http://www.ecdms.energy.ca.gov/elecbyutil.aspx>.
- \_\_\_\_\_. 2016b. Electricity Consumption by County.  
<http://www.ecdms.energy.ca.gov/elecbycounty.aspx>.
- \_\_\_\_\_. 2016c. Gas Consumption by Entity. <http://www.ecdms.energy.ca.gov/gasbyutil.aspx>.
- \_\_\_\_\_. 2016d. Gas Consumption by County. <http://www.ecdms.energy.ca.gov/gasbycounty.aspx>.
- \_\_\_\_\_. 2021. *2019 Building Energy Efficiency Standards*. <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency>.
- Michael Baker International. 2019. *Water Supply Assessment for City of Sunnyvale El Camino Real Corridor Specific Plan Project*.
- PG&E (Pacific Gas and Electric Company). 2020. Company Profile.  
[https://www.pge.com/en\\_US/about-pge/company-information/profile/profile.page](https://www.pge.com/en_US/about-pge/company-information/profile/profile.page).
- SFPUC (San Francisco Public Utilities Commission). 2009. *Hetch Hetchy Water System Improvement Program. 2008-09 Annual Report*.  
<https://www.sfwater.org/modules/showdocument.aspx?documentid=821>.
- \_\_\_\_\_. 2018. Water System Improvement Program Overview.  
<https://sfwater.org/index.aspx?page=115>.
- Sunnyvale, City of. 2011. Sunnyvale General Plan (consolidated in 2011).
- \_\_\_\_\_. 2013. Final Report Zero Waste Strategic Plan: A Quantifiable Approach.  
<https://sunnyvale.ca.gov/civicaX/filebank/blobdload.aspx?blobid=25677>.
- \_\_\_\_\_. 2015. Stormwater Management Plan Data Form.
- \_\_\_\_\_. 2016. *2015 Urban Water Management Plan*.  
<file:///C:/Users/nmarotz/Downloads/2015%20UWMP.pdf>.



- \_\_\_\_\_. 2019a. Report to City Council Agenda (with attachments) - *Adopt an Amendment Approving the 2018 Amendments to the Water Supply Agreement Between the City and County of San Francisco (SFPUC) and the Wholesale Customers in Alameda County, San Mateo County, and Santa Clara County.*  
<https://sunnyvaleca.legistar.com/LegislationDetail.aspx?ID=3868228&GUID=98DE7915-8CCA-4040-ADAC-F18CEC0F13AB&Options=&Search=&FullText=1>.
- \_\_\_\_\_. 2019b. Green Building Program.  
<https://sunnyvale.ca.gov/civicax/filebank/blobdload.aspx?BlobID=23493>.
- \_\_\_\_\_. 2020a. Water Pollution Control Plant - Improvement Program.  
<https://sunnyvale.ca.gov/property/water/sewer/controlplant.htm>.
- \_\_\_\_\_. 2020b. Construction Waste. <https://sunnyvale.ca.gov/business/environmental/waste.htm>.
- SWRCB (California State Water Resources Control Board). 2018. 20x2020 Agency Team on Water Conservation. [https://www.waterboards.ca.gov/water\\_issues/hot\\_topics/20x2020/](https://www.waterboards.ca.gov/water_issues/hot_topics/20x2020/).
- Waste Management. 2020. <https://kirbycanyon.wm.com/about-us/index.jsp>.

#### 4.0 Effects Found Not to Be Significant

- Caltrans (California Department of Transportation). 2020. Officially Designated State Scenic Highways. <http://www.dot.ca.gov/hq/LandArch/scenic/schwy.htm>.

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