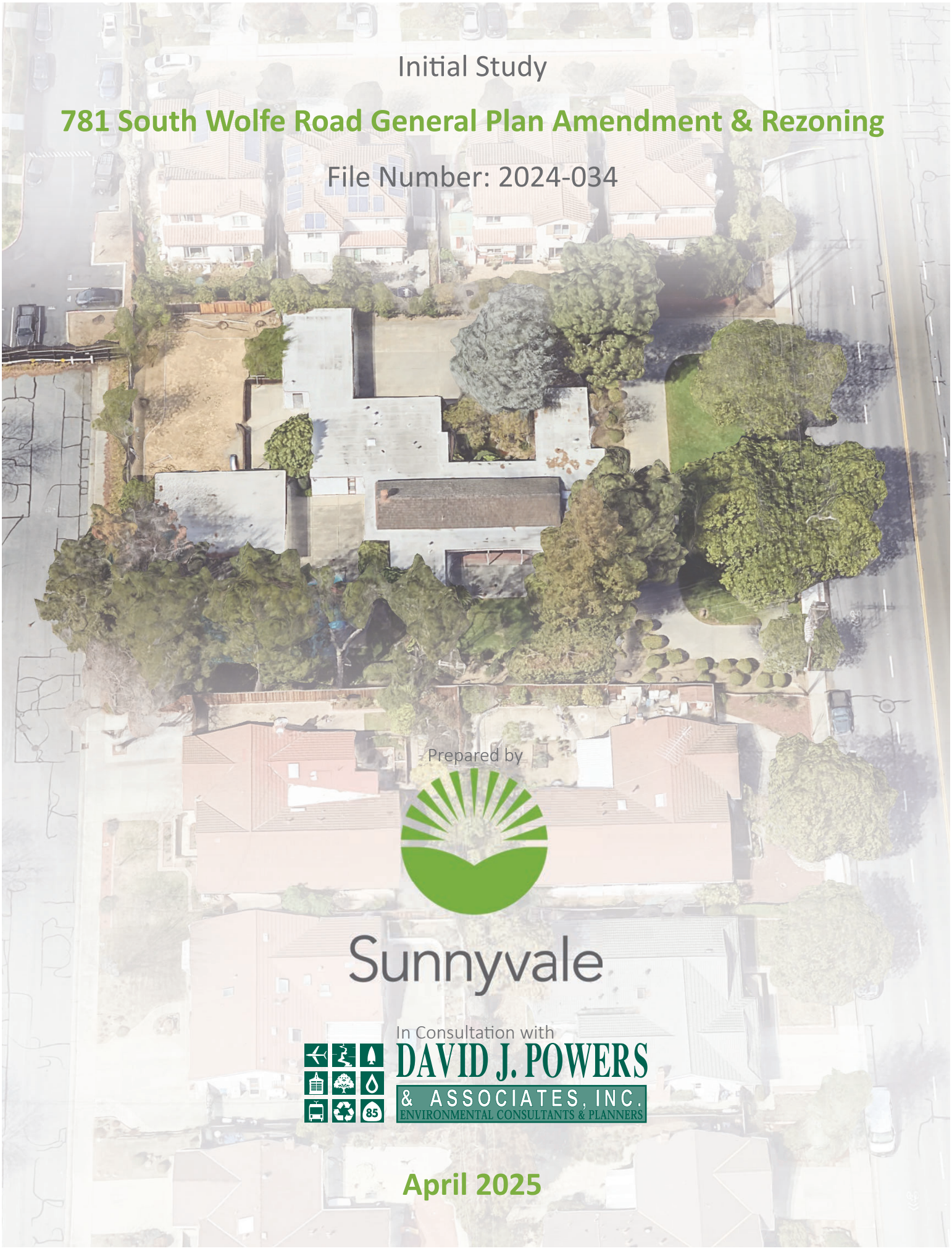
Initial Study

781 South Wolfe Road General Plan Amendment & Rezoning

File Number: 2024-034



Prepared by

Sunnyvale

In Consultation with

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ENVIRONMENTAL CONSULTANTS & PLANNERS

April 2025

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Section 1.0 Introduction and Purpose

1.1 Purpose of the Initial Study

The City of Sunnyvale, as the Lead Agency, has prepared this Initial Study for the 781 South Wolfe Road General Plan Amendment & Rezoning project in compliance with the California Environmental Quality Act (CEQA), CEQA Guidelines (California Code of Regulations §15000 et. seq.), and regulations and policies of the City of Sunnyvale, California.

The project proposes a General Plan Amendment (GPA) and rezoning to allow future development of single-family residential uses on a 0.69-acre project site located at 781 South Wolfe Road in the City of Sunnyvale. This Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the proposed GPA and rezoning project. This Initial Study does not evaluate a specific development application. Section 3.0 describes the development that is reasonably foreseeable under the implementation of the project and assumed under the impact analysis in this Initial Study.

When a specific development application associated with the project is proposed, it will be subject to CEQA, and the City shall review and compare it to the development assumptions and analysis in this Initial Study. Subsequent environmental review for the specific development project could include preparation of an Addendum to this Initial Study/Negative Declaration (ND). Pursuant to CEQA Guidelines Section 15164, the lead agency shall prepare an addendum to a previously certified negative declaration if some changes or additions are necessary but none of the conditions described in CEQA Guidelines Section 15162 have occurred that would necessitate preparation of a subsequent EIR or negative declaration.

1.2 Public Review Period

Publication of this Initial Study marks the beginning of a 20-day public review and comment period. During this period, the Initial Study will be available to local, state, and federal agencies and to interested organizations and individuals for review. Written comments concerning the environmental review contained in this Initial Study during the 20-day public review period should be sent to:

Aastha Vashist, Senior Planner
Community Development Department
City of Sunnyvale
456 West Olive Avenue
Sunnyvale, CA 94086
AVashist@sunnyvale.ca.gov

1.3 Consideration of the Initial Study and Project

Following the conclusion of the public review period, the City of Sunnyvale will consider the adoption of the Initial Study/Negative Declaration (ND) for the project at a regularly scheduled meeting. The City shall consider the Initial Study/MND together with any comments received during the public review process. Upon adoption of the MND, the City may proceed with project approval actions.

1.4 Notice of Determination

If the project is approved, the City of Sunnyvale will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15075(g)).

Section 2.0 Project Information

2.1 Project Title

781 South Wolfe Road General Plan Amendment & Rezoning

2.2 Lead Agency Contact

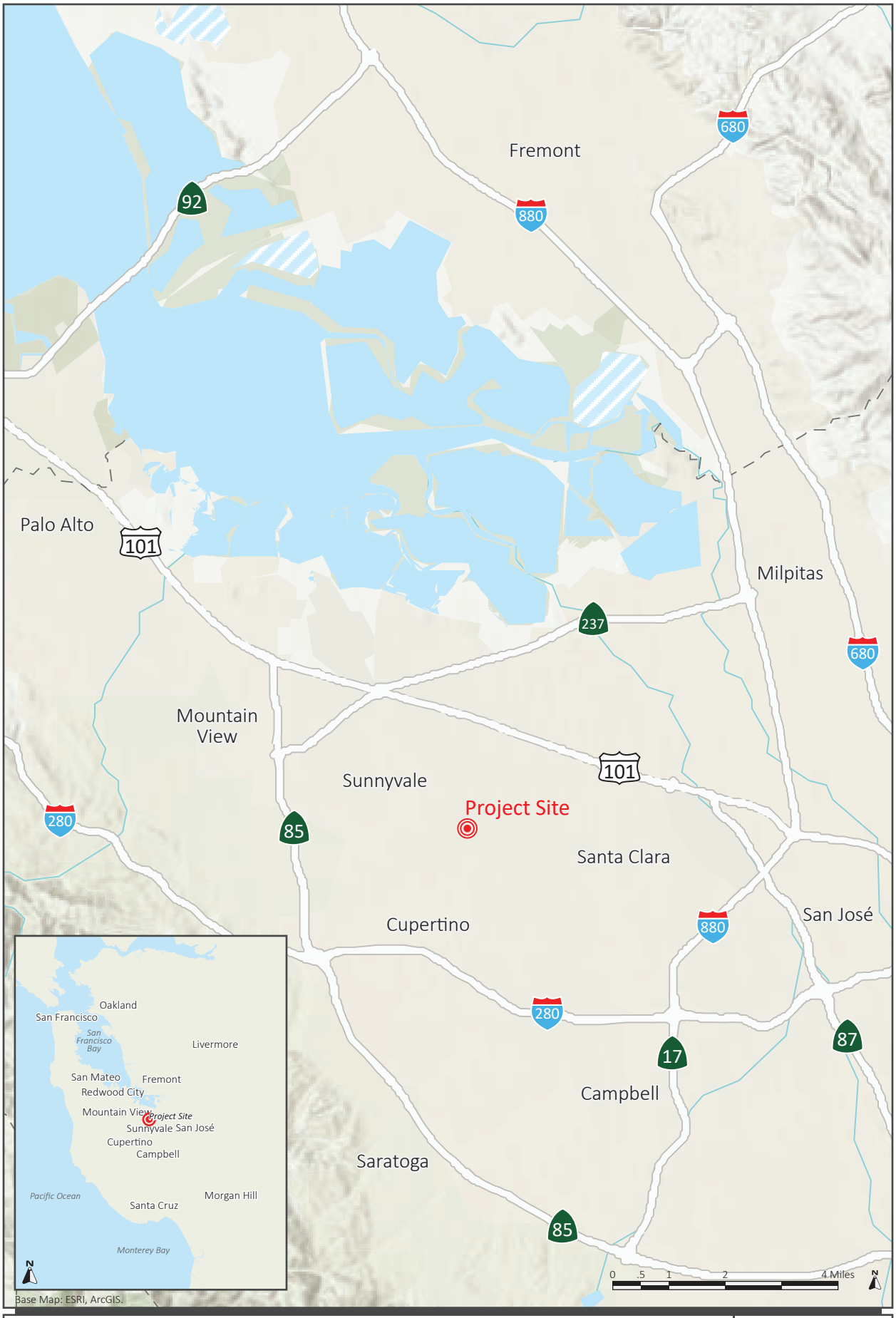
Aastha Vashist, Senior Planner
Community Development Department
City of Sunnyvale
456 West Olive Avenue
Sunnyvale, CA 94086
AVashist@sunnyvale.ca.gov
(408) 730-7458

2.3 Project Applicant

Forrest Mozart
California Communities
1068 East Meadow Circle
Palo Alto, CA 94303
FMozart@mozartdev.com
(650) 380-5399

2.4 Project Location

The 0.69-acre (or 29,980 square foot) project site is located at 781 South Wolfe Road, between Old San Francisco Road and Iris Avenue, in the City of Sunnyvale. The project site is currently developed with one single-family residence and an ancillary building. The project site is surrounded by residential uses to the north, south, west, and east. There is a commercial shopping center approximately 400 feet north of the project site at the southwest corner of Old San Francisco Road and South Wolfe Road. Regional and vicinity maps are shown on Figure 2.4-1 and Figure 2.4-2. An aerial photograph of the project site and surrounding land uses is shown on Figure 2.4-3.



REGIONAL MAP | FIGURE 2.4-1

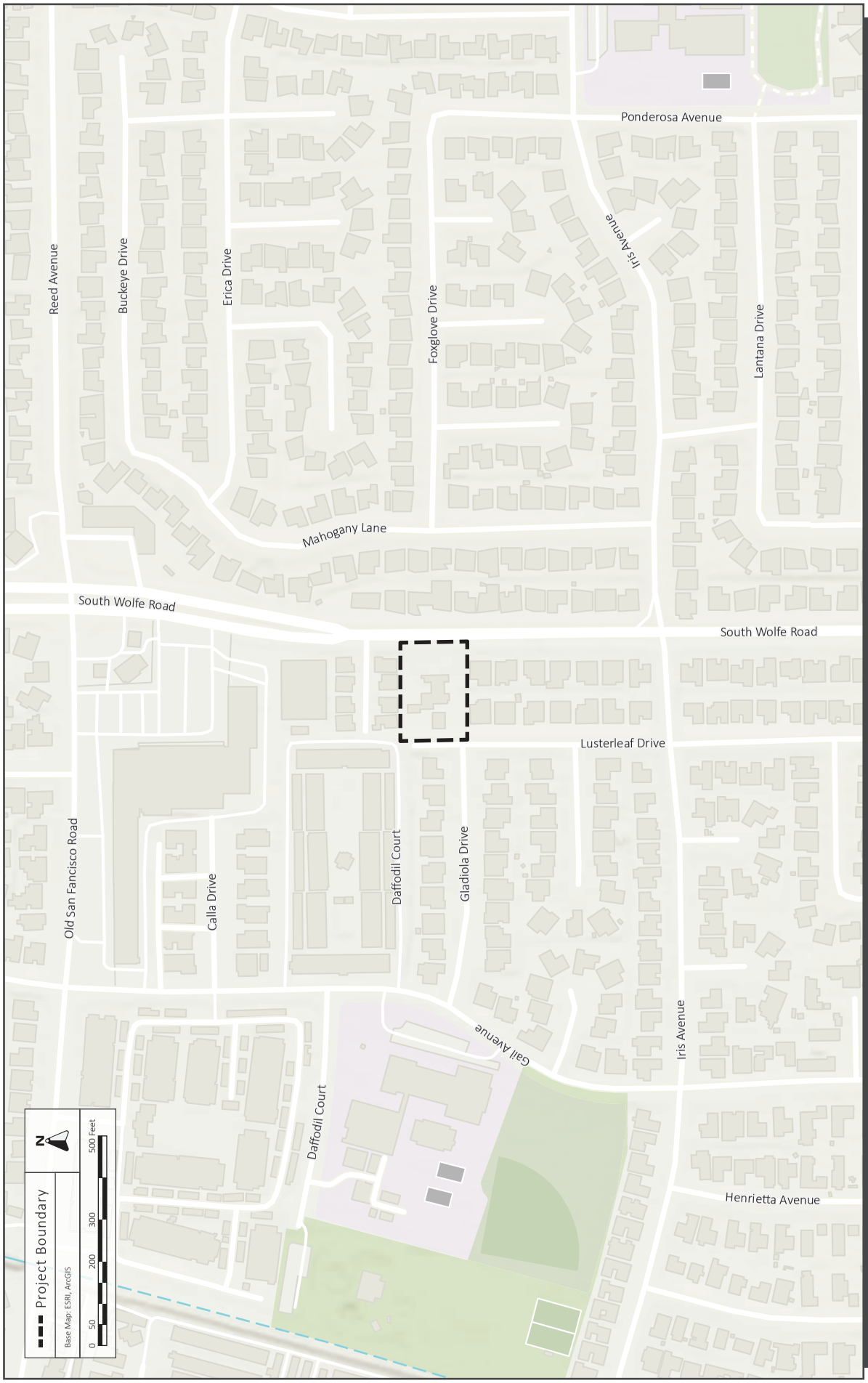


FIGURE 2.4-2

VICINITY MAP

AERIAL PHOTOGRAPH AND SURROUNDING LAND USES | FIGURE 2.4-3

2.5 Assessor's Parcel Number

211-05-009

2.6 General Plan Designation and Zoning District

The project site has a General Plan land use designation of Low Density Residential and zoning of Low Density Residential (R-0). The General Plan Low Density Residential designation is intended to preserve existing single-family neighborhoods designed around parks or schools and located along neighborhood streets or residential collector streets. This designation allows for the development of zero to seven dwelling units per acre (du/ac). Larger lots under this designation may include accessory dwelling units (ADUs) pursuant to standards provided in the Zoning Code.[1]

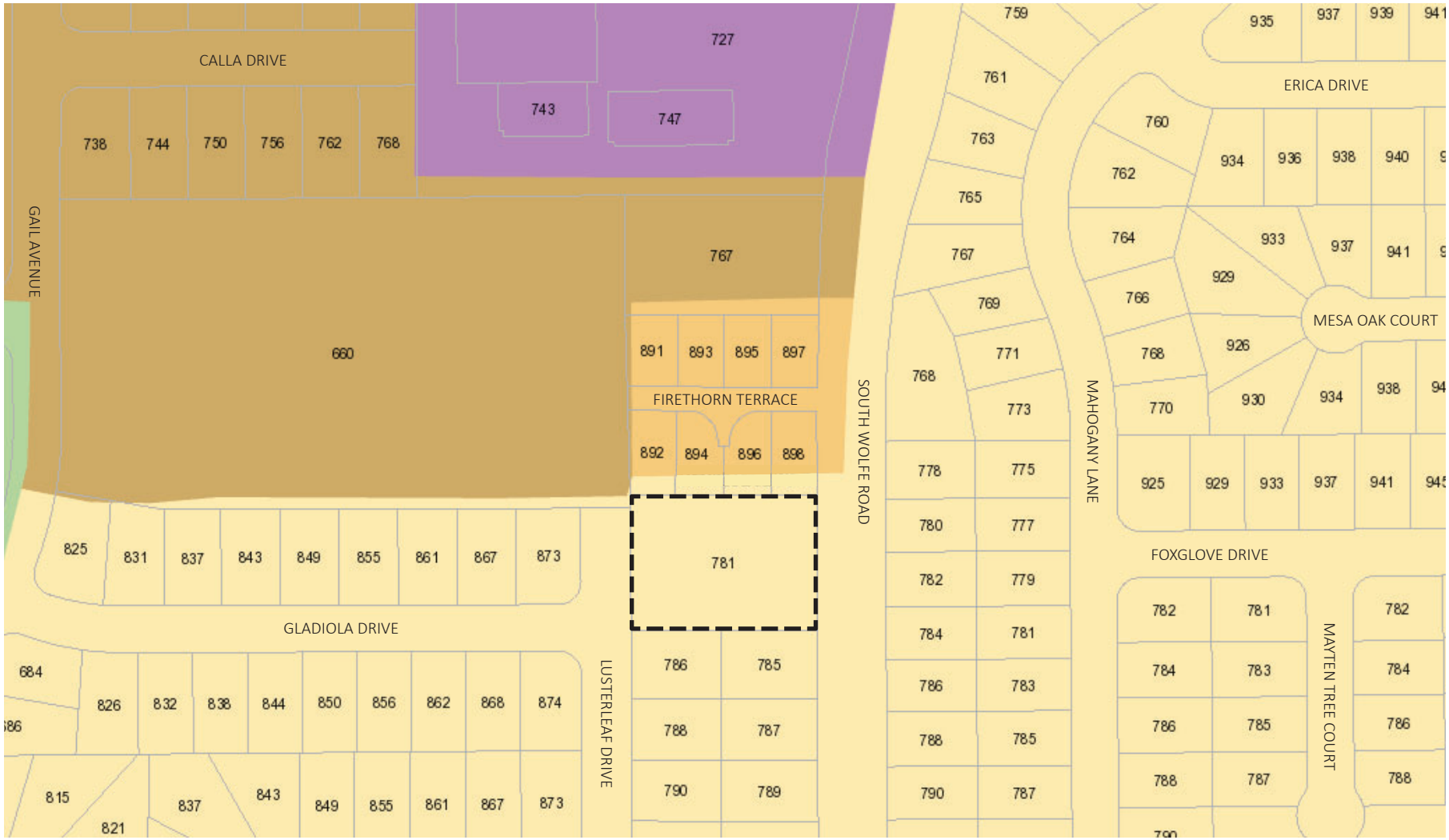
The R-0 zoning district is reserved for the construction, use and occupancy of residences at a development density of no more than seven du/ac.[2] Uses permitted in this district include single-family residences, boarding facilities, public parks and playgrounds, and small care facilities.[3] The allowable maximum building height in the R-0 district is two stories (or 30 feet) and the maximum lot coverage is limited to 45 percent.[4]

Maps of the project area's existing General Plan land use and zoning designations are shown on Figure 2.7-1 and Figure 2.7-2, respectively.

2.7 Project-Related Approvals, Agreements, and Permits

- General Plan Amendment
- Rezoning
- Special Development Permit

[1] City of Sunnyvale. *General Plan - Chapter 3: Land Use and Transportation*. June 2022. Pages 3-82 and 3-84.
[2] City of Sunnyvale. *Municipal Code.* Chapter 19.18.020 – Residential Zoning Districts.
[3] City of Sunnyvale. *Municipal Code.* Chapter 19.18 – Residential Zoning Districts. Table 19.18.030.
[4] City of Sunnyvale. *Municipal Code.* Chapter 19.32 – Building Heights, Lot Coverages, and Floor Area Ratios. Table 19.32.020.

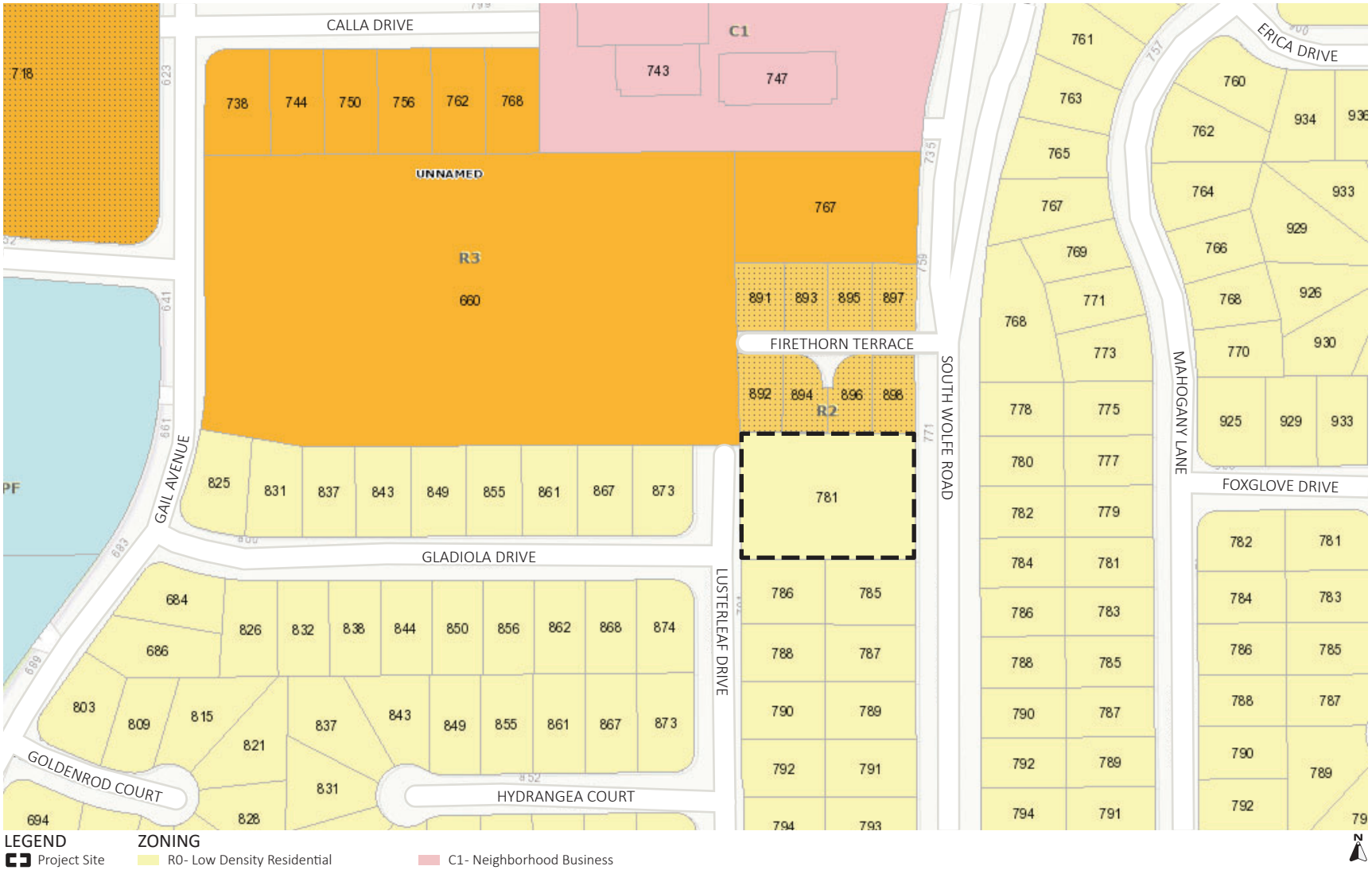


LEGEND
- Project Site

LAND USE DESIGNATION
- Low Density Residential
- Low Medium Density Residential
- Medium Density Residential
- Commercial Mixed Use
- Public Facilities

Source: City of Sunnyvale, General Plan Map, ESRI.

EXISTING GENERAL PLAN LAND USE MAP | FIGURE 2.7-1



Source: City of Sunnyvale, Zoning Map, ESRI.

EXISTING ZONING MAP

FIGURE 2.7-2

Section 3.0 Project Description

The project proposes a General Plan Amendment (GPA) and rezoning to allow future development of single-family residences on-site at a density that exceeds what is currently allowed under the existing General Plan designation and zoning. The proposed GPA and rezoning are described below.

- **General Plan Amendment to Low-Medium Density Residential** – The project proposes to change the General Plan land use designation of the site from Low Density Residential to Low-Medium Density Residential, which allows a density of seven to 14 du/ac. The intent of the Low-Medium Density Residential land use designation is to preserve existing single-family, duplexes, and smaller multi-family use neighborhoods designed around parks or schools and located along neighborhood streets or residential collector streets. This designation includes small-lot single-family homes and zero lot line homes. Larger single-family lots may include ADUs pursuant to standards in the Zoning Code.[5]

- **Rezoning to R-2 with a Planned Development (PD) Combining District** – The project also proposes to rezone the site from Low Density Residential (R-0) to Low Medium Density Residential (R-2) with a PD combining district overlay consistent with the proposed General Plan land use designation. The proposed R-2 zoning district supports residential uses with a maximum density of 12 du/ac, minimum property line setbacks of four feet for side yard on one side and 20 percent of the lot width for both sides (but not less than 10 feet), 15 feet for front yard, and 20 feet for the rear yard.[6] The maximum building height allowed under R-2 is two stories (or 30 feet).[7]

  Consistent with Sunnyvale Municipal Code (SMC) Section 19.26.020, the PD combining district overlay is intended to facilitate redevelopment of the site with a use that is compatible with the existing neighborhood but requires deviation from established development standards. The proposed PD combining district for this site would allow for the creation of lots that are less than the minimum size required in the proposed base zoning district (R-2).

There is no specific development application on file at this time associated with the proposed project; however, conceptual plans have been provided to illustrate the potential layout, design, and setbacks of a residential development that would be consistent with the proposed GPA and rezoning. If the GPA and rezoning is approved, a separate planning permit is required to process a subsequent specific development application. See Figure 3.1-1 for a conceptual site plan that shows the typical lot sizes and setbacks that could result from implementation of the project and 3.1-2 for conceptual elevations of future development on-site.

[5] City of Sunnyvale. *General Plan - Chapter 3: Land Use and Transportation*. June 2022. Page 3-84.
[6] City of Sunnyvale. *Municipal Code*. Chapter 19.34 – Front, Side and Rear Yards. Table 19.34.030.
[7] City of Sunnyvale. *Municipal Code*. Chapter 19.32.020 – Building Height, Lot Coverage, and Floor Area Ratio.

Source: Dahlin, August 5, 2024.

CONCEPTUAL SITE PLAN

FIGURE 3.1-1

CENTER OF DRIVE AISLE LOOKING NORTH

CENTER OF DRIVE AISLE LOOKING SOUTH

LUSTERLEAF DRIVE LOOKING EAST

SOUTH WOLFE ROAD LOOKING WEST

Source: Dahlin, August 5, 2024.

CONCEPTUAL ELEVATIONS | FIGURE 3.1-2

The analysis in this document for the proposed GPA and rezoning is generally programmatic in nature. For the purpose of the Initial Study analysis, it is assumed the project would result in demolition of the residence on-site and construction of eight, two-story (up to 30-foot tall) residences on lots averaging approximately 3,750 square feet. These residences would be developed consistent with the standards (e.g., setbacks and building height) of the proposed zoning (R-2). This future development would result in a development density of 11.62 du/ac on-site, consistent with the proposed land use and zoning designation.

Construction of future development on-site would involve demolition, site preparation, grading, building construction, paving, and painting. It is assumed that these construction activities would occur over a 14-month period and require a maximum excavation depth of 11 feet to accommodate the construction of building foundations and the installation of utility lines on-site.

Future development under the project may be subject to supplemental environmental review.

Section 4.0 Environmental Setting, Checklist, and Impact Discussion

This section presents the discussion of impacts related to the following environmental subjects in their respective subsections:

4.1	Aesthetics	4.12	Mineral Resources
4.2	Agriculture and Forestry Resources	4.13	Noise
4.3	Air Quality	4.14	Population and Housing
4.4	Biological Resources	4.15	Public Services
4.5	Cultural Resources	4.16	Recreation
4.6	Energy	4.17	Transportation
4.7	Geology and Soils	4.18	Tribal Cultural Resources
4.8	Greenhouse Gas Emissions	4.19	Utilities and Service Systems
4.9	Hazards and Hazardous Materials	4.20	Wildfire
4.10	Hydrology and Water Quality	4.21	Mandatory Findings of Significance
4.11	Land Use and Planning		

The discussion for each environmental subject includes the following subsections:

- **Environmental Setting** – This subsection 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the project and 2) describes the existing, physical environmental conditions at the project site and in the surrounding area, as relevant.
- **Impact Discussion** – This subsection 1) includes the recommended checklist questions from Appendix G of the CEQA Guidelines to assess impacts and 2) discusses the project's impact on the environmental subject as related to the checklist questions. For significant impacts, feasible mitigation measures are identified. "Mitigation measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines Section 15370). Mitigation measures are numbered to correspond to the impact they address. For example, MM BIO-1.3 refers to the third mitigation measure for the first impact in the Biological Resources section.

4.1 Aesthetics

4.1.1 Environmental Setting

4.1.1.1 *Regulatory Framework*

State

Streets and Highway Code Sections 260 through 263

The California Scenic Highway Program (Streets and Highway Code, Sections 260 through 263) is managed by the California Department of Transportation (Caltrans). The program is intended to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment.

In Santa Clara County, the one state-designated scenic highway is State Route (SR) 9 from the Santa Cruz County line to the Los Gatos City Limit. Eligible state scenic highways (not officially designated) include: SR 17 from the Santa Cruz County line to SR 9, SR 35 from Santa Cruz County line to SR 9, Interstate 280 (I-280) from the San Mateo County line to SR 17, and the entire length of SR 152 within the County.[8]

Local

City of Sunnyvale General Plan

The City of Sunnyvale General Plan (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 aesthetic resources and are applicable to the proposed project.

Policy	Description
Land Use and Transportation Element	
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.
Community Character Element	
CC-1.3	Ensure that new development is compatible with the character of special districts and residential neighborhoods.
CC-3.2	Ensure site design is compatible with the natural and surrounding built environment.

[8] California Department of Transportation. "State Scenic Highway Map" Accessed September 10, 2024. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa.

Sunnyvale Municipal Code

SMC Title 19 (Zoning) provides development standards and regulations meant to enhance the visual quality of new development through building height limits, building density, building design and landscaping standards, architectural features, setback requirements, sign regulations, usable open space requirements, and public artwork in private developments. The Zoning Code promotes good design and careful planning of development projects to enhance the visual environment.

- Chapter 19.42 outlines operating standards relating to the zoning code. Chapter 19.42.050 requires shielding or other special lenses to be included in any lighting sources to prevent any glare or direct illumination on any other property.
- Chapter 19.94 (Tree Preservation) regulates the protection, installation, removal and long term management of significantly sized trees on private property within the City and City-owned golf courses and parks; encourages the proper protection and maintenance of significantly sized trees which are located on such property; establishes a review and permit procedure to assure the correct planting, maintenance, protection and removal of significant trees on such property; and establishes penalties for violation of its provisions. The provisions of Chapter 19.94 identify and prescribe specific procedures and requirements for the filing, processing, and consideration of the removal and preservation of trees. A significant size tree, or protected tree, is defined as:

    - Any single trunk tree 38 inches or greater in circumference (the circumference of the tree is measured at 4.5 feet above the ground); or
    - Any multi-trunk tree which has at least one trunk 38 inches or greater in circumference or where the measurements of the multi-trunks added together equal at least 113 inches.

In addition to the provisions of the Zoning Code, Chapter 13.16 (City Trees) within SMC Title 13 provides guidance and regulations on City trees, including protected trees, removal or damage to trees, and permitting. Permitting is required for planting trees in the public ROW, removal or maintenance to protected trees, and construction affecting protected trees.

Sunnyvale Development Review Process

The City's development review process includes the review of preliminary plans and the consideration of public input by the Zoning Administrator, Planning Commission, and City Council. The City reviews private and public development applications for conformance with City plans, ordinances, and policies related to zoning, urban design, and CEQA.

4.1.1.2 *Existing Conditions*

Scenic Vistas

The term scenic vista typically refers to an expansive view of an area that is visually or aesthetically pleasing, usually as seen from an elevated point or open area. The project site is in a fully developed area of the City and is located on relatively flat land, which limits the amount of expansive views from the project area. Views of the Santa Cruz Mountains can be seen in the project vicinity, looking south on South Wolfe Road. The views, however, are obstructed by existing landscaping and development.

Visual Character and Quality

There are no state-designated scenic highways in Sunnyvale and the project site is not visible from a designated state scenic highway. The nearest segment of state-designated scenic highway is SR 9 from the Santa Cruz County line to the Los Gatos City limit, which is approximately 7.3 miles southwest of the project site. The project site is not visible from this designated state scenic highway.

The project site is currently developed with one, one-story, unoccupied single-family residence that is mid-century modern in design. The site also contains an ancillary building of a matching architectural style that was previously used as a garage space and pool house. There is landscaping in both the front and back yards, which consists of trees, shrubs, and lawn areas. There are 35 trees total on-site. Additional information regarding the trees on-site can be found in Section 4.4 Biological Resources. There are two paved driveways entering the site via South Wolfe Road, which connect to form a semicircle in front of the residence. The northernmost driveway also extends to the gated backyard, where there is a pool and landscaped space.

The surrounding area in the immediate vicinity of the project site consists primarily of one- and two-story single-family residences. The properties to the north of the project site comprise a planned development of eight, two-story, single-family residences and are separated from the project site by a five- to six-foot-tall wooden fence. There are single-story single-family residences to the south as well as east across South Wolfe Road. A single-family residential neighborhood is located west of the site which is developed with one- to two- story residential structures. There is a commercial shopping center approximately 400 feet north of the project site at the southwest corner of Old San Francisco Road and South Wolfe Road.

Views of the project site and surrounding area are shown in Photos 1-4.

Photo 1: View from the northeast corner of the project site looking southwest.

Photo 2: View from the southeastern boundary of the site looking north on South Wolfe Road.

PHOTOS 1 & 2

Photo 3: View of the western project boundary looking east from Lusterleaf Drive.

Photo 4: View from the western project boundary looking north on Lusterleaf Drive.

PHOTOS 3 & 4

4.1.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings?[9] If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

a) Would the project have a substantial adverse effect on a scenic vista?

As discussed in Section 4.1.1.2 Existing Conditions, the flat topography and urban location of the project area limits the views of scenic resources. The primary scenic resource visible from the project vicinity is the Santa Cruz Mountain Range, the views of which are obstructed by existing development and mature landscaping. Future development under the project could result in the construction of up to eight single-family residences. These residences would not exceed two stories (or a maximum of 30 feet), which is consistent with the surrounding residential development and the maximum height allowed for the project site under the development standards outlined in Title 19 of the SMC for both the current and proposed zoning designation.

Given that the project site is in an urban and developed area where views of the Santa Cruz Mountains are limited and future development under the project would be consistent with the surrounding neighborhood and the development standards in Title 19 of the SMC for the proposed zoning designation, the project would not substantially affect the already obstructed views. The project, therefore, would result in a less than significant impact to scenic vistas. **(Less than Significant Impact)**

[9] Public views are those that are experienced from publicly accessible vantage points.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

As discussed in Section 4.1.1.2 Existing Conditions, there are no state-designated scenic highways in Sunnyvale and the nearest state designated scenic highway is approximately 7.3 miles southwest of the project site. The project site is not visible from that segment of state-designated scenic highway; therefore, future development made possible by the project would not have an adverse impact on the viewshed from the highway. **(No Impact)**

c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The proposed project is located in a fully urbanized area of the City. Consistent with General Plan Policies LT-4.3, CC-1.3, and CC-3.2, future development allowed under the project would be subject to the City's design review process, which would ensure incorporation of appropriate design measures (e.g., height limits, setbacks, and landscaping) to reduce potential visual impacts and ensure compatibility with the existing neighborhood character. In addition, future development under the project would be designed to comply with all Low Medium Density Residential (R-2) design standards except for the minimum lot size standard. The deviance from the typically allowed minimum lot size would be allowed under the proposed PD combining district for this site. This would be consistent with the zoning designation and site design of the parcels adjacent to the northern boundary of the project site. Therefore, the proposed project would not conflict with applicable zoning and other regulations governing scenic quality. **(Less than Significant Impact)**

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The project site is surrounded by development with existing light sources including lighting from residences, streetlights, and vehicles travelling on local roads. Sources of daytime glare include building windows and vehicles. Future development allowed under the proposed project would result in construction of eight single-family residences. The increase in the number of residences on-site would increase the amount of reflective surfaces (e.g., additional windows) and associated glare compared to the existing conditions; however, future development under the project would be designed to include materials and massing consistent with the surrounding residential development. This design would be reviewed during the City's design review process to ensure surrounding residential development. In addition, as discussed in Section 4.4 Biological Resources, it is assumed future development under the project would comply with the City's Bird Safe Building Design Guidelines and not include large expanses of reflective surfaces. Therefore, the increase in the amount of reflective surfaces on-site would not be significant and the project would not introduce a substantial new source of glare.

Currently, there is one single-family residence and an ancillary building on-site which include internal and external building lights. Future development under the proposed project would include construction of up to eight single-family residences, all of which would also include interior and exterior lighting. This would increase the number of light sources on-site compared to existing conditions.

As discussed under checklist question c), future development under the project would be subject to a planning permit process prior to receiving building permits. This review would ensure consistency with SMC Section 19.42.050, which prohibits lights, spotlights, floodlights, reflectors, and other means of illumination from being directed onto public streets or adjacent properties. Compliance with the SMC would prevent the additional sources of light associated with future development on-site from affecting adjacent properties or public right of way; therefore, impacts would be less than significant and the project would not create a new source of substantial light or glare. **(Less than Significant Impact)**

4.2 Agriculture and Forestry Resources

4.2.1 Environmental Setting

4.2.1.1 *Regulatory Framework*

State

Farmland Mapping and Monitoring Program

The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) assesses the location, quality, and quantity of agricultural land and conversion of these lands over time. Agricultural land is rated according to soil quality and irrigation status. The best quality land is identified as Prime Farmland. In CEQA analyses, the FMMP classifications and published county maps are used, in part, to identify whether agricultural resources that could be affected are present on-site or in the project area.[10]

California Land Conservation Act

The California Land Conservation Act (Williamson Act) enables local governments to enter into contracts with private landowners to restrict parcels of land to agricultural or related open space uses. In return, landowners receive lower property tax assessments. In CEQA analyses, identification of properties that are under a Williamson Act contract is used to also identify sites that may contain agricultural resources or are zoned for agricultural uses.[11]

Fire and Resource Assessment Program

The California Department of Forestry and Fire Protection (CAL FIRE) identifies forest land, timberland, and lands zoned for timberland production that can (or do) support forestry resources.[12] Programs such as CAL FIRE's Fire and Resource Assessment Program are used to identify whether forest land, timberland, or timberland production areas could be affected are located on or adjacent to a project site.[13]

[10] California Department of Conservation. "Farmland Mapping and Monitoring Program." Accessed September 10, 2024. http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx.
[11] California Department of Conservation. "Williamson Act." Accessed September 10, 2024. http://www.conservation.ca.gov/dlrp/lca.
[12] Forest Land is land that can support 10 percent native tree cover and allows for management of forest resources (California Public Resources Code Section 12220(g)); Timberland is land not owned by the federal government or designated as experimental forest land that is available for, and capable of, growing trees to produce lumber and other products, including Christmas trees (California Public Resources Code Section 4526); and Timberland Production is land used for growing and harvesting timber and compatible uses (Government Code Section 51104(g)).
[13] California Department of Forestry and Fire Protection. "Fire and Resource Assessment Program." Accessed September 10, 2024. http://frap.fire.ca.gov/.

4.2.1.2 *Existing Conditions*

The project site has a General Plan land use designation of Low Density Residential and zoning of Low Density Residential (R-0). The project site is currently developed with one single-family residence and an ancillary building and is surrounded by single-family development to the north and south, South Wolfe Road to the east, and Lusterleaf Drive to the west.

The California Important Farmland Finder Map designates the project site as "Urban and Built-Up Land", which is defined as land with at least six structures per 10 acres. Common examples of "Urban and Built-Up Land" are residential, institutional, industrial, commercial, landfill, golf course, airports, and other utility uses.[14] No lands adjacent to the project site are used for agricultural production, forest land, or timberland. Surrounding properties are designated, zoned, and used for urban uses. There are no Williamson Act parcels on or in the vicinity of the project site.[15]

4.2.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d) Result in a loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

[14] California Department of Conservation. "California Important Farmland Finder." Accessed September 10, 2024. https://maps.conservation.ca.gov/DLRP/CIFF/.
[15] County of Santa Clara. "Williamson Act and Open Space Easement." Accessed September 10, 2024. Available at: https://plandev.sccgov.org/policies-programs/williamson-act-and-open-space-easement.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

The project site is designated as "Urban and Built-Up Land" on maps prepared by the California Resources Agency for Santa Clara County. Therefore, no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be converted to non-agricultural use as a result of project implementation. **(No Impact)**

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

As discussed in Section 4.2.1.2 Existing Conditions, the project site is zoned Low Density Residential (R-0). The project site is not under a Williamson Act contract. Therefore, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract. **(No Impact)**

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production?

As discussed in Section 4.2.1.2 Existing Conditions, the project site is not zoned or adjacent to land zoned, for forest land, timberland, or Timberland Production. It is in an urban area surrounded by urban development. Therefore, the project would not conflict with existing zoning or require rezoning of forest land or timberland uses. **(No Impact)**

d) Would the project result in a loss of forest land or conversion of forest land to non-forest use?

The project site is currently developed with a single-family residence. Therefore, no forest land would be lost as a result of the project. **(No Impact)**

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

The project site is in an urbanized area of the City. No agricultural or forestry uses are on-site or in the vicinity of the project site. Therefore, the project would not result in impacts to agricultural lands or forest lands. **(No Impact)**

4.3 Air Quality

The following discussion is based, in part, on a Construction Emissions and Health Risk Assessment prepared by Illingworth & Rodkin, Inc. dated October 10, 2024. This report is attached as Appendix A to this Initial Study.

4.3.1 Environmental Setting

4.3.1.1 *Background Information*

Criteria Pollutants

Criteria air pollutants are pollutants that have established federal or state standards for outdoor concentrations to protect public health. Pursuant with the federal and State Clean Air Acts, the United States Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established and enforced the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS), respectively. The NAAQS and CAAQS address the following criteria air pollutants: ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), particulate matter with a diameter of 10 microns or less (PM_{10}), particulate matter with a diameter of 2.5 micros or less ($PM_{2.5}$), sulfur dioxide (SO_2), and lead. The CAAQS also includes visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

Toxic Air Contaminants

Toxic air contaminants (TACs) include airborne chemicals that are known to have short- and long-term adverse health effects. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, diesel fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway). Unlike criteria air pollutants, which have a regional impact, TACs are highly localized and regulated at the individual emissions source level.

DPM is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs. DPM is comprised of diesel exhaust which is a complex mixture of gases, vapors, and fine particles. Medium- and heavy-duty diesel trucks represent the bulk of DPM emissions from California highways. The majority of DPM is small enough to be inhaled into the lungs. Most inhaled particles are subsequently exhaled, but some deposit on the lung surface or are deposited in the deepest regions of the lungs (i.e., areas most susceptible to injury).[16] Chemicals in diesel exhaust, such as benzene and formaldehyde, are also TACs identified by the CARB.

An overview of the sources of criteria pollutants and TACs, as well as their associated health effects, is provided in Table 4.3-1.

[16] California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed September 10, 2024. https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health.

Table 4.3-1: Sources and Health Effects of Criteria Air Pollutants and Toxic Air Contaminants

Pollutants	Description and Sources	Primary Effects
Ozone (O_3)	O_3 is a secondary criteria air pollutant that is the result of a photochemical (sunlight) reaction between reactive organic gases (ROG) and nitrogen oxides (NO_x). Pollutants emitted by motor vehicles, power plants, industrial boilers, refineries, and chemical plants are the common sources for this reaction. High O_3 levels are caused by the cumulative emissions of ROG and NO_X. These precursor or primary pollutants react under certain meteorological conditions to form high O_3 levels. Commons sources of ROG and NO_x are vehicles, industrial plants, and consumer products.	• Aggravation of respiratory and cardiovascular diseases • Irritation of eyes • Cardiopulmonary function impairment
Nitrogen Dioxide (NO_2)	NO_2 is a reactive gas that combines with nitric oxide (NO) to form NO_x. NO_2 is the byproduct of fuel combustion, with common sources of NO_2 being emissions from cars, trucks, buses, power plants, and off-road equipment. Other sources of NO_2 include high temperature stationary combustion and atmospheric reactions.	• Aggravation of respiratory illness • Reduced visibility
Carbon Monoxide (CO)	CO is a colorless, odorless, and toxic gas that is the product of incomplete combustion of carbon-containing substances (e.g., when something is burned). Common outdoor sources of CO include mobile vehicles (passenger cars and trucks) and machinery that burn fossil fuels.	• Interferes with oxygen delivery to the body's organ due to binding with the hemoglobin in the blood • Fatigue, headaches, confusion, and dizziness
Fine Particulate Matter ($PM_{2.5}$) and Coarse Particulate Matter (PM_{10})	Particulate Matter (PM) is any material that is emitted as liquid or solid particles or a gaseous material, such as dust, soot, aerosols, and fumes. PM_{10} and $PM_{2.5}$ are both small enough particulates to be inhaled into the human lungs, and $PM_{2.5}$ is small enough to deposit into the lungs, which poses an increased health risk compared to PM_{10}. Typical sources of PM include stationary combustion of solid fuels, construction activities, vehicles, industrial processes, and atmospheric chemical reactions.	• Reduced lung function, especially in children • Aggravation of respiratory and cardiorespiratory diseases • Increased cough and chest discomfort • Reduced visibility
Sulfur Dioxide (SO_2)	SO_2 is a pungent and colorless gaseous pollutant. SO_2 is part of the sulfur oxides (SO_x) group and is the pollutant of greatest concern in the SO_x group. SO_x can react with other compounds in the atmosphere to form small particles. These particles contribute to pollution. SO_2 is primarily formed from fossil fuel combustion at power plants and other industrial facilities. Sources of SO_2 include motor vehicles, locomotives, ships, and off-road diesel equipment that are operated with fuels that contain high levels of sulfur. Industrial processes, such as natural gas and petroleum extraction, oil refining, and metal processing.	• Aggravation of respiratory illness • Respiratory irritation such as wheezing, shortness of breath and chest tightness • Increased incidence of pulmonary symptoms and disease, decreased pulmonary function

Pollutants	Description and Sources	Primary Effects
Lead	Lead is a naturally occurring element that can be found in all parts of the environment including the air, soil, and water. As an air pollutant, lead is present in small particles. The most common historic source of lead exposure was the past use of leaded gasoline in motor vehicles. The exhaust resulting from use of leaded gasoline would release lead emissions into the air. Now, major sources of lead in the air are from ore and metals processing plants and piston-engine aircraft operating on leaded aviation fuel. Other sources are waste incinerators, utilities, and lead-acid battery manufacturers. The highest air concentrations of lead are usually found near lead smelters.	• Adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems and the cardiovascular system
Toxic Air Contaminants (TACs)	TACs include certain air pollutants known to increase the risk of cancer and/or a range of other serious health effects. Sources of TAC include, but are not limited to, cars and trucks, especially diesel-fueled; industrial sources, such as chrome platers; dry cleaners and service stations; and building materials and products.	• Cancer • Chronic eye, lung, or skin irritation • Neurological and reproductive disorders

Sensitive Receptors

Some groups of people are more affected by air pollution than others. CARB has identified the following groups who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools. In addition, BAAQMD considers worker receptors as sensitive receptors.[17]

4.3.1.2 *Regulatory Framework*

Federal and State

Clean Air Act

At the federal level, the EPA is responsible for overseeing implementation of the Clean Air Act and its subsequent amendments. The federal Clean Air Act requires the EPA to set national ambient air quality standards for the six common criteria pollutants, discussed previously; PM, O_3, CO, SO_2, NO_2, and lead.[18]

[17] Bay Area Air Quality Management District. *California Environmental Quality Act Air Quality Guidelines Appendix E: Recommended Methods for Screening and Modeling Local Risks and Hazards*. 2022. Page E-14.

[18] NO_x is the group of nitrogen compounds (NO_2 and nitric oxide [NO]) that typically represents NO_2 emissions because NO_2 emissions contribute the majority of NO_x exhaust emissions emitted from fuel combustion.

CARB is the state agency that regulates mobile sources throughout the state and oversees implementation of the state air quality laws and regulations, including the California Clean Air Act. The EPA and the CARB have adopted ambient air quality standards establishing permissible levels of these pollutants to protect public health and the climate. Violations of ambient air quality standards are based on air pollutant monitoring data and are determined for each air pollutant. Attainment status for a pollutant means that a given air district meets the standard set by the EPA and/or CARB.

Diesel Risk Reduction Plan

To address the issue of diesel emissions in the state, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90 percent, this plan involves the application of emission control strategies to existing diesel vehicles and equipment to reduce DPM and other pollutants. Implementation of this plan, in conjunction with stringent federal and CARB-adopted emission limits for diesel fueled vehicles and equipment, including off-road equipment, will significantly reduce emissions of DPM and NO_X.

Regional

2017 Clean Air Plan

The Bay Area Air Quality Management District (BAAQMD) is the agency primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area, which includes the project area. Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how federal and state air quality standards will be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan. The 2017 Clean Air Plan focuses on the following two related BAAQMD goals and how to achieve them:

- Protect air quality and health at the regional and local scale by attaining all state and national air quality standards and eliminating disparities among Bay Area communities in cancer health risk from TAC; and
- Protect the climate by reducing Bay Area greenhouse gas (GHG) emissions 40 percent below 1990 levels by 2040 and 80 percent below 1990 levels by 2050.[19]

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines 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. Jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing air quality impacts developed by BAAQMD within their CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing

[19] Bay Area Air Quality Management District. *Final 2017 Clean Air Plan.* April 19, 2017. Page 12. Accessed September 18, 2024.

impacts, and recommended mitigation measures. The latest CEQA Air Quality Guidelines are the 2022 CEQA Air Quality Guidelines adopted on April 20, 2023 by the BAAQMD Board of Directors.

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 air quality and are applicable to the proposed project.

Policy	Description
Land Use and Transportation Element	
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.
Environmental Management Element	
EM-11.2	Utilize land use strategies to reduce air quality impact.
EM-11.3	Require all new development to utilize site planning to protect citizens from unnecessary exposure to air pollutants.
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.
EM-11.6	Contribute to a reduction in regional vehicle miles travelled.

City of Sunnyvale Climate Action Playbook Update and Game Plan 2028

The City of Sunnyvale Climate Action Playbook (originally adopted in August 2019) set a vision for the City to reduce carbon emissions by 2050. The Climate Action Playbook was subsequently updated in June 2024 to outline updated strategies to further reduce emissions in the City. The updated playbook includes six strategies with "plays" that identify areas for action to reduce GHG emissions (including air pollutant emissions). The following plays from the plan are related to air quality and are applicable to the proposed project.

Play	Description
Strategy 1: Promoting Clean Electricity	
1.1	Promote 100 percent clean electricity
Strategy 2: Decarbonizing Buildings	
2.3	Achieve all-electric new construction

Sunnyvale Reach Codes

The California Energy Commission (CEC) approved the City's Reach Codes, which went in effect on January 26, 2021. The Reach Codes are a local energy code for buildings design and construction that go beyond the minimum state requirements. The purpose of the Reach Codes are to help reduce GHG emissions by promoting electric versus natural gas energy use. The Reach Codes apply to new residential and non-residential construction, and includes the following requirements:

- Solar panels are required for all new buildings
- Electric vehicle charging stations (or conduit and preliminary wiring for them) are required for all new building parking lots

The Reach Codes also contains language prohibiting gas appliances (e.g., cooking range, water heater, space heater, fireplace, etc.) in new construction; however, the enforcement of that requirement is currently suspended, due to a recent federal court decision invalidating all-electric construction requirements.

4.3.1.3 *Existing Conditions*

The San Francisco Bay Area (Bay Area) Air Basin is designated a non-attainment area for the federal O_3 and $PM_{2.5}$ standards and for the state O_3, PM_{10}, and $PM_{2.5}$ standards.[20] The area has attained both NAAQS and CAAQS for CO, SO_2, and NO_2.[21] As the regional air district, BAAQMD is responsible for attaining the NAAQS and CAAQS for these pollutants. As part of an effort to attain and maintain ambient air quality standards for O_3, PM_{10}, and $PM_{2.5}$, BAAQMD has established thresholds of significance for these air pollutants and their precursors that apply to both construction period and operational period impacts. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce O_3 levels. The highest O_3 levels in the Bay Area occur in the eastern and southern inland valleys where temperatures are higher, there is less wind circulation, and sources of the precursor pollutants (ROG and NO_x) are prominent. In the Bay Area, most particulate matter is generated from the following activities: combustion, factories, construction, grading, demolition, agriculture, and motor vehicles. Motor vehicles are currently responsible for about half of particulates in the Bay Area. Elevated concentrations of PM_{10} and $PM_{2.5}$ are the result of both region-wide emissions and localized emissions.

[20] Bay Area Air Quality Management District. "Air Quality Standards and Attainment Status." Last Updated January 5, 2017. Accessed September 10, 2024. https://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status.

[21] The area has attained both state and federal ambient air quality standards for CO. The project does not include substantial new emissions of SO_2 or lead. These criteria pollutants are not discussed further.

4.3.2 Impact Discussion

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

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

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

The BAAQMD CEQA Air Quality Guidelines set forth criteria for determining consistency with the 2017 CAP. In general, a project is considered consistent if a) it supports the primary goals of the 2017 CAP; b) it includes relevant control measures; and c) it does not interfere with implementation of the 2017 CAP control measures.

Support of Primary 2017 CAP Goals

As discussed in Section 4.3.1.2 Regulatory Framework, the goals of the 2017 CAP include 1) protecting public health by progressing towards attaining air quality standards and eliminating health risk and 2) protecting the climate. As discussed below, the project would support these primary goals of the 2017 CAP through attainment of air quality standards, reducing exposure of populations to emissions, and reducing greenhouse gas emissions. If a project is below the BAAQMD criteria air pollutants thresholds of significance, its emissions are considered to not significantly affect attainment of the region's air quality standards. If future development results in health risk effects below the BAAQMD thresholds of significance, the development is assumed to not result in significant health effects. An analysis of potential construction and operational air pollutant emissions from future development under the proposed project, as well as the project's health risk, is provided below. As discussed in Section 4.8 Greenhouse Gas Emissions future

development consistent with the project assumptions would make a minimal contribution to local and regional air pollutant and greenhouse gas emissions during both construction and operation.

Construction Period Emissions

The proposed project includes a GPA and rezoning that would result in changes at the policy level and does not include a specific development proposal; however, the policy changes would facilitate the development of up to eight single-family residences on-site.

Future redevelopment of the site allowed under the project would result in short-term emissions from construction activities associated with development, including demolition, site grading, asphalt paving, building construction, and architectural coating. 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_{10} and $PM_{2.5}$ 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 construction of buildings can also generate PM_{10} and $PM_{2.5}$ emissions. Off-road construction equipment is often diesel-powered and can be a substantial source of NO_x emissions, in addition to PM_{10} and $PM_{2.5}$ emissions. Diesel exhaust from construction equipment poses both a health and nuisance impact to nearby receptors.

Construction period emissions were modeled based on a preliminary equipment list and schedule information provided by the applicant. The preliminary modeling and results show that future development under the proposed project could be below the BAAQMD thresholds of significance and, therefore, less than significant. Refer to Appendix A for details about the modeling, data inputs, and assumptions.

Construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM_{10} and $PM_{2.5}$. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. BAAQMD recommends all projects include a “basic” set of best management practices (BMPs) to manage fugitive dust and consider impacts from dust (i.e. fugitive PM_{10} and $PM_{2.5}$) to be less than significant. This analysis assumes future development under the proposed project would comply with the BAAQMD CEQA Guidelines and implement the below standard BAAQMD construction BMPs:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Unpaved roads providing access to site located 100 feet of further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.
- Publicly visible signs shall be posted with the telephone number and name of the 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 General Air Pollution Complaints number shall be visible to ensure compliance with applicable regulations.

Assuming future development under the proposed project would result in construction criteria air pollutant emissions below the BAAQMD thresholds of significance and implement the BAAQMD standard construction BMPs, construction period emissions would be reduced to a less than significant level by controlling dust, limiting equipment idling, and properly maintaining equipment. **(Less than Significant Impact)**

Operational Period Emissions

The eight single-family residences that would be allowed under the project would be below BAAQMD's operational criteria pollutant screening threshold of 421 dwelling units.[22] Therefore, emissions from operation of future development on-site would not exceed BAAQMD's operational criteria air pollutant emissions thresholds and are presumed to be less than significant. **(Less than Significant Impact)**

Construction Health Risk Effects

As discussed in further detail under checklist question c) below, preliminary analysis shows that the construction health risk effects from future development under the proposed project could exceed the BAAQMD single-source thresholds for incremental cancer risk at the maximumly exposed individual. When a specific development application associated with the project is proposed, a refined community risk assessment may be required which could identify measures to reduce the health risk to below the BAAQMD thresholds of significance if any significant health risks are identified.

[22] Bay Area Air Quality Management District. *2022 CEQA Guidelines*. April 2023. Page 4-4.

Consistency with 2017 CAP Control Measures

The 2017 CAP contains 85 control measures that describe specific actions to reduce emissions and are categorized based on the economic sector framework used by CARB for the AB 32 Scoping Plan Update. The sectors covered by the control measures are: Stationary (Industrial Sources), Transportation, Energy, Buildings, Agriculture, Natural and Working Lands, Waste Management, Water, and Super-GHG Pollutants. Many strategies are related to industrial sources and are not applicable to the project. The key strategies related to buildings and energy are:

- Expand the production of low-carbon, renewable energy by promoting on-site technologies such as rooftop solar, wind and ground-source heat pumps;
- Support the expansion of community choice energy programs throughout the Bay Area;
- Promote energy and water efficiency in both new and existing buildings; and
- Promote the switch from natural gas to electricity for space and water heating in Bay Area buildings.

Pursuant to the City's Reach Codes, future development under the project would install solar panels on all new buildings and be enrolled in Silicon Valley Clean Energy which provides electricity that is 100 percent GHG-emission free. In addition, future development on-site would voluntarily be 100 percent electric with no natural gas appliances or connections. Based on these assumptions, the project and future development under the project would not disrupt, delay, or otherwise hinder the implementation of any of the control measures. **(Less than Significant Impact)**

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

As discussed in Section 4.3.1.3 Existing Conditions, the Bay Area is considered a non-attainment area for ground-level O_3 and $PM_{2.5}$ under both the federal and state Clean Air Act. The area is also considered a non-attainment area for PM_{10} under the state act, but not the federal act. The Bay Area has attained both state and federal ambient air quality standards for CO.

As discussed under checklist question a) above, based on preliminary analysis, the construction period and operational period criteria air pollutant emissions for future development under the project are estimated not exceed the BAAQMD thresholds of significance and future development under the project is assumed to implement BAAQMD-recommended construction BMPs to control dust, limit equipment idling, and properly maintain equipment. **(Less than Significant Impact)**

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

As discussed under checklist question a) above, the proposed project includes a GPA and rezoning that would result in changes at the policy level and does not include a specific development

proposal; however, it is expected that the policy changes would facilitate the development of up to eight single-family residences on-site. Using the development assumptions outlined in Section 3.0 Project Description, a preliminary community risk assessment was completed to evaluate the health effects to nearby sensitive receptors from construction emissions that could be generated by future development on-site. Refer to Appendix A for details about the preliminary community health risk modeling, data inputs, and assumptions.

The results of the preliminary assessment show that the construction health risk effects from future development under the proposed project could exceed the BAAQMD single-source thresholds for incremental cancer risk at the maximumly exposed individual. When a specific development application associated with the project is proposed, a refined community risk assessment may be required. If significant health risks are identified, measures such as implementing BAAQMD enhanced BMPs and/or utilizing construction equipment that meets U.S. EPA Tier 4 emission standards (or equivalent), would be required to reduce the health risk to below the BAAQMD thresholds of significance. **(Less than Significant Impact)**

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Examples of land uses that generate considerable odors include wastewater treatment plants, landfills, and chemical plants. The project would allow for the future construction of up to eight single-family residences on-site. Residential land use is not a land use that would generate emissions leading to objectionable odors. Implementation of the project would result in minor emissions of diesel exhaust during construction activities. These odors would be temporary in nature and minimized with the implementation of the measures identified under checklist question b). For these reasons, the project and future development made possible by the project would not result in significant odors. **(Less than Significant Impact)**

4.3.3 Non-CEQA Effects

Per California Building Industry Association v. Bay Area Air Quality Management District, 62 Cal. 4th 369 (BIA v. BAAQMD), effects of the environment on the project are not considered CEQA impacts. The following discussion is included for informational purposes. The following discussion is included for informational purposes only because the City of Sunnyvale has General Plan Policy EM-11.3 that protects residents from unnecessary exposure to air pollutants.

In addition to evaluating health impacts from project construction and cumulative TAC sources on existing sensitive receptors (as discussed in Section 4.3.2 Impact Discussion), a health risk assessment was completed to analyze the health effects that existing TAC sources would have on the new proposed sensitive receptors (residents) that would be introduce to the site with the implementation of the project.

Health risk effects to the future on-site receptors from the existing TAC sources in the project vicinity were evaluated (see detailed analysis in Appendix A). The analysis found existing sources of TAC emissions and health risk effects from surrounding TAC sources (including nearby roadways and stationary sources) do not exceed the BAAQMD single-source or cumulative-source thresholds for health risk effects at the project site.

4.4 Biological Resources

The following discussion is based upon an Arborist Report prepared by Kielty Arborist Services, LLC dated November 27, 2023. This report is attached as Appendix B to this Initial Study.

4.4.1 Environmental Setting

4.4.1.1 *Regulatory Framework*

Federal and State

Endangered Species Act

Individual plant and animal species listed as rare, threatened, or endangered under state and federal Endangered Species Acts are considered special-status species. Federal and state endangered species legislation has provided the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the USFWS and CDFW if activities associated with a proposed project would result in the take of a species listed as threatened or endangered. To "take" a listed species, as defined by the State of California, is "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" these species. Take is more broadly defined by the federal Endangered Species Act to include harm of a listed species.

In addition to species listed under state and federal Endangered Species Acts, Sections 15380(b) and (c) of the CEQA Guidelines provide that all potential rare or sensitive species, or habitats capable of supporting rare species, must be considered as part of the environmental review process. These may include plant species listed by the California Native Plant Society and CDFW-listed Species of Special Concern.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, capture, possession, or trade of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. Hunting and poaching are also prohibited. This includes direct and indirect acts, except for harassment and habitat modification, which are not included unless they result in direct loss of birds, nests, or eggs. The CDFW also protects migratory and nesting birds under California Fish and Game Code Sections 3503, 3503.5, and 3800. The CDFW defines taking as causing abandonment and/or loss of reproductive efforts through disturbance.

Sensitive Habitat Regulations

Wetland and riparian habitats are considered sensitive habitats under CEQA. They are also afforded protection under applicable federal, state, and local regulations, and are generally subject to regulation by the United States Army Corps of Engineers (USACE), Regional Water Quality Control

Board (RWQCB), CDFW, and/or the USFWS under provisions of the federal Clean Water Act (e.g., Sections 303, 304, 404) and State of California Porter-Cologne Water Quality Control Act.

Fish and Game Code Section 1602

Streambeds and banks, as well as associated riparian habitat, are regulated by the CDFW per Section 1602 of the Fish and Game Code. Work within the bed or banks of a stream or the adjacent riparian habitat requires a Streambed Alteration Agreement from the CDFW.

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 biological resources and are applicable to the proposed project.

Policy	Description
Land Use and Transportation Element	
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 improvement, wildlife habitat, and reduction of heat islands; and enhance the health, safety, and welfare of residents.
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.

Urban Forest Management Plan

The Urban Forest Management Plan (UFMP) was adopted by the City in 2014 to sustain, protect, and promote the urban forest. The UFMP contains goals and guidelines for tree maintenance and encouraging positive tree management.

Sunnyvale Municipal Code

The SMC contains several chapters related to the protection of biological resources such as trees. Chapters relevant to the project include the following:

- Chapter 13.16 (City Trees) provides guidance and regulations on City trees, including protected trees, removal or damage to trees, and permitting.[23] Permitting is required for

[23] Pursuant to SMC Chapter 13.16, a "City tree" is defined as any woody plant which is growing within the public right-of-way along a city street and has a trunk four inches or more in diameter at four and one-half feet above normal ground level.

planting trees in the public right of way, removal or maintenance to protected trees, and construction affecting protected trees.

- Chapter 19.94 (Tree Preservation) regulates the protection, installation, removal and long term management of significantly sized trees on private property within the City and City owned golf courses and parks; encourages the proper protection and maintenance of significantly sized trees which are located on such property; establishes a review and permit procedure to assure the correct planting, maintenance, protection and removal of significant trees on such property; and establishes penalties for violation of its provisions. The provisions of Chapter 19.94 identify and prescribe specific procedures and requirements for the filing, processing, and consideration of the removal and preservation of trees. A significant size tree (or protected tree) is defined as:

    - Any single trunk tree 38 inches or greater in circumference (the circumference of the tree is measured at 4.5 feet above the ground); or
    - Any multi-trunk tree which has at least one trunk 38 inches or greater in circumference or where the measurements of the multi-trunks added together equal at least 113 inches.

Bird Safe Design Guidelines

In order to address bird safety concerns, the City Council adopted the Bird Safe Building Design Guidelines in January 2014. The intent of these guidelines is to reduce the risk of bird collisions in new construction. These guidelines focus on building design issues based upon the location of the proposed building and provide a set of design requirements. These guidelines address design requirements for (1) sites within 300 feet of a body of water or that are adjacent to an open space or park area larger than one acre in size and (2) for other areas of the City that are considered to be lower risk for bird collisions. The design requirements include minimizing reflective surfaces and glass walls, reducing nighttime lighting, discouraging the placement of larger water features, and avoiding landscape designs that emphasize tall landscaping adjacent to reflective surfaces.

4.4.1.2 *Existing Conditions*

The project site is currently developed with one single-family residence, an ancillary building, pool, and landscaping. The site is within an urban area and provides habitat and foraging opportunities for urban-adapted birds. Habitats primarily associated with Bay Area special-status species, such as riparian, wetland, salt marsh, freshwater marsh, and serpentine grassland habitats, are not present on or adjacent to the site. The nearest waterway is the Sunnyvale East Channel, which is a man-made channel constructed to manage the risk associated with flooding in the area. It is located approximately 0.3-mile to the west of the project site. The nearest wetland area is the freshwater pond located adjacent to the Sunnyvale Community Center, approximately 0.7-mile southwest of the project site.

The primary biological resources on-site are trees. The project site contains 35 trees total, 14 of which are protected as defined in the SMC.[24] The predominant species on-site is the privet tree, which makes up approximately 34 percent (or 12 trees) of the total trees on-site.

4.4.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

[24] Kielty Arborist Services LLC. *781 South Wolfe Road Sunnyvale CA Arborist Report* 2023. November 27th, 2023. Page 1.

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

Because the project site is fully developed, located in an urban area surrounded by development, and lacks sensitive habitats, no special status species are expected on the project site. However, nesting birds (which are protected under provisions of the MBTA and CDFW regulations) may be periodically present in trees and landscaping on and adjacent to the project site. Future development would be required comply with MBTA and CDFW to avoid disturbing active nests that may be affected by project construction. Compliance with the MBTA and CDFW regulations could include implementation the following measure, or equivalent, by future development:

- When possible, construction shall be scheduled to avoid the nesting season to the extent feasible. The nesting season for most birds, including most raptors, in the San Francisco Bay area extends from February 1 through August 31.

  If it is not possible to schedule construction and tree removal between September and January, then pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests shall be disturbed during project implementation. This survey shall be completed no more than 14 days prior to the initiation of grading, tree removal, or other demolition or construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August).

  During this survey, the ornithologist shall inspect all trees and other possible nesting habitats within and immediately adjacent to the construction area for nests. If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist shall determine the extent of a construction-free buffer zone to be established around the nest to ensure that nests of bird species protected by the MBTA or Fish and Game code shall not be disturbed during project construction.

  A final report of nesting birds, including any protection measures, shall be submitted to the Director of Community Development prior to the start of grading or tree removal.

Compliance with the MBTA and CDFW regulations (e.g., by avoiding construction activities during the nesting season and conducting preconstruction surveys in order to avoid disturbing active nests that may be affected by project construction) would result in less than significant impacts to nesting birds. **(Less than Significant Impact)**

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?

As discussed in Section 4.4.1.2 Existing Conditions, the project site and adjacent sites do not contain any riparian habitat or other sensitive natural communities. The nearest waterway is the Sunnyvale East Channel, which is located approximately 0.3-mile to the west of the project site. Given the distance to the nearest waterway and riparian habitat, future development under the proposed project would not result in impacts to riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. **(No Impact)**

c) Would the project have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means?

As discussed in Section 4.4.1.2 Existing Conditions, the project site and adjacent sites do not contain any wetlands. The nearest wetland area is the freshwater pond located adjacent to the Sunnyvale Community Center approximately 0.7-mile southwest of the project site. Future development under the proposed project would not result in impacts to state or federally protected wetlands. **(No Impact)**

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The project site is in a developed urban area, and it does not contain any waterways, wetlands, or open space areas along the San Francisco Bay that could provide habitat or movement corridors for wildlife species (including fish, birds, and non-flying wildlife) in the region. There are no identified wildlife nursery sites present on the project site.[25] For these reasons, future development under the project would not impact migratory fish or wildlife species, wildlife corridors, and wildlife nursery sites. **(No Impact)**

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

Sunnyvale Municipal Code Chapters 13.16 and 19.94

As discussed in Section 4.4.1.2 Existing Conditions, the project site contains 35 trees total, 14 of which are defined as protected in the SMC. Most of the trees are located on the perimeter of the project site. Future development on-site could result in the removal of on-site trees or street trees.

[25] A wildlife nursery site is defined as a site where wildlife concentrates for hatching and/or raising young, such as rookeries, spawning areas, and bat colonies.

Future development would obtain the necessary permits to plant, maintain, remove, and protect city trees during construction, consistent with the requirements in SMC Chapter 13.16. Pursuant to SMC Chapter 19.94, future development would follow the procedures and requirements for removing any of the 14 protected trees on the project site. If tree replacement is not feasible, payment of in-lieu fees may be required. At the discretion of the Director of Community Development, replacement trees may be required as a condition of issuance of a protected tree removal permit, or as a condition of any discretionary permit for development or redevelopment (SMC Chapter 19.94.080). Based on this discussion, implementation of the project would not conflict with the SMC Chapters 13.16 and 19.94. **(Less than Significant Impact)**

Bird Safe Design Guidelines

The City's Bird Safe Building Design Guidelines stipulate that efforts should be taken to reduce bird strikes in all locations of the City. Future development on-site would be designed to comply with applicable measures from the Bird Safe Design Guidelines including the following:

- Avoid large expanse of glass near open areas, especially when tall landscaping is immediately adjacent to the glass walls
- Avoid the funneling of open space towards a building face
- Prohibit glass skyways or freestanding glass walls
- Avoid transparent glass walls coming together at building corners to avoid birds trying to fly through glass
- Reduce glass at top of building, especially when incorporating a green roof into the design;
- Prohibit up lighting or spotlights
- Shield lighting to cast light down onto the area to be illuminated
- Turn commercial building lights off at night or incorporate blinds into window treatment to use when lights are on at night
- Create smaller zones in internal lighting layouts to discourage wholesale area illumination

The City would review future development during the design review process to ensure compliance with the City's Bird Safe Design Guidelines. **(Less than Significant Impact)**

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The project site is not part of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. The Santa Clara Valley Habitat Plan/Natural Community Conservation Plan (Habitat Plan) is a conservation program to promote the recovery of endangered species in portions of Santa Clara County while accommodating planned development, infrastructure, and maintenance activities. The City of

Sunnyvale, including the project site, is located outside the Habitat Plan area and outside of the expanded study area for burrowing owl conservation. Therefore, it would not conflict with any approved local, regional, or state habitat conservation plan. **(No Impact)**

4.5 Cultural Resources

The following discussion is based, in part, upon a Historic Resource Evaluation prepared by Evans & De Shazo, Inc. dated October 13, 2023 which is attached as Appendix C to this Initial Study and an Archaeological Study was prepared by Evans & De Shazo, Inc. dated December 26, 2024. A copy of the confidential Archaeological Study is on file at the City of Sunnyvale.

4.5.1 Environmental Setting

4.5.1.1 *Regulatory Framework*

Federal and State

National Historic Preservation Act

Federal protection is legislated by the National Historic Preservation Act of 1966 (NHPA) and the Archaeological Resource Protection Act of 1979. These laws maintain processes for determination of the effects on historical properties eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA and related regulations (36 Code of Federal Regulations [CFR] Part 800) constitute the primary federal regulatory framework guiding cultural resources investigations and require consideration of effects on properties that are listed or eligible for listing in the NRHP. Impacts to properties listed in the NRHP must be evaluated under CEQA.

The NRHP is the nation's master inventory of historic resources that are considered significant at the national, state, or local level. The minimum criteria for determining NRHP eligibility include:

- The property is at least 50 years old (properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included in the NRHP);
- It retains integrity of location, design, setting, materials, workmanship, feeling, and associations; and
- It possesses at least one of the following characteristics:
    - Association with events that have made a significant contribution to the broad patterns of history;
    - Association with the lives of persons significant in the past;
    - Distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant, distinguishable entity whose components may lack individual distinction; or
    - Has yielded, or may yield, information important to prehistory or history.

California Register of Historical Resources

The California Register of Historical Resources (CRHR) is administered by the State Office of Historic Preservation and encourages protection of resources of architectural, historical, archeological, and cultural significance. The CRHR identifies historic resources for state and local planning purposes and affords protections under CEQA. Under Public Resources Code Section 5024.1(c), a resource may be eligible for listing in the CRHR if it meets any of the NRHP criteria.[26]

Historical resources eligible for listing in the CRHR must meet the significance criteria described previously and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data.

The concept of integrity is essential to identifying the important physical characteristics of historical resources and, therefore, in evaluating adverse changes to them. Integrity is defined as "the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance." The processes of determining integrity are similar for both the CRHR and NRHP and use the same seven variables or aspects to define integrity that are used to evaluate a resource's eligibility for listing. These seven characteristics include 1) location, 2) design, 3) setting, 4) materials, 5) workmanship, 6) feeling, and 7) association.

Senate Bill 18

The intent of SB 18 is to aid in the protection of traditional tribal cultural places through local land use planning by requiring city governments to consult with California Native American tribes on projects which include adoption or amendment of general plans (defined in Government Code Section 65300 et seq.) and specific plans (defined in Government Code Section 65450 et seq.). SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process.

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act applies to both state and private lands. The act requires that upon discovery of human remains, construction or excavation activity must cease and the county coroner be notified.

Public Resources Code Section 5097.98

Section 15064.5 of the CEQA Guidelines specifies procedures to be used in the event of an unexpected discovery of Native American human remains on non-federal land. These procedures are outlined in Public Resources Code Section 5097.98. These codes protect such remains from

[26] California Office of Historic Preservation. "CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6." Accessed September 11, 2024. https://ohp.parks.ca.gov/pages/1054/files/ts01ca.pdf.

disturbance, vandalism, and inadvertent destruction, establish procedures to be implemented if Native American skeletal remains are discovered during construction of a project, and establish the Native American Heritage Commission (NAHC) as the authority to resolve disputes regarding disposition of such remains.

Pursuant to Public Resources Code Section 5097.98, in the event of human remains discovery, no further disturbance is allowed until the county coroner has made the necessary findings regarding the origin and disposition of the remains. If the remains are of a Native American, the county coroner must notify the NAHC. The NAHC then notifies those persons most likely to be related to the Native American remains. The code section also stipulates the procedures that the descendants may follow for treating or disposing of the remains and associated grave goods.

California Health and Safety Code Section 7050.5

Section 7050.5 of the California Health and Safety Code states that it is a misdemeanor to knowingly disturb a human burial and requires that excavation be halted in the event of discovery of human remains in accordance with Public Resources Code Section 5097.98.

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 cultural resources and are applicable to the proposed project.

Policy	Description
Community Character Element	
CC-5.1	Preserve existing landmarks and cultural resources and their environmental settings.
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.
CC-5.3	Identify and work to resolve conflicts between the preservation of historic resources and alternative land uses.
CC-5.4	Seek out, catalog and evaluate heritage resources which may be significant.
CC-5.5	Archeological resources should be preserved whenever possible.

In addition, the General Plan includes Action LT-1.10f to protect cultural resources. Action LT-1.10f states to 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 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.

Sunnyvale Municipal Code

Chapter 19.96 (Heritage Preservation) of the SMC establishes the Heritage Preservation Commission to oversee the designation, preservation, restoration, rehabilitation, relocation, or reconstruction of qualified historic resources (e.g., buildings, properties, signs, features, and trees). The Heritage Preservation Commission has the chance to review all permit applications regarding heritage resources, heritage resource districts, landmark site, or landmark district designated structures that involve changing use, exterior alteration, or demolition; and approve, disapprove, or approve as modified said applications.

Heritage Resource Inventory

The City maintains a Heritage Resource Inventory (HRI) containing landmarks, trees, residential and commercial districts, and individual structures of local importance. There are two main types of protected structures in Sunnyvale: heritage resources and local landmarks. A local landmark is the highest level of protection afforded by the City under the SMC. Heritage resources have a somewhat lower level of protection that recognizes properties which have architectural or historic significance. The inventory was last updated to remove a heritage resource in September 2024.[27]

4.5.1.2 *Existing Conditions*

Historic Resources

Sunnyvale was a historically agricultural community until the mid-twentieth century when the economy shifted towards industrial uses and, as a result, the City became more urbanized. Prior to construction of the existing residence on-site in 1965, the project site and the surrounding properties contained orchards that were utilized for agricultural purposes.

The project site does not contain any structures listed the NRHP or the CRHR; nor does it contain any resources listed on the City of Sunnyvale Heritage Resources Inventory.[28] The project site currently contains two buildings, the primary residence (which was constructed in 1965) and the ancillary building (which was constructed in 1971). To be considered a historic resource, a site must meet certain sets of criteria including relevance to local and regional history, its association with historic figures, and the distinctiveness of its architecture. To determine whether any of the structures on-site meet the established criteria to be considered a historic resource, a Historic Resource Evaluation (which is included in Appendix C) was completed for the existing structures on-site. The Historic Resource Evaluation determined that none of the structures on-site would be eligible for listing on the CRHR under any criteria; therefore, the existing structures would not qualify as historic resources. Refer to Appendix C for a more detailed evaluation of the potential historic significance of the existing structures on-site.

[27] City of Sunnyvale. "Heritage Resources Inventory." Revised September 2024. Accessed January 23, 2025. https://www.sunnyvale.ca.gov/home/showpublisheddocument/1556/637820850915270000.
[28] City of Sunnyvale. "Heritage Resources Inventory." Revised September 2024. Accessed January 23, 2025. https://www.sunnyvale.ca.gov/home/showpublisheddocument/1556/637820850915270000.

Archaeological Resources

A records search at the Northwest Information Center of the California Historical Resources Information System (CHRIS) was completed to identify all recorded archaeological sites on and within one-half mile of the project site. No archaeological resources have been recorded on the site, and only one built environment resource was recorded as being within one-half mile of the project site. This built environment resource (a residence located at 925 South Wolfe Road which was constructed in 1929) was located approximately 0.4-mile south of the project site prior to being converted to a clubhouse for a new apartment complex in 1974. The built environment resource was evaluated for its potential historic significance prior to the renovation, and was determined to be ineligible for listing on the NRHP and the CRHR.

Historic-era maps and aerial photos were also reviewed to identify the potential for historic-era archaeological resources in the project site. A review of historic maps shows no evidence of structures on the project site until construction of a small building in 1956, which was demolished prior to construction of the existing residence in 1965. Based on the historic uses on-site and the lack of substantial development prior to the current structures, the project site has a low sensitivity to contain historic-era archaeological resources.

Native American archaeological sites are most often found in flat locations with access to a perennial source of fresh water. In Santa Clara County, these Native American sites are most often found within one-half mile of major watercourses and one-quarter mile of minor watercourses. Soils deposited during the Holocene era (approximately 11,700 years ago), are more likely to contain buried archaeological deposits.

Within the project area, the soil consists of Pleistocene alluvial fan deposits, which were deposited prior to 11,700 years ago, and younger Holocene-age alluvial surficial sediments. In addition, near surface soils on-site contain urban land-Flaskan complex soils, which are comprised of approximately 70 percent urban land, 20 percent Flaskan and similar soils, and 10 percent minor components. Urban land soils consist of disturbed and human-transported materials which are less likely to contain unknown archaeological resources.

The nearest water sources in pre-contact history were Calabazas Creek, approximately 1.5 miles to the east, Stevens Creek, approximately 2.5 miles to the west, and the San Francisco Bay estuary, approximately 3.8 miles to the north of the project site. Based on the absence of previously recorded archaeological resources within a one-half mile of the project site, the age of underlying soils, and the lack of nearby water courses, the project site has a low sensitivity for buried Native American archaeological deposits.

4.5.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource as pursuant to CEQA Guidelines Section 15064.5?	☐	☐	☒	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?

The project site contains two buildings, the primary residence which was constructed in 1965, and the ancillary building which was constructed in 1971. As discussed above in Section 4.5.1.2 Existing Conditions, neither structure is listed the NRHP, CRHR, or the City of Sunnyvale Heritage Resources Inventory. In addition, the site-specific Historic Resource Evaluation determined that the property, including all structures on-site, would not be eligible for listing on the CRHR under any criteria. Therefore, the project does not contain any historic resources and future development on-site would not result in a substantial adverse change in the significance of a historic resource. **(Less than Significant Impact)**

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

As discussed above in Section 4.5.1.2 Existing Conditions, no archaeological resources have been previously identified on or adjacent to the project site and the site has a low sensitivity for Native American archaeological resources and a low sensitivity for historic-era archaeological resources. Future development under the project, however, could disturb previously unknown archaeological resources on-site during excavation. Future development under the project would comply with the NHPA, CRHR, Archaeological Resource Protection Act of 1979, General Plan Policy CC-5.5, and General Plan Action LT-1.10f to avoid and/or reduce impacts to archaeological resources to a less than significant level by preserving archaeological resources, halting all ground-disturbing activities if resources are encountered, retaining a qualified archaeologist to evaluate the significance of the encountered resources pursuant to existing regulations, and implementing measures to protect the resource. Therefore, the project would not adversely impact archaeological resources. **(Less than Significant Impact)**

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

As discussed in checklist question b) above, although the project site has low sensitivity for Native American resources, ground-disturbing activities during the construction of future developments on-site could impact unknown underground resources, including human remains. Future development under the project would comply with existing regulations, including Public Resources Code Section 5097 and 5097.98, California Health and Safety Code Section 7050.5, and General Plan Policy CC-5.5 to protect human remains (if discovered on-site) by following existing protocol to halt work in the event of a discovery, notifying the Santa Clara County Coroner and NAHC as applicable, and implementing measures to protect and reinter the remains. Therefore, the project would not result in significant impacts to human remains. **(Less than Significant Impact)**

4.6 Energy

4.6.1 Environmental Setting

4.6.1.1 *Regulatory Framework*

Federal and State

Energy Star Fuel Efficiency

At the federal level, energy standards set by the EPA apply to numerous consumer products and appliances (e.g., the EnergyStar™ program). The EPA also sets fuel efficiency standards for automobiles and other modes of transportation.

Renewables Portfolio Standard Program

In 2002, California established its Renewables Portfolio Standard Program, with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent of retail sales by 2010. Governor Schwarzenegger issued Executive Order (EO) S-3-05, requiring statewide emissions reductions to 80 percent below 1990 levels by 2050. In 2008, EO S-14-08 was signed into law, requiring retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. In October 2015, Governor Brown signed SB 350 to codify California's climate and clean energy goals. A key provision of SB 350 requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable sources by 2030. SB 100, passed in 2018, requires 100 percent of electricity in California to be provided by 100 percent renewable and carbon-free sources by 2045.

Executive Order B-55-18 and Assembly Bill 1279

Executive Order B-55-18 was issued in September 2018. It ordered a new statewide goal of achieving carbon neutrality no later than 2045 and to maintain net negative emissions thereafter.

Assembly Bill 1279, also known as the California Climate Crisis Act, was approved on September 16, 2022, and codifies the statewide goal set by Executive Order B-55-18 of achieving net zero GHG emissions no later than the year 2045 and maintaining net negative emissions thereafter. In addition, this bill has a statewide goal of reducing anthropogenic GHG emissions by 85 percent below the 1990 levels by the year 2045. The bill requires CARB to work with relevant state agencies to ensure that updates to the scoping plan, identify and recommend measures to achieve these policy goals, and implement strategies that enable CO_2 removal solutions and carbon capture, utilization, and storage technologies in California. The bill requires CARB to submit an annual report.

California Building Standards Code

The Energy Efficiency Standards for Residential and Non-residential Buildings, as specified in Title 24, Part 6 was established in 1978 in response to a legislative mandate to reduce California's energy

consumption. Title 24 is updated approximately every three years. Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments. The California Building Energy Efficiency Standards (California Energy Code) is under Title 24, Part 6 and is overseen by the California Energy Commission (CEC). This code includes design requirements to conserve energy in new residential and non-residential developments. The California Energy Code is enforced and verified by cities during the planning and building permit process.

Title 24, Part 11 of the California Building Standards Code (CBSC), also known as CALGreen, establishes mandatory green building standards for buildings in California. CALGreen was developed to reduce GHG emissions from buildings, promote environmentally responsible and healthier places to live and work, reduce energy and water consumption, and respond to state environmental directives. CALGreen covers five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.

CALGreen also requires new construction and demolition projects to have a diversion of at least 65 percent of the construction waste generated. CALGreen also allows a disposal reduction option that can be met when the project's disposal rate is 2.0 pounds per square foot or less for non-residential and high-rise residential construction or 3.4 pounds per square foot or less for low-rise residential construction.

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars II program in 2022 in coordination with the EPA and National Highway Traffic Safety Administration. The program combines the control of smog-causing pollutants and GHG emissions into a single coordinated set of requirements for vehicle model years 2026 through 2035. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel savings.[29]

Local

City of Sunnyvale Climate Action Playbook Update and Game Plan 2028

The City of Sunnyvale Climate Action Playbook (originally adopted in August 2019) set a vision for the City to reduce carbon emissions by 2050. The Climate Action Playbook was subsequently updated in June 2024 to outline updated strategies to further reduce emissions in the City and adopted as a qualified greenhouse gas reduction strategy pursuant to CEQA Guidelines. The updated playbook includes six strategies with "plays" that identify areas for action to reduce GHG emissions (including air pollutant emissions). The following plays from the plan are related to air quality and are applicable to the proposed project.

[29] California Air Resources Board. "Advanced Clean Cars II." Accessed September 11, 2024. https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii.

Play	Description
Strategy 1: Promoting Clean Electricity	
1.1	Promote 100 percent clean electricity
1.2	Increase local solar photovoltaics
Strategy 2: Decarbonizing Buildings	
2.3	Achieve all-electric new construction
Strategy 4: Managing Resources Sustainably	
4.1	Achieve Zero Waste goals for solid waste
4.3	Enhance natural carbon sequestration capacity

Sunnyvale Green Building Program

In May 2019, the City revised the green building standards for new construction, additions, and remodels of buildings.[30] The green building standards increase energy efficiency for heating and cooling and promote reduced vehicle travel. Incentives are offered for projects that exceed the minimum green building standards to encourage project applicants and developers to provide additional green building features. At minimum, new residential projects are required to implement CALGreen Mandatory Measures and achieve 90 points minimum on the GreenPoint Rated Checklist with a Build it Green Certification.

Sunnyvale Reach Codes

The California Energy Commission (CEC) approved the City's Reach Codes, which went in effect on January 26, 2021. The Reach Codes are a local energy code for building design and construction that go beyond the minimum state requirements. The purpose of the Reach Codes are to help reduce GHG emissions by promoting electric versus natural gas energy use. The Reach Codes apply to new residential and non-residential construction, and includes the following requirements:

- Solar panels are required for all new buildings
- Electric vehicle charging stations (or conduit and preliminary wiring for them) are required for all new building parking lots

The Reach Codes also contain language prohibiting gas appliances (e.g., cooking range, water heater, space heater, fireplace, etc.) in new construction; however, the enforcement of that requirement is currently suspended, due to a recent federal court decision.

[30] City of Sunnyvale. *Green Building Program.* May 2019. Accessed September 18, 2024.

Sunnyvale Construction and Demolition Waste Diversion

The City requires remodel or demolition projects where 50 percent or more of the exterior wall will be removed to recycle or reuse at least 65 percent of the project's nonhazardous waste.[31] Recycling of nonhazardous waste reduces the energy use to produce new materials from raw, non-renewable resources.

4.6.1.2 *Existing Conditions*

Total energy usage in California was approximately 6,882 trillion British thermal units (Btu) in the year 2022, the most recent year for which this data was available.[32] Out of the 50 states, California is ranked second in total energy consumption and 49th in energy consumption per capita. The breakdown by sector was approximately 18 percent (1,204 trillion Btu) for residential uses, 17 percent (1,193 trillion Btu) for commercial uses, 22 percent (1,539 trillion Btu) for industrial uses, and 43 percent (2,916 trillion Btu) for transportation.[33] This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

Context regarding energy demand and use at a more local level is provided below. In terms of on-site use, energy is used to power the single-family residence (when occupied). The residential use on-site would generate demand for electricity, natural gas, and gasoline to run appliances, provide heating and cooling, fuel vehicles traveling to and from the site, etc.

Electricity

Electricity in Santa Clara County in 2022 was consumed primarily by the non-residential sector (75 percent), followed by the residential sector consuming 25 percent. A total of approximately 17,101 gigawatt hours (GWh) of electricity was consumed in Santa Clara County annually.[34]

The community-owned Silicon Valley Clean Energy (SVCE) is the electricity provider for the City of Sunnyvale.[35] SVCE sources the electricity and the Pacific Gas and Electric Company (PG&E) delivers it to customers over their existing utility lines. Customers are automatically enrolled in the GreenStart plan and can upgrade to the GreenPrime plan. Both options are considered 100 percent GHG-emission free.

[31] City of Sunnyvale. "Construction Waste." January 1, 2022. Accessed September 11, 2024. https://www.sunnyvale.ca.gov/business-and-development/planning-and-building/construction-waste.
[32] United States Energy Information Administration. "California State Energy Profile." Accessed October 24, 2024. https://www.eia.gov/state/print.php?sid=CA.
[33] Ibid.
[34] California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed October 24, 2024. http://ecdms.energy.ca.gov/elecbycounty.aspx.
[35] Silicon Valley Clean Energy. "Frequently Asked Questions." Accessed October 24, 2024. https://www.svcleanenergy.org/faqs.

Natural Gas

PG&E provides natural gas services within Sunnyvale. California's natural gas supply comes from a combination of in-state production and imported supplies from other western states and Canada.[36] Annually, residential and commercial customers in California use approximately 34 percent of the state's natural gas, electric power plants use 31 percent, and the industrial sector use 30 percent.[37] Santa Clara County uses approximately 3.6 percent of the state's total consumption of natural gas.[38]

Fuel for Motor Vehicles

Annually, California produces approximately 118 million barrels of crude oil and approximately 15 billion gallons of gasoline are sold in California.[39, 40] The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles) in the United States has steadily increased from about 13.1 miles per gallon (mpg) in the mid-1970s to 26.0 mpg in 2022.[41] Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. That standard, which originally mandated a national fuel economy standard of 35 miles per gallon by the year 2020, was updated in April 2022 to require all cars and light duty trucks achieve an overall industry average fuel economy of 49 mpg by model year 2026.[42,43]

[36] California Gas and Electric Utilities. *2023 California Gas Report*. Accessed October 24, 2024. https://www.socalgas.com/sites/default/files/Joint_Biennial_California_Gas_Report_2023_Supplement.pdf.
[37] United States Energy Information Administration. "Natural Gas Consumption by End Use." 2021. Accessed October 24, 2024. https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_SCA_a.htm.
[38] California Energy Commission. "Natural Gas Consumption by County." Accessed October 24, 2024. http://ecdms.energy.ca.gov/gasbycounty.aspx.
[39] United States Energy Information Administration. "Petroleum & Other Liquids, California Field Production of Crude Oil." February 28, 2023. https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=mcrfpca1&f=a
[40] California Department of Tax and Fee Administration. "Net Taxable Gasoline Gallons." Accessed October 24, 2024. https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=VehicleTaxableFuelDist.
[41] United States Environmental Protection Agency. "The 2023 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." December 2023. https://www.epa.gov/system/files/documents/2023-12/420r23033.pdf.
[42] United States Department of Energy. *Energy Independence & Security Act of 2007.* Accessed October 24, 2024. http://www.afdc.energy.gov/laws/eisa.
[43] United States Department of Transportation. USDOT Announces New Vehicle Fuel Economy Standards for Model Year 2024-2026." Accessed October 24, 2024. https://www.nhtsa.gov/press-releases/usdot-announces-new-vehicle-fuel-economy-standards-model-year-2024-2026.

4.6.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

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

Construction

Future development allowed under the proposed project would require energy for the manufacture and transportation of building materials, preparation of the site (e.g., demolition and grading), and construction of buildings and other improvements. These construction processes are generally designed to be efficient in order to avoid excess monetary cost, therefore, inefficient or wasteful use of energy is not expected to occur. Further, development in urbanized areas (such as the project site) with proximity to roadways, construction supplies, and workers is already more efficient than construction occurring in outlying, undeveloped areas. In addition, BAAQMD's 2022 CEQA Guidelines includes BMPs for construction related GHG emissions, which in turn, would avoid wasteful inefficient, or unnecessary consumption of energy sources. When a specific development application associated with the project is proposed, a refined community risk assessment may be required that could recommend measures such as implementing BAAQMD enhanced BMPs, utilizing construction equipment that meets U.S. EPA Tier 4 emission standards (or equivalent), and/or implementing a combination of measures that would utilize more efficient equipment or require the use of less diesel equipment. For these reasons, the construction process would be considered efficient.

Future development made possible by the project would also comply with the CALGreen and City requirements to recycle and/or salvage for reuse a minimum of 65 percent of nonhazardous construction and demolition waste, minimizing energy impacts from the creation of excessive waste. For these reasons, construction activities associated with future development under the proposed project would not use fuel or energy in a wasteful manner. **(Less than Significant Impact)**

Operation

Future development made possible by the project would be designed for energy efficiency and conservation in accordance with existing regulations including the City's Climate Action Playbook, Green Building Program, and Reach Codes. Compliance with existing regulations would include implementing CALGreen Mandatory Measures, achieving 90 points minimum on the GreenPoint Rated Checklist, and installing solar panels on any new buildings, ensuring an energy-efficient design. Future development would also be constructed to meet the latest California Building Energy Efficiency Standards (Title 24 California Code of Regulations) and would be located on an infill site which would promote lower vehicle miles traveled (VMT) by future residents. Adherence to existing regulations would ensure future development under the project would not consume energy in a manner that is wasteful, inefficient, or unnecessary. **(Less than Significant Impact)**

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Electricity for future development made possible by the project would be from SVCE, which is 100 percent GHG-emission free energy from renewable and hydroelectric sources, consistent with the state's RPS program and SB 350.[44] In addition, future development under the project would meet state mandated Title 24 energy efficiency standards and CALGreen standards by complying with the Sunnyvale Green Building standards and the City's residential Reach Codes. It is assumed that future development on-site under the project would voluntarily commit to being all-electric and not include installation of any natural gas connections.

Future development made possible by the project would be required to comply with the plays from the City's Climate Action Playbook of utilizing 100 percent clean energy (Play 1.1), installing solar photovoltaic panels (Play 1.2), achieving all-electric new construction (Play 2.3), providing on-site recycling services and recycling/salvaging demolition waste (consistent with Play 4.1 and the City's construction and demolition waste diversion requirements), and planting new trees if protected trees are removed (Play 4.3). Therefore, future development made possible by the project would not obstruct a state or local plan for renewable energy or energy efficiency. **(Less than Significant Impact)**

[44] SVCE is the default electricity provider in the City. Building occupants/owners need to voluntarily opt-out of SVCE in order to obtain electricity directly from PG&E.

4.7 Geology and Soils

4.7.1 Environmental Setting

4.7.1.1 *Regulatory Framework*

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed following the 1971 San Fernando earthquake. The act regulates development in California near known active faults due to hazards associated with surface fault ruptures. Alquist-Priolo maps are distributed to affected cities, counties, and state agencies for their use in planning and controlling new construction. Areas within an Alquist-Priolo Earthquake Fault Zone require special studies to evaluate the potential for surface rupture to ensure that no structures intended for human occupancy are constructed across an active fault.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) was passed in 1990 following the 1989 Loma Prieta earthquake. The SHMA directs the California Geological Survey (CGS) to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. CGS has completed seismic hazard mapping for the portions of California most susceptible to liquefaction, landslides, and ground shaking, including the central San Francisco Bay Area. The SHMA requires that agencies only approve projects in seismic hazard zones following site-specific geotechnical investigations to determine if the seismic hazard is present and identify measures to reduce earthquake-related hazards.

California Building Standards Code

The CBSC prescribes standards for constructing safe buildings. Part 2 of the CBSC contains the California Building Code (CBC), which includes provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. Per Section 1803A.1 of the CBC, preparation of a geotechnical investigation report is required for most development projects to evaluate seismic and geologic conditions such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability.

California Division of Occupational Safety and Health Regulations

Excavation, shoring, and trenching activities during construction are subject to occupational safety standards for stabilization by the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) under Title 8 of the California Code of Regulations and

Excavation Rules. These regulations minimize the potential for instability and collapse that could injure construction workers on the site.

Public Resources Code Section 5097.5

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. They range from mammoth and dinosaur bones to impressions of ancient animals and plants, trace remains, and microfossils. These materials are valued for the information they yield about the history of the earth and its past ecological settings. California Public Resources Code Section 5097.5 specifies that unauthorized removal of a paleontological resource is a misdemeanor. Under the CEQA Guidelines, a project would have a significant impact on paleontological resources if it would disturb or destroy a unique paleontological resource or site or unique geologic feature.

Regional

Municipal Stormwater National Pollutant Discharge Elimination System Permit

The San Francisco Bay RWQCB has issued a Municipal NPDES Permit (MRP), which requires the use of Low Impact Development (LID) stormwater treatment controls (e.g., infiltration or bioretention-based facilities) to treat post-construction stormwater runoff. The City of Sunnyvale, as a permittee, reviews and enforces stormwater treatment controls on development sites to minimize pollutant discharge, as well as erosion and sedimentation.

Provision C.6.c of the MRP outlines the BMP categories that permittees must require all construction sites to implement. These BMPs are divided into six sections which include erosion control, run-on and run-off control, sediment control, active treatment systems, good site management, and non-stormwater management. Each construction site is required to implement the BMPs that are seasonally and phase appropriate.

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 geologic and soil resources and are applicable to the proposed project.

Policy	Description
Environmental Management Element	
EM-8.5	Prevent accelerated soil erosion. Continue implementation of a construction site inspection and control program to prevent discharges of sediment from erosion and discharges of other pollutants from new and redevelopment projects.
Safety and Noise Element	
SN-1.1	Evaluate and consider existing and potential hazards in developing land use policies. Make land use decisions based on an awareness of the hazards and potential hazards for the specific parcel of land.

In addition, the General Plan includes Action LT-1.10f to protect cultural resources and the intent of this action is to also be applied to paleontological resources.[45] Consistent with the intent of Action LT-1.10f, if paleontological resources are encountered during construction of a project, all ground-disturbing activities near the find shall be halt, a qualified paleontologist shall evaluate the find and prescribe measures to preserve the find.

Sunnyvale Municipal Code

SMC Titles 16 (Building and Construction) and 12 (Water and Sewers) includes the CBC and requirements for soil erosion control. In accordance with the SMC, procedures for the issuance, administration, and enforcement of a building and grading permits are employed in order to protect health and safety, this includes the reduction or elimination of the hazards of undue settlement, erosion, siltation, and flooding, or other special conditions. SMC Chapter 12.60.310 outlines the BMPs required for development projects mandating effective erosion control, run-on and runoff control, sediment control, active treatment systems, good site management, and non-stormwater management through all phases of construction.

4.7.1.2 *Existing Conditions*

Regional Geology

The City of Sunnyvale is located in the Coast Ranges Geomorphic Province in California. The mountain ranges in this Geomorphic Province are generally northwest trending and were formed tens of millions of years ago by intense folding and faulting caused by tectonic activity between the Pacific Oceanic Plate and the North American Continental Plate.

On-Site Geological Conditions

Soils and Topography

The project site is located on relatively flat land that slopes very gently northeast towards the San Francisco Bay. Sunnyvale, including the project site, is a part of Santa Clara Valley which spans the

[45] City of Sunnyvale. *2017 Land Use and Transportation Element Draft Environmental Impact Report*. August 2016. Page 3.7-18. SCH# 2012032003. Accessed September 18, 2024.

stretch between the Santa Cruz Mountain Range to the southwest and west and the Diablo Range to the northeast. The near surface soil on-site is classified as urban land-Flaskan complex, which is generally composed of gravelly sandy clay loam that has a medium degree of plasticity and a moderate potential for expansion.[46]

Seismicity and Seismic Hazards

As the San Francisco Bay Area contains numerous active and potentially active faults, there is a high potential for seismic events such as fault surface ruptures and ground shaking, which can cause ground failure (landslides), settlement, erosion, liquefaction, lateral spreading, and soil expansion. Faults in the region are capable of generating earthquakes of magnitude 6.7 or higher, and strong-to-very-strong ground shaking would be expected to occur at the project site during a major earthquake on one of the nearby faults. Major faults in the vicinity of the project site include the San Andreas, Hayward, Calaveras, and San Gregorio faults.

During a major earthquake on a segment of one of the nearby faults, strong to severe ground shaking is expected to occur at the project site.[47] The ground shaking intensity felt at the project site would depend on the size of the earthquake (magnitude), distance from the site to the fault source, directivity (focusing of earthquake energy along the fault in the direction of the rupture), and site-specific soil conditions. The project site is not located within a State of California Earthquake Fault Zone or a Fault-Rupture Hazard Zone.[48]

Liquefaction, Landslide, and Lateral Spreading

Soil liquefaction can be defined as a complete loss of strength that causes otherwise solid soil to take on the characteristics of a liquid. The types of soil most susceptible to this hazard are loose, saturated, uniformly graded, fine-grain sands that comprise the soil layer within approximately 45 to 50 feet of the ground surface. Soils saturated with groundwater are more likely to experience liquefaction. Liquefaction mostly frequently occurs under vibratory conditions, such as those created by seismic events. The project area is not located in a designated landslide hazard zone, compressible soil hazard zone or a liquefaction hazard zone.[49]

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically, lateral spreading is associated with liquefaction of one or more subsurface layers near the bottom of the exposed slope. There are no open faces in proximity to the project site where lateral spreading could occur.

[46] United States Department of Agriculture Natural Resources Conservation Service. "Web Soil Survey." Accessed September 24, 2024. https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.
[47] Association of Bay Area Governments. "Hazard Viewer." Accessed September 14, 2023. https://abag.ca.gov/our-work/resilience/data-research/hazard-viewer.
[48] Santa Clara County Planning & Development. *Geologic Hazard Zones Mapping Application.* 2021.
[49] Santa Clara County. *Santa Clara County Geologic Hazard Zones Map.* October 2012.

Groundwater

The estimated depth to groundwater below the site is approximately 20 to 30 feet below ground surface (bgs).[50] Groundwater levels on-site may vary depending on seasonal precipitation, irrigation practices, and other climate conditions.

Paleontological Resources

As discussed in Section 4.5 Cultural Resources, the project site is underlain by late Pleistocene alluvial fan deposits which are more than 11,700 years old and younger Holocene-age alluvial surficial sediments. The Pleistocene alluvial fan deposits, which are often found at depths of greater than 10 feet, are considered highly sensitive for paleontological resources.[51]

4.7.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
- Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42)?	☐	☐	☐	☒
- Strong seismic ground shaking?	☐	☐	☒	☐
- Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
- Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

[50] Santa Clara Valley Water District. "Santa Clara County Depth to First Groundwater." Accessed September 25, 2024. https://data-valleywater.opendata.arcgis.com/datasets/valleywater::santa-clara-county-depth-to-first-groundwater/explore?location=37.364061%2C-122.014687%2C18.98.

[51] City of Sunnyvale. *Land Use and Transportation Element Draft Environmental Impact Report. SCH No. 2012032003*. August 2016. Page 3.7-12.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
c) Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☐	☒	☐

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides?

Fault Rupture

As discussed in Section 4.7.1.2 Existing Conditions, the project site is not located within an Alquist-Priolo Earthquake Fault Zone or a Fault-Rupture Hazard Zone and no known faults cross the site. While existing faults that are currently considered active are located within 20 miles of the site (i.e., the Monte Vista-Shannon, San Andreas, and Hayward faults), the project site is located outside of their fault rupture zones. For these reasons, future development made possible by the project would not directly or indirectly cause potential substantial adverse effects from rupture of a known earthquake fault. **(No Impact)**

Seismic Ground Shaking

There are several major fault lines within 20 miles of the project site that have the potential to produce a major earthquake during the lifespan of this project. During a major earthquake, this site is expected to experience strong to severe ground shaking. The level of intensity of this ground shaking at the project site would depend on a variety of factors such as the magnitude, distance from the site to the fault source, and site-specific soil conditions. The ground shaking could

potentially damage structures and threaten the safety of occupants in future development made possible by the project.

Prior to permit issuance, future development on-site would be required to adhere to the current CBC and any design recommendations included in a site-specific geotechnical report. Additionally, future development on-site would be required to utilize standard engineering techniques to ensure the project could withstand minor earthquakes without damage and major earthquakes without collapse. For these reasons, the project would not result in seismic hazards as future development would be constructed in accordance with the CBC and current design and engineering standards. As such, the existing seismic hazards on-site would not be exacerbated by the project in a manner that it would impact (or worsen) off-site conditions. **(Less than Significant Impact)**

Liquefaction and Lateral Spreading

As discussed in Section 4.7.1.2 Existing Conditions, the project site is not located within a designated liquefaction hazard zone. Despite that, there could be some potential for liquefaction during future seismic events depending on the soil conditions, depth of water table, and strength of the seismic activity. Adherence to the current CBC and any design recommendations included in the future site-specific geotechnical report would reduce the risk of liquefaction at the project site.

There are no adjacent bodies of water, channels, or excavations in the vicinity of the site that would increase the potential for lateral spreading, therefore, the project would not exacerbate such conditions off-site.

Based on the above, future development on-site would not cause potential substantial adverse effects related to liquefaction and lateral spreading. **(Less than Significant Impact)**

Landslides

As discussed in Section 4.7.1.2 Existing Conditions, the project site is not located in a designated landslide hazard zone. The project site is relatively flat and is not located in the vicinity of steep embankments that could increase the risk of landslides affecting the site. Future development under the project would not include substantial earthwork that would create unstable slopes that would exacerbate any existing landslide risks. **(No Impact)**

b) Would the project result in substantial soil erosion or the loss of topsoil?

Future development made possible by the project would increase the potential for wind or water-related erosion and sedimentation during construction. Implementation of the required erosion control measures in the SMC Section 12.60.310, future site-specific geotechnical report, and Provision C.6.c of the MRP would ensure that erosion and loss of topsoil are reduced to less than significant by controlling the amount of erosion occurring on-site during construction activities, limiting run-off from the site, and maintaining active treatment systems, on-site. **(Less than Significant Impact)**

c) 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?

As discussed in Section 4.7.1.2 Existing Conditions and checklist question a) above, the project site is not located in a designated liquefaction hazard zone. However, there could be some potential for liquefaction during future seismic events depending on the soil conditions, depth of water table, and strength of the seismic activity. Adherence to the current CBC, the grading regulations identified in Section 12.60.310 of the SMC, and recommendations in the site-specific geotechnical report that would be prepared for future development under the project (as required by General Plan Policy SN-1.1) would reduce the risk of liquefaction on-site because these recommendations would minimize impacts related to liquefaction and soil instability (such as collapse) to a less than significant level.

Valley Water actively monitors for land subsidence through surveying, groundwater elevation monitoring, and data from wells. Valley Water reduces the potential for land subsidence throughout the Santa Clara Valley by recharging groundwater basins with local and imported surface water. Valley Water also manages "in-lieu" recharge programs, including treated water deliveries, water conservation, and water recycling that reduce groundwater demand. As discussed in Section 4.10 Hydrology and Water Quality, the project site is not located within a groundwater recharge area and lies entirely within a confined zone.[52] Given the estimated maximum excavation depth of 11 feet for utility trenching and the estimated groundwater depth below the site (20 to 30 feet bgs), it is unlikely that future development of the site would require dewatering of subsurface groundwater during construction.

As discussed in Section 4.7.1.2 Existing Conditions and checklist question a) above, the project site is not subject to landslide, lateral spreading, or other forms of ground failure. **(Less than Significant Impact)**

d) Would the project be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?

As discussed in Section 4.7.1.2 Existing Conditions, the near-surface soil on-site is generally composed of gravelly sandy clay loam that has a medium degree of plasticity and a moderate potential for expansion. Expansive soils possess a "shrink-swell" characteristic. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments from the process of wetting and drying. Structural damage may result over a long period of time, usually the result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils. Although expansive soils can be a hazard, it is generally mitigated through adherence with the standard engineering and building practices and techniques specified in the CBC

[52] Santa Clara Valley Water District. 2021 Groundwater Management Plan, Santa Clara and Llagas Subbasins. November 2021.

and adherence to recommendations in a site-specific geotechnical report. In addition, the City's General Plan Policy SN-1.1 requires geotechnical reports, in part, to determine the geologic stability of the site and to identify design measures to minimize geologic hazards.

With adherence to the current CBC, General Plan Policy SN-1.1, and recommendations of the future site-specific geotechnical report, future development made possible by the project would not create substantial direct or indirect risks to life or property due to expansive soils. **(Less than Significant Impact)**

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Future development under the project would connect to the City's sewer system and would not require septic tanks or alternative wastewater disposal systems. **(No Impact)**

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

The project site does not contain any known paleontological resources or unique geological features. As discussed in Section 4.7.1.2 Existing Conditions, the project site is underlain by late Pleistocene alluvial fan deposits which are more than 11,700 years old and considered highly sensitive for paleontological resources.

Construction activities associated with future development made possible by the project could result in the disturbance and/or accidental destruction of unknown paleontological resources, if present on-site. Future development would comply with Public Resources Code Section 5097.5 and General Plan Action LT-1.10f to avoid and/or reduce impacts to a paleontological resources (if encountered on-site) to a less than significant level by halting all ground-disturbing activities if resources are encountered, retaining a qualified paleontologist to evaluate the significance of the encountered resources, and implementing measures to protect and preserve the resources in accordance with existing regulations. **(Less than Significant Impact)**

4.8 Greenhouse Gas Emissions

4.8.1 Environmental Setting

4.8.1.1 *Background Information*

Greenhouse gases (GHG) are gases that trap heat in the atmosphere and regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. In GHG emission inventories, the weight of each gas is multiplied by its global warming potential (GWP) and is measured in units of CO_2 equivalents (CO_2e). The most common GHGs are carbon dioxide (CO_2) and water vapor but there are also several others, most importantly methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These are released into the earth's atmosphere through a variety of natural processes and human activities (anthropogenic). Natural and anthropogenic sources of GHGs are generally as follows:

- CO_2 exchange between the atmosphere, ocean, and land surface
- CO_2, CH_4, and N_2O are emitted from wildfires and volcanic eruptions
- CO_2 and N_2O are byproducts of fossil fuel combustion
- N_2O is associated with agricultural operations such as fertilization of crops
- CH_4 is commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations
- Chlorofluorocarbons (CFCs) were widely used as refrigerants, propellants, and cleaning solvents, but their production has been stopped by international treaty
- HFCs are now used as a substitute for CFCs in refrigeration and cooling
- PFCs and SF_6 emissions are commonly created by industries such as aluminum production and semiconductor manufacturing

An expanding body of scientific research supports the theory that global climate change is currently causing changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. Per the 2022 Scoping Plan from CARB, atmospheric concentrations of CO_2 have increased by 50 percent since the Industrial Revolution and continue to increase at a rate of two parts per million each year, which will result in increased global temperatures.[53] The climate within California are adversely affected by the global warming trend. Increased precipitation and sea level rise will increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases;

[53] California Air Resources Board. *2022 Scoping Plan for Achieving Carbon Neutrality*. December 2022. Page 3. Accessed September 18, 2024.

more frequent and intense natural disasters such as flooding, hurricanes and drought; and increased levels of air pollution.

4.8.1.2 *Regulatory Framework*

State

Assembly Bill 32 and State Bill 32

Under the California Global Warming Solutions Act, known as AB 32, CARB established a statewide GHG emissions cap for 2020, adopted mandatory reporting rules for significant sources of GHGs, and adopted a comprehensive plan, known as the Climate Change Scoping Plan, identifying how emission reductions would be achieved from significant GHG sources. The first Scoping Plan was approved by CARB in 2008 and must be updated at least every five years. Since 2008, there have been two updates to the Scoping Plan.

In 2016, SB 32 was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying Executive Order B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December of 2017 to accelerate 2030 statewide target in terms of million metric tons of CO_2e ($MMTCO_2e$). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 $MMTCO_2e$.

2022 Scoping Plan

On December 15, 2022, CARB approved the 2022 Scoping Plan. The 2022 Scoping Plan provides a sector-by-sector guide on how to reduce man-made (i.e., anthropogenic) GHG emissions by 85 percent below 1990 levels and achieve carbon neutrality by 2045 over a 25-year horizon.[54] The primary focus of the 2022 Scoping Plan is to reduce the usage of fossil fuels by electricizing the transportation sector, procuring electricity from renewable resources, phasing out natural gas in land use developments, and building transit-oriented communities that encourage multi-modal transportation. If implemented successfully, the 2022 Scoping Plan would not only reduce GHG emissions but also reduce smog-forming air pollution (NO_x) by 71 percent and reduce fossil fuel demand by 94 percent. The 2022 Scoping Plan also details natural carbon capture and storage process along with mechanical carbon capture programs to address the remaining 15 of anthropogenic GHG emissions that will remain post-2045. To meet these goals, CARB also includes a revised goal of reducing state GHG emissions 48 percent below 1990 levels by 2030.

Senate Bill 375 and Plan Bay Area 2050

SB 375, known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. SB 375 builds upon AB 32 by requiring CARB to develop regional GHG reduction targets for automobile and light truck sectors for 2020 and 2035. The per capita GHG

[54] California Air Resources Board *2022 Scoping Plan for Achieving Carbon Neutrality*. December 2022. Page 5. Accessed September 18, 2024.

emissions reduction targets for passenger vehicles in the Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035.

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 2050.

Plan Bay Area 2050 is a long-range plan for the nine-county San Francisco Bay Area that provides strategies that increase the availability of affordable housing, support a more equitable and efficient economy, improve the transportation network, and enhance the region's environmental resilience. Plan Bay Area 2050 promotes the development of a variety of housing types and densities within identified priority development areas (PDAs). PDAs are areas generally near existing job centers or frequent transit that are locally identified for housing and job growth.[55]

Play Bay Area 2050 includes a goal to increase the number of households that live within 0.5 mile of frequent transit by 2050. Plan Bay Area 2050 promotes strategies that support active and shared modes, combined with a transit-supportive land use patterns, which together are forecasted to lower the share of Bay Area residents that drive to work alone from 50 percent in 2015 to 33 percent in 2050, resulting in a decrease in GHG emissions. Plan Bay Area 2050 also provides a path to emissions reductions via goals to expand TDM initiatives that support and augment employers' commute programs.

SB 100

SB 100, known as The 100 Percent Clean Energy Act of 2018, was adopted on September 10, 2018. The overall goal is to have all retail electricity sold in California be procured from 100 percent renewable and zero-carbon resources by the year 2045. SB 100 also modified the renewables portfolio standard to 50 percent by 2025 and 60 percent by 2030.

Executive Order B-55-18 and Assembly Bill 1279

Executive Order B-55-18 was issued in September 2018. It ordered a new statewide goal of achieving carbon neutrality no later than 2045 and to maintain net negative emissions thereafter.

Assembly Bill 1279, also known as the California Climate Crisis Act, was approved on September 16, 2022 and codifies the statewide goal set by Executive Order B-55-18 of achieving net zero GHG emissions no later than the year 2045 and maintaining net negative emissions thereafter. In addition, this bill has a statewide goal of reducing anthropogenic GHG emissions by 85 percent below the 1990 levels by the year 2045. The bill requires CARB to work with relevant state agencies to ensure that updates to the scoping plan identify and recommend measures to achieve these

[55] Association of Bay Area Governments and Metropolitan Transportation Commission. *Plan Bay Area 2050.* October 21, 2021. Page 20. Accessed September 18, 2024.

policy goals and implement strategies that enable CO_2 removal solutions and carbon capture, utilization, and storage technologies in California. The bill requires CARB to submit an annual report.

Advanced Clean Cars II Regulation

To continue reducing air pollutants and GHG emissions in the transportation sector, CARB adopted the Advanced Clean Cars II Regulations (Resolution 22-12) on August 25, 2022. The new regulation requires that by 2035 all new passenger cars, trucks, and SUVs sold in California will be zero-emission vehicles. This regulation bans the sale of new gasoline or diesel passenger cars, trucks, and SUVs in California from automakers. Beginning in 2026, 35 percent of new vehicle sales must be zero-emission vehicles and plug-in hybrid electric vehicles (EV) and that percentage will increase per year. By 2030, 70 percent of new vehicle sales will be zero-emissions vehicles and by the 2035 model year 100 percent of new vehicle sales will be zero-emissions. CARB will limit the use of plug-in hybrid EVs in the percentage requirements to keep the manufacturing of zero-emissions as the primary goal. Existing gasoline cars can continue to be driven and sold as used cars beyond 2035. CARB is required to track and report on the zero-emissions vehicle market development annually.

California Building Standards Code – Title 24 Part 11 and Part 6

The CALGreen Code is part of the CBSC under Title 24, Part 11.[56] The CALGreen Code encourages sustainable construction standards that incorporate planning/design, energy efficiency, water efficiency resource efficiency, and environmental quality. These green building standard codes are mandatory statewide and are applicable to residential and non-residential developments. The most recent CALGreen Code (2022 CALGreen Code) was effective as of January 1, 2023.

The California Building Energy Efficiency Standards (California Energy Code) is under Title 24, Part 6 and is overseen by the CEC. This code includes design requirements to conserve energy in new residential and non-residential developments. This Energy Code is enforced and verified by cities during the planning and building permit process. The 2022 Energy Code replaced the 2019 Energy Code as of January 1, 2023. There are new 2022 standards for single-family residences, multi-family residences, and non-residential uses. Major changes include electric-ready single-family and multi-family residence and solar photovoltaic systems and energy storage systems for residential and commercial developments. [57,58,59]

Requirements for electric vehicle (EV) charging infrastructure are set forth in Title 24 of the California Code of Regulations and are regularly updated on a three-year cycle. The 2022 CALGreen

[56] Refer to https://www.dgs.ca.gov/BSC/CALGreen.
[57] California Energy Commission. "2022 Building Energy Efficiency Standards What's New for Single-Family Residential." Revised July 15, 2022. Accessed September 11, 2024. https://www.energy.ca.gov/sites/default/files/2022-08/2022_Single-family_Whats_New_Summary_ADA.pdf.
[58] California Energy Commission. "2022 Building Energy Efficiency Standards What's New for Multifamily." Revised August 4, 2022. Accessed September 13, 2023. https://www.energy.ca.gov/sites/default/files/2022-08/2022_Multifamily_Whats_new_Summary_ADA.pdf.
[59] California Energy Commission. "2022 Building Energy Efficiency Standards What's New for Nonresidential." Revised August 4, 2022. Accessed September 13, 2023. https://www.energy.ca.gov/sites/default/files/2022-08/2022_Nonresidential_Whats_New_Summary_ADA.pdf.

standards include requirements for both EV readiness and the actual installation of EV chargers. For new one- and two-family dwelling units with attached private garages, CALGreen requires installation of a listed raceway to accommodate a dedicated 208/240-volt branch circuit that would allow for future installation of an EV charger. CALGreen also requires new construction and demolition projects to have a diversion of at least 65 percent of the construction waste generated.

CALGreen also requires new construction and demolition projects to have a diversion of at least 65 percent of the construction waste generated. CALGreen also allows a disposal reduction option that can be met when the project's disposal rate is 2.0 pounds per square foot or less for non-residential and high-rise residential construction or 3.4 pounds per square foot or less for low-rise residential construction.

Regional and Local

2017 Clean Air Plan

To protect the climate, the 2017 Clean Air Plan prepared by BAAQMD includes control measures designed to reduce emissions of methane and other super-GHGs that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

BAAQMD CEQA Thresholds for Evaluating Climate Impacts from Land Use Projects and Plans

In April 2022, the BAAQMD Board of Directors adopted the Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans. The report includes BAAQMD's thresholds of significance for use in determining whether a proposed project or plan will have a significant impact on climate change and provides substantial evidence to support these thresholds. The April 2022 GHG thresholds replace the GHG thresholds set forth in the May 2017 BAAQMD CEQA Air Quality Guidelines and represent what is required of new land use development projects and plans to achieve California's long-term climate goal of carbon neutrality by 2045.

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 greenhouse gas reduction and are applicable to the proposed project.

Policy	Description
Land Use and Transportation Element	
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.
LT-2.2	Reduce greenhouse gas emissions that affect climate and the environment through land use and transportation planning and development.

City of Sunnyvale Climate Action Playbook Update and Game Plan 2028

The City of Sunnyvale Climate Action Playbook (originally adopted in August 2019) set a vision for the City to reduce carbon emissions by 2050. The Climate Action Playbook was subsequently updated in June 2024 to outline updated strategies to further reduce emissions in the City. The updated playbook includes six strategies with "plays" that identify areas for action to reduce GHG emissions (including air pollutant emissions). The following plays from the plan are related to air quality and are applicable to the proposed project.

Play	Description
Strategy 1: Promoting Clean Electricity	
1.1	Promote 100 percent clean electricity
1.2	Increase local solar photovoltaics
Strategy 2: Decarbonizing Buildings	
2.3	Achieve all-electric new construction
Strategy 4: Managing Resources Sustainable	
4.1	Achieve Zero Waste goals for solid waste
4.3	Enhance natural carbon sequestration capacity

The Playbook is a qualified GHG reduction strategy pursuant to the BAAQMD CEQA Guidelines and CEQA Guidelines Section 15183.5(b).

Sunnyvale Reach Codes

The CEC approved the City's Reach Codes, which went into effect on January 26, 2021. The City's Reach Codes are a local energy code for buildings design and construction that goes beyond the minimum state requirements. The purpose of the Reach Codes are to help reduce GHG emissions by promoting electric versus natural gas energy use and encouraging EV charging infrastructure. The Reach Codes apply to new residential and non-residential construction, and includes the following requirements:

- Solar panels are required for all new buildings
- EV charging stations (or conduit and preliminary wiring for them) are required for all new building parking lots

The Reach Codes were re-adopted as part of the 2022 Building Codes update on November 1, 2022. The Reach Codes also contain language prohibiting gas appliances (e.g., cooking range, water heater, space heater, fireplace, etc.) in new construction; however, enforcement of that requirement is currently suspended to due a recent federal court case.

Sunnyvale Construction and Demolition Waste Diversion

The City requires remodel or demolition projects where 50 percent or more of the exterior wall will be removed to recycle or reuse at least 65 percent of the project's nonhazardous waste.[60] Recycling of nonhazardous waste reduces the energy use to produce new materials from raw, non-renewable resources.

4.8.1.3 *Existing Conditions*

Unlike emissions of criteria and toxic air pollutants, which have regional and local impacts, emissions of GHGs have a broader, global impact. Global warming is a process whereby GHGs accumulating in the upper atmosphere contribute to an increase in the temperature of the earth and changes in weather patterns.

The existing residence on-site is currently vacant. When it was previously occupied, the existing use on-site generated GHG emissions as a result of energy consumption, vehicle trips to and from the site, solid waste generation, and water usage.

4.8.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?	☐	☐	☒	☐

a) Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction Emissions

Future development that could occur with project approval would result in GHG emissions associated with construction activities, including operation of construction equipment and emissions from construction workers' personal vehicles traveling to and from the construction site. Construction-related GHG emissions vary depending on the level of activity, length of construction period, types of equipment, etc. Neither the City nor BAAQMD has established a quantitative threshold or standard for determining whether the project's construction related GHG emissions

[60] City of Sunnyvale. "Construction Waste." Accessed September 11, 2024. https://www.sunnyvale.ca.gov/business-and-development/planning-and-building/construction-waste.

are significant, however, BAAQMD's 2022 CEQA Guidelines includes BMPs for reducing GHG emissions from construction-related activities. When a specific development application associated with the project is proposed, a refined community risk assessment may be required that could recommend measures such as implementing BAAQMD enhanced BMPs, utilizing construction equipment that meets U.S. EPA Tier 4 emission standards (or equivalent), and/or implementing a combination of measures that would utilize more efficient equipment or require the use of less diesel equipment. With implementation of measures similar to these, construction related emissions of future development under the project would be less than significant. **(Less than Significant Impact)**

Operational Emissions

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. Pursuant with BAAQMD, for land use projects to result in a less than significant GHG emissions impact, the land use project would need to comply with threshold A or B below.

A. Projects must include, at a minimum, the following project design elements:
    1. Buildings
        a. The project will not include natural gas appliances or natural gas plumbing (in both residential and non-residential development).
        b. The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.
    2. Transportation
        a. Achieve a reduction in project-generated VMT below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA:
            i. Residential projects: 15 percent below the existing VMT per capita
            ii. Office projects: 15 percent below the existing VMT per employee
            iii. Retail projects: no net increase in existing VMT
        b. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.

B. Be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

It is assumed that implementation of the project would result in the development of up to eight single-family residences. The operation of this residential development would generate GHG emissions primarily from energy consumption, vehicular travel, and solid waste disposal.

Since the project requires a GPA, it is not consistent with the City's Climate Action Playbook Update and Game Plan 2028 as the playbook update is predicated on General Plan consistency. For this

reason, the project's GHG impact is evaluated against threshold A above. Future development on-site would voluntarily comply with the City's Reach Codes and be 100 percent electric and not include any natural gas infrastructure or appliances, would not result in the wasteful, inefficient, or unnecessary use of energy as described in Section 4.6 Energy, and is presumed to achieve reduction in project-generated VMT below the regional average as further discussed in Section 4.17 Transportation. In addition, consistent with the requirements of the CALGreen Building Standards Code, future development under the project would install a 208/240-volt branch EV charging circuit and receptacle in the garage of each residence to allow for on-site EV charging. This would comply with the off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2 (threshold A.2.b above). For these reasons, implementation of the proposed project would have a less than significant operational GHG emission impact. **(Less than Significant Impact)**

b) Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

2022 Scoping Plan Update

The proposed project is a GPA and rezoning of a site to allow for higher density single-family residential development near existing transit facilities. Future development under the project would use energy efficient appliances and equipment, as required by Title 24 and CALGreen, would comply with the City's Green Building Program and voluntarily comply with the Reach Codes. Additionally, future development would receive its energy from Silicon Valley Clean Energy, who provides electricity generated from carbon free sources. For these reasons, the project would not conflict with the 2022 Scoping Plan. **(Less than Significant Impact)**

2017 Clean Air Plan

The BAAQMD 2017 CAP focuses on two goals: protecting public health and protecting the climate. The 2017 CAP includes air quality standards and control measures designed to reduce emissions of methane, carbon dioxide, and other super-GHGs. As discussed in Section 4.3 Air Quality, when a specific development application associated with the project is proposed, a refined community risk assessment may be required which could identify measures to reduce the health risk to below the BAAQMD thresholds of significance if any significant health risks are identified. With this, the project would not disrupt, delay, or otherwise hinder the implementation of any of the control measures included in the 2017 CAP. In addition, as discussed under checklist question a) above, the project would result in less than significant construction and operational GHG emissions, consistent with the 2017 CAP goal of protecting the climate. For these reasons, the project would not conflict with or obstruct implementation of the 2017 CAP. **(Less than Significant Impact)**

General Plan Policies

Implementation of the proposed project would be made possible by the project would be consistent with General Plan Policies LT-2.1 and LT-2.2 by redeveloping an infill site with increased density and complying with Title 24 and CALGreen, the City's Green Building Program, Reach Codes, Climate Action Playbook (as described further below), and Construction and Demolition Waste Diversion program. **(Less than Significant Impact)**

Climate Action Playbook

Future development made possible by the project would be consistent with the Climate Action Playbook strategies applicable to the project by sourcing electricity from SVCE (Play 1.1); installing solar photovoltaic panels (Play 1.2), achieving all-electric new construction (Play 2.3), providing on-site recycling services and recycling/salvaging demolition waste (Play 4.1), and planting new trees on-site to replace any protected trees that are removed (Play 4.3). For these reasons, the proposed project and future development made possible by the project would not conflict with City's Climate Action Playbook. **(Less than Significant Impact)**

4.9 Hazards and Hazardous Materials

The following discussion is based, in part, on a Phase I Environmental Site Assessment (ESA) prepared by Rosso Environmental, Inc. dated March 21, 2024. This report is attached as Appendix D to this Initial Study.

4.9.1 Environmental Setting

4.9.1.1 *Regulatory Framework*

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. In California, the EPA has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA). In turn, local agencies have been granted responsibility for implementation and enforcement of many hazardous materials regulations under the Certified Unified Program Agency (CUPA) program.

Worker health and safety and public safety are key issues when dealing with hazardous materials. Proper handling and disposal of hazardous material is vital if it is disturbed during project construction. Cal/OSHA enforces state worker health and safety regulations related to construction activities. Regulations include exposure limits, requirements for protective clothing, and training requirements to prevent exposure to hazardous materials. Cal/OSHA also enforces occupational health and safety regulations specific to lead and asbestos investigations and abatement.

Federal and State

Federal Aviation Regulations Part 77

Federal Aviation Regulations, Part 77 Objects Affecting Navigable Airspace (FAR Part 77) sets forth standards and review requirements for protecting the airspace for safe aircraft operation, particularly by restricting the height of potential structures and minimizing other potential hazards (such as reflective surfaces, flashing lights, and electronic interference) to aircraft in flight. These regulations require that the Federal Aviation Administration (FAA) be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above the ground.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Over five years, $1.6 billion was collected and the tax went to a trust fund for cleaning

up abandoned or uncontrolled hazardous waste sites. CERCLA accomplished the following objectives:

- Established prohibitions and requirements concerning closed and abandoned hazardous waste sites;
- Provided for liability of persons responsible for releases of hazardous waste at these sites; and
- Established a trust fund to provide for cleanup when no responsible party could be identified.

The law authorizes two kinds of response actions:

- Short-term removals, where actions may be taken to address releases or threatened releases requiring prompt response; and
- Long-term remedial response actions that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life-threatening. These actions can be completed only at sites listed on the EPA's National Priorities List.

CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986.[61]

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA), enacted in 1976, is the principal federal law in the United States governing the disposal of solid waste and hazardous waste. RCRA gives the EPA the authority to control hazardous waste from the "cradle to the grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also sets forth a framework for the management of non-hazardous solid wastes.

The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization, phasing out land disposal of hazardous waste, and 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.[62]

[61] United States Environmental Protection Agency. "Superfund: CERCLA Overview." Accessed September 11, 2024. https://www.epa.gov/superfund/superfund-cercla-overview.
[62] United States Environmental Protection Agency. "Summary of the Resource Conservation and Recovery Act." Accessed September 11, 2024. https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act.

Government Code Section 65962.5

Section 65962.5 of the Government Code requires CalEPA to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by state and local agencies and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB).[63]

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 provides the EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics, and pesticides. The TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint (LBP).

California Accidental Release Prevention Program

The California Accidental Release Prevention (CalARP) Program aims to prevent accidental releases of regulated hazardous materials that represent a potential hazard beyond the boundaries of a property. Facilities that are required to participate in the CalARP Program use or store specified quantities of toxic and flammable substances (hazardous materials) that can have off-site consequences if accidentally released. The Sunnyvale Department of Public Safety reviews CalARP risk management plans as the CUPA.

Asbestos-Containing Materials

Friable asbestos is any asbestos-containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand, allowing the asbestos particles to become airborne. Common examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Common examples of non-friable ACMs are asphalt roofing shingles, vinyl floor tiles, and transite siding made with cement. The EPA began phasing out use of friable asbestos products in 1973 and issued a ban in 1978 on manufacture, import, processing, and distribution of some asbestos-containing products and new uses of asbestos products.[64] The EPA is currently considering a proposed ban on on-going use of asbestos.[65] National Emission Standards for Hazardous Air Pollutants (NESHAP) guidelines require that potentially friable ACMs be removed prior to building demolition or remodeling that may disturb the ACMs.

[63] California Environmental Protection Agency. "Cortese List Data Resources." Accessed September 11, 2024. https://calepa.ca.gov/sitecleanup/corteselist/.
[64] United States Environmental Protection Agency. "EPA Actions to Protect the Public from Exposure to Asbestos." Accessed September 11, 2024. https://www.epa.gov/asbestos/epa-actions-protect-public-exposure-asbestos
[65] Ibid.

CCR Title 8, Section 1532.1

The United States Consumer Product Safety Commission banned the use of LBP in 1978. Removal of older structures with LBP is subject to requirements outlined by the Cal/OSHA Lead in Construction Standard, CCR Title 8, Section 1532.1 during demolition activities. Requirements include employee training, employee air monitoring, and dust control. If LBP is peeling, flaking, or blistered, it is required to be removed prior to demolition.

Regional and Local

Comprehensive Land Use Plan for Moffett Federal Airfield

The project site is approximately 3.1 miles southeast of the Moffett Federal Airfield (Airfield); which is the closest airport to the site. The Moffett Federal Airfield Comprehensive Land Use Plan (CLUP), adopted by the Santa Clara County Airport Land Use Commission, is intended to safeguard the general welfare of the inhabitants within the vicinity of the airport, as well as aircraft occupants.[66] The CLUP is also intended to ensure that surrounding new land uses do not affect airfield operations. The CLUP identifies the Airfield's Airport Influence Area (AIA). The AIA 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.

Santa Clara County Operational Area Hazard Mitigation Plan

The City's Hazard Mitigation Plan, an annex to Santa Clara County's Operational Area Hazard Mitigation Plan (2017), performs a full risk assessment on the nine hazards that present the greatest concern in Santa Clara County. The nine hazards focused on for this mitigation plan are climate change/sea-level rise, dam and levee failure, drought, earthquakes, floods, landslides, severe weather, tsunamis, and wildfires.

The City's annex, Chapter 16 of the document, provides a detailed overview of the City's response capabilities, the organizational structure of local authorities, risk rating scores that determine which hazards present the greatest risk to Sunnyvale, and a priority schedule for mitigation measures planned by local and regional agencies.

[66] Santa Clara County Airport Land Use Commission. *Moffett Federal Airfield Comprehensive Land Use Plan.* November 2, 2016. Accessed September 18, 2024.

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 hazards and hazardous materials and are applicable to the proposed project.

Policy	Description
Safety and Noise Element	
SN-1.1	Evaluate and consider existing and potential hazards in developing land use policies. Make land use decisions based on an awareness of the hazardous and potential hazards for the specific parcel of land.
SN-1.5	Promote a living and working environment safe from exposure to hazardous materials.

Certified Unified Program Agency

Approved by CalEPA, the Sunnyvale Department of Public Safety serves as the CUPA within its jurisdiction and is responsible for the unified hazardous waste and hazardous materials management regulatory program established by Health and Safety Code, Division 20, Chapter 6.11, Section 25404, et seq. This program consolidates the administration and enforcement of six hazardous materials management programs and ensures the coordination and consistency of any regulations adopted pursuant to such program requirements. The six locally implemented programs are:

1. Hazardous Waste Generator and Onsite Hazardous Waste Treatment (tiered permitting) Program;
2. Aboveground Petroleum Storage Act;
3. Underground Storage Tank Program;
4. Hazardous Materials Release Response Plans and Inventories (Business Plans);
5. California Accidental Release Prevention (CalARP) Program; and
6. California Fire Code: Hazardous Material Management Plans and Inventory Statements.

Sunnyvale Municipal Code

Chapter 20.10 of the SMC outlines the City's CUPA administration policies. This includes details on permits, fees, and enforcement policies regarding the regulation of hazardous materials in the City. Chapter 16.52 of the SMC includes additional regulations within the City's Fire Code which regulate the safe storage and proper containment of hazardous materials in the City.

4.9.1.2 *Existing Conditions*

Site History

Prior to construction of the existing residence on-site in 1965, the project site and the surrounding properties contained orchards that were utilized for agricultural purposes. Due to the historic

agricultural use of the project site and the surrounding parcels, it is possible that the soils on-site contain residual agricultural chemicals.

Conditions On-Site

Hazardous Materials Storage and Use

The reconnaissance conducted as part of the Phase I ESA prepared for the project identified small quantities of several hazardous materials stored on-site, including empty containers of Diazinon and benzene, containers of floor finish, granular herbicide, and an oil drain container. Oily staining on several concrete areas was also discovered. In addition, the property currently contains several containers of paints, roofing seal, deck coating, algaecide, and muriatic acid in the garage and ancillary building (which contains a pool pump room). No evidence of leaks or spills were noted for these materials.

Asbestos Containing Building Materials

The on-site reconnaissance conducted as part of the Phase I ESA prepared for the project identified suspected ACMs including wallboard assemblies, coving mastics, sheet flooring, tile flooring, and carpet mastics.

Lead-Based Paint

Based on the age of the existing residence and accessory structure, LBP may be present on-site. Additionally, soil adjacent to any existing structures that are painted with lead-containing paint can become impacted with lead as a result of the weathering and/or peeling of painted surfaces.

Cortese List

The project site is not located on the Cortese List.[67]

Off-Site Sources of Contamination

There are two sites in the project vicinity with potential or recorded contamination issues, including 793 East El Camino Real and 755 South Wolfe Road, which are located approximately 0.54-miles southwest and 350 feet north of the site, respectively. Both sites appear to have been utilized by dry cleaning businesses; however, based on the information in the regulatory agency database report, neither site has a recorded spill or release incident that is likely to significantly impact soil, soil vapor or groundwater beneath the project site because the contamination at 793 East El Camino Real does not extend off-site and the contamination at 755 South Wolfe Road is downgradient from the site.

[67] California Environmental Protection Agency. "Cortese List Data Resources." Accessed October 21, 2024. https://calepa.ca.gov/sitecleanup/corteselist/.

Other Hazards

Airports

The project site is approximately 3.1 miles southeast of the Airfield and is located outside of the Airfield's AIA, 65 dBA noise contour area, and airport safety zones.[68] As previously mentioned, FAR Part 77 requires that the FAA be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above ground. The project site is within the Airfield's FAR Part 77 Notification Surface Area and falls within the 407 foot surface area.[69] Based on the project site's elevation of approximately 101 feet above mean sea level, any structure exceeding 306 feet in height above grade would require submittal to the FAA for airspace safety review.

Wildfire

The project site is in an urban area surrounded by existing development that is not near any wildlands that could present a fire hazard. The site is not located within an identified Very High Fire Hazard Severity Zone in a State Responsibility Area (SRA) or a Local Responsibility (LRA).[70,71]

4.9.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐

[68] Santa Clara County Airport Land Use Commission. *Moffett Federal Airfield Comprehensive Land Use Plan.* November 2, 2012. Figure 5, Figure 7, and Figure 8.
[69] Santa Clara County Airport Land Use Commission. *Moffett Federal Airfield Comprehensive Land Use Plan.* November 2, 2012. Figure 6.
[70] California Department of Forestry and Fire Protection. *Santa Clara County Fire Hazard Safety Zone Map – State Responsibility Area.* November 2007.
[71] California Department of Forestry and Fire Protection. *Santa Clara County Fire Hazard Safety Zone Map – Local Responsibility Area.* October 2008.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, will it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The project does not propose any land uses that would result in hazardous materials being routinely transported, used, or disposed of in quantities that would pose a significant health hazard to the public. The operation of a future residential development on-site would include the use and storage of cleaning supplies, maintenance chemicals, and landscaping-related chemicals in small quantities. The small quantities of domestic chemicals used on-site would not pose a risk to adjacent land uses as they would be properly stored and disposed. **(Less than Significant Impact)**

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The site was previously used for agriculture, therefore, soils on-site may contain levels of pesticides exceeding applicable screening thresholds. The proposed project is a GPA and rezoning only and does not include a development which could result in direct impacts from the release of hazardous materials; however, it would allow for redevelopment of the site with a higher density residential

development. Redevelopment of the site would include grading and excavation activities that could pose an unacceptable risk.

Future development would be required to comply with City regulations (including General Plan policies SN-1.1 and SN-1.5) to further investigate and remediate elevated contamination on-site, if present. Based on the investigation of the project site to date, future development under the project would implement the following measure, or equivalent, to comply with existing regulations:

- A Site Management Plan (SMP) for redevelopment activities on-site shall be prepared by the project applicant. The SMP shall include (1) methodologies for collecting and testing soil samples for contaminants associated with the former agricultural use (e.g., pesticides) and the potential presence of LBP in soil surrounding the structures, (2) management practices for handling, remediation, and disposal of impacted soil or other materials that may potentially be encountered during construction activities, and (3) protocols for accepting imported fill materials.

  The soil sampling completed as part of the SMP shall be compared against the applicable screening levels published by the RWQCB, DTSC and/or EPA. If there are no contaminants identified that exceed applicable screening levels published by the RWQCB, DTSC and/or EPA, the SMP does not need to be submitted to an oversight agency, and shall only be submitted to the City prior to the beginning of construction earthwork activities and issuance of a permit for grading and excavation. If contaminants are identified at concentrations exceeding applicable screening levels, the SMP shall be submitted for review and approval by an appropriate regulatory oversight agency (e.g., SCCDEH). Further investigation may be required by the oversight agency to determine the extent of contamination (i.e., location and concentration level) and the appropriate measures required to remediate the contamination for the proposed land use(s) shall be confirmed and implemented. A copy of the approved SMP shall be submitted to the City prior to the issuance of a permit for grading and excavation.

Compliance with state and City regulations would ensure future development made possible by the proposed project would reduce impacts from potential soil contamination related to the agricultural use to a less than significant level by requiring sampling for contaminants, proper handling of hazardous materials contamination, and remediation of contamination under regulatory agency oversight, if necessary. **(Less than Significant Impact)**

Asbestos-Containing Materials and Lead-Based Paint

Based on the age of the structures on-site and observations noted in the Phase I ESA, ACMs and LBP may be present within the building materials. Future development under the project would comply with existing regulations, including NESHAP guidelines and Cal/OSHA guidelines that require pre-demolition surveys for ACMs and LBP and proper removal and disposal of ACMs and material

containing LBP, to reduce impacts from ACMs and LBP to a less than significant level. **(Less than Significant Impact)**

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The only school within 0.25 miles of the project site is Brady Elementary School, which is located approximately 0.15-miles west of the project site at 675 Gail Avenue. While there is an existing school within one-quarter mile of the project site, compliance with existing hazardous materials regulations, including state and local regulations to properly screen, handle, transport, and dispose hazardous materials, would limit the risk of hazardous materials exposure to the school. For this reason, the proposed project would not result in significant hazardous materials impacts to schools within one-quarter mile of the project site. **(Less than Significant Impact)**

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

As discussed in Section 4.9.1.2, the project site is not listed on any regulatory databases for hazardous materials compiled pursuant to Government Code Section 65962.5. Based on this, the project would not create a significant hazard to the public or the environment as a result of being listed on a hazardous materials site. **(No Impact)**

e) If located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The proposed zoning would allow residential development with a maximum building height of 30 feet on-site. While the project site is located within the FAA's FAR Part 77 Notification Surface Area, the maximum building height allowed on-site as a result of this project would not exceed 306 feet in height above grade, nor would the equipment required for construction. Therefore, the project and the future development allowed by the project would not require submittal to the FAA for airspace safety review. As discussed in Section 4.9.1.2, the project site is located outside of the Airfield's 65 dBA noise contour area. Therefore, future development under the project would not expose people residing or working in the project area to excessive noise. Based on this discussion, future development under the proposed project would not result in a safety hazard related to airport activities or expose people residing or working in the project area to excessive noise. **(No Impact)**

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The City of Sunnyvale has a Hazard Mitigation Plan, which is an annex to Santa Clara County's Operational Area Hazard Mitigation Plan (2017) that provides a regional framework for coordinated and comprehensive emergency response in the County. The project would allow for the development of up to eight single-family residential units on-site, which could incrementally increase the demand on emergency responders during an emergency response situation compared to existing conditions. However, when an application for development is filed, Sunnyvale's Department of Public Safety would review the site development plan to ensure fire protection design features are incorporated and adequate emergency access is provided. Based on this, future development allowed under the project would not impair or physically interfere with the implementation of the Hazard Mitigation Plan. **(Less than Significant Impact)**

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

The project site is not located within a Very High Fire Hazard Severity Zone as delineated on CalFire State Responsibility Area and Local Responsibility Area maps. The project site is in a developed, urban area and is not located near wildland areas that would be susceptible to wildland fires. For these reasons, implementation of the proposed project would not expose people or structures to wildland fires. **(No Impact)**

4.10 Hydrology and Water Quality

4.10.1 Environmental Setting

4.10.1.1 *Regulatory Framework*

Federal and State

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality in California. Regulations set forth by the EPA and the State Water Resources Control Board (SWRCB) have been developed to fulfill the requirements of this legislation. EPA regulations include the National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge pollutants into the waters of the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by the Regional Water Quality Control Boards (RWQCBs). The project site is within the jurisdiction of the San Francisco Bay RWQCB.

Under Section 303(d) of the federal Clean Water Act, the SWRCB and RWQCBs are required to identify impaired surface water bodies that do not meet water quality standards and develop total maximum daily loads (TMDLs) for contaminants of concern. The list of the state's identified impaired surface water bodies, known as the "303(d) list" can be found on the on the SWRCB's website.[72]

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) established the National Flood Insurance Program (NFIP) to reduce impacts of flooding on private and public properties. The program provides subsidized flood insurance to communities that comply with FEMA regulations protecting development in floodplains. As part of the program, FEMA publishes Flood Insurance Rate Maps (FIRMs) that identify Special Flood Hazard Areas (SFHAs). An SFHA is an area that would be inundated by the one-percent annual chance flood, which is also referred to as the base flood or 100-year flood.

Regional and Local

San Francisco Bay Basin Plan

The San Francisco Bay RWQCB regulates water quality in accordance with the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The Basin Plan lists the beneficial uses that the San Francisco Bay RWQCB has identified for local aquifers, streams, marshes, rivers, and the San Francisco Bay, as well as the water quality objectives and criteria that must be met to protect these

[72] California State Water Resources Control Board. "2020-2022 California Integrated Report (Clean Water Act Section 303(d) List and 305(b) Report)." May 11, 2022. Accessed September 11, 2024. https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_integrated_report.html.

uses. The San Francisco Bay RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements, including permits for nonpoint sources such as the urban runoff discharged by a City's stormwater drainage system. The Basin Plan also describes watershed management programs and water quality attainment strategies.

Municipal Regional Permit Provision C.3

The San Francisco Bay RWQCB re-issued the Municipal Regional Stormwater NPDES Permit (MRP) in May 2022 to regulate stormwater discharges from municipalities and local agencies (co-permittees) in Alameda, Contra Costa, San Mateo, and Santa Clara Counties, and the cities of Fairfield, Suisun City, and Vallejo.[73] Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 5,000 square feet or more of impervious surface area are required to implement site design, source control, and Low Impact Development (LID)-based stormwater treatment controls to treat post-construction stormwater runoff. LID-based treatment controls are intended to maintain or restore the site's natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g., rainwater harvesting for non-potable uses). The MRP also requires that stormwater treatment measures are properly installed, operated, and maintained.

Water Resources Protection Ordinance and District Well Ordinance

Valley Water operates as the flood control agency for Santa Clara County. Valley Water also provides stream stewardship and is the wholesale water supplier throughout the county, which includes the groundwater recharge program. Well construction and deconstruction permits, including borings 45 feet or deeper, are required under Valley Water's Well Ordinance 90-1. Under Valley Water's Water Resources Protection Ordinance, projects within Valley Water property or easements are required to obtain encroachment permits.

2021 Groundwater Management Plan

The 2021 Groundwater Management Plan (GWMP) describes Valley Water'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, which are located entirely in Santa Clara County. Valley Water manages a diverse water supply portfolio, with sources including groundwater, local surface water, imported water, and recycled water. About half of the county's water supply comes from local sources and the other half comes from imported sources. Imported water includes the Valley Water's State Water Project and Central Valley contract supplies and supplies delivered by the San Francisco Public Utilities Commission (SFPUC) to cities in northern Santa Clara County. Local sources include natural groundwater recharge and surface water supplies. A small portion of the county's water supply is recycled water.

[73] California Regional Water Quality Control Board San Francisco Region. *Municipal Regional Stormwater NPDES Permit, Order No. R2-2022-0018, NPDES Permit No. CAS612008.* May 11, 2022.

Local groundwater resources make up the foundation of the county's water supply, but they need to be augmented by the Valley Water's comprehensive water supply management activities to reliably meet the county's needs. These include the managed recharge of imported and local surface water and in-lieu groundwater recharge through the provision of treated surface water and raw water, acquisition of supplemental water supplies, and water conservation and recycling.[74]

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 hydrology and water quality and are applicable to the proposed project.

Policy	Description
Environmental Management Element	
EM-8.3	Ensure that stormwater control measures and best management practices are implemented to reduce the discharge of pollutants in stormwater to the maximum extent practicable.
EM-8.5	Prevent accelerated soil erosion. Continue implementation of a construction site inspection and control program to prevent discharges of sediment from erosion and discharges of other pollutants from new and redevelopment projects.
EM-8.6	Minimize the impacts from stormwater and urban runoff on the biological integrity of natural drainage systems and water bodies.
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 (hydro modification) of surface runoff as part of land use and development decisions.
EM-10.2	Consider the ability of a land parcel to detain excess stormwater 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 reasonably be considered to cause or contribute to the pollution of stormwater and urban runoff as defined in the current version of the stormwater Municipal Regional Permit.
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.
Safety and Noise Element	
SN-1.1	Evaluate and consider existing and potential hazards in developing land use policies. Make land use decisions based on an awareness of the hazards and potential hazards for the specific parcel of land.
SN-1.3	Operate and maintain the storm drainage system at a level to minimize damages and ensure public safety.

[74] Santa Clara Valley Water District. *2021 Groundwater Management Plan, Santa Clara and Llagas Subbasins. November* 2021.

Sunnyvale Municipal Code

Chapter 12.60 (Stormwater Management) in Title 12 of the SMC include the currently adopted water quality, wastewater, and stormwater management regulations. This includes regulations for compliance with NPDES permits, best management practices, project design, and water quality.

Chapter 16.62 of the SMC provides regulations to prevent flood damage in Sunnyvale. This chapter establishes provisions for reducing flood hazards, including standards for construction, utilities, subdivisions, manufactured homes, floodways, and coastal high hazard areas.

4.10.1.2 *Existing Conditions*

Water Quality

Most of the site is impervious. Stormwater runoff from the project site enters the City's main storm drain system untreated and eventually flows into the San Francisco Bay.

Groundwater

The City of Sunnyvale is located within the Santa Clara Valley Groundwater Basin.[75] Hydrologically, the groundwater basin is separated into recharge and confined zones. Geological conditions in the recharge areas allow precipitation, stream flow, and water diverted into percolation areas to recharge the deeper aquifers. The confined zones include areas of the valley where low permeability clays and silts overlie the major groundwater aquifers which impedes the vertical flow of groundwater into the deeper aquifers. The City of Sunnyvale, including the project site, lies entirely within the area of the confined zone.[76]

As discussed in Section 4.7 Geology and Soils, groundwater is estimated to be located at a depth between 20 feet to 30 feet bgs on-site.[77] Water levels on-site may vary depending on seasonal precipitation, irrigation practices, and other climate conditions.

Stormwater Drainage

The storm drainage system that serves the project site is owned and maintained by the City of Sunnyvale. Currently, the project site consists of approximately 18,000 square feet (or 60 percent) of impervious area. The remaining 11,980 square feet (or 40 percent) of the site consists of pervious area, which is comprised of landscaping and other permeable surfaces. The nearest drainage inlets

[75] United States Geological Survey. "Groundwater Quality in the San Francisco Bay Groundwater Basins, California." March 2013. Accessed September 14, 2023. https://pubs.usgs.gov/fs/2012/3111/pdf/fs20123111.pdf.
[76] Santa Clara Valley Water District. *2021 Groundwater Management Plan, Santa Clara and Llagas Subbasins*. November 2021.
[77] Santa Clara Valley Water District. "Santa Clara County Depth to First Groundwater." Accessed September 20, 2024. https://data-valleywater.opendata.arcgis.com/datasets/valleywater::santa-clara-county-depth-to-first-groundwater/explore?location=37.364061%2C-122.014687%2C18.98.

to the project site are located on South Wolfe Road, and the storm drain main line adjacent to the project site in South Wolfe Road is 39 inches in diameter.[78]

Flooding

The project site is not located within a 100-year special flood hazard area. According to the FEMA, the project site is in Zone X with 0.2 percent annual chance of flood.[79]

Other Inundation Hazards

A seiche is a standing wave oscillating in a body of water that can produce flooding along the shoreline under certain natural conditions.[80] There are no bodies of water such as lakes, harbors, or reservoirs near the project site that would affect the site in the event of a seiche. The project site is not close enough to San Francisco Bay to be affected in the event of a tsunami.[81]

4.10.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
- result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐

[78] City of Sunnyvale. "Utility Maps." Accessed September 14, 2023. https://www.sunnyvale.ca.gov/city-services/online-services/maps-and-gis/utility-maps.
[79] Federal Emergency Management Agency. "FEMA Flood Map Service Center." Accessed September 19, 2024. https://msc.fema.gov/portal/search.
[80] National Ocean Service. "What is a Seiche?" Accessed September 19, 2024. https://oceanservice.noaa.gov/facts/seiche.html.
[81] Association of Bay Area Governments. "Tsunami & Additional Hazards." Accessed September 19, 2024. https://abag.ca.gov/our-work/resilience/data-research/tsunami-additional-hazards.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
- substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
- create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
- impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Construction

The proposed project would allow for the future development of up to eight single-family residential units on-site. Future construction activities, such as grading and excavation, have the potential to result in temporary impacts to surface water quality. When disturbance to the soil occurs, sediments may be dislodged and discharged into the storm drainage system by surface runoff flows from the site. Future development would be required to comply with General Plan Policies EM-8.3, EM-8.5, EM-8.6, and EM-10.1 by implementing stormwater control measures and best management practices to minimize runoff and soil erosion to reduce construction-related water quality impacts to a less than significant level.

Post-Construction

It is assumed future development of the project site under the project would result in the addition or replacement of more than 5,000 square feet of impervious surface areas, which would require compliance with Provision C.3 of the MRP and SMC Section 12.60. Pursuant to these regulations, future development on-site would implement post-construction stormwater treatment controls using LID-based stormwater treatment controls to reduce the pollutant loads of runoff from the project to the maximum extent feasible. The inclusion of post-construction stormwater treatment controls on-site would be consistent with General Plan Policies EM-10.1, EM-10.2, and EM-10.3, and

would improve existing conditions by treating stormwater runoff on-site. Based on this discussion, future development of the project site, in compliance with existing regulations (including the MRP, General Plan policies, and SMC), would not result in significant water quality impacts. **(Less than Significant Impact)**

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Groundwater recharge occurs when surface water percolates through the soil to recharge groundwater aquifers. As discussed in Section 4.10.1.2 Existing Conditions, the project site is not located within a recharge zone for the Santa Clara Subbasin.[82] The project would facilitate the redevelopment of the site with up to eight single-family residences. Future development would not pump groundwater beneath the site for use, it would rely on existing sources of water and the City's existing water delivery system. Future residential uses on the project site would incrementally increase in demand for water in the City; however, the increase would be nominal, and the project itself would not result in the overdraft of any groundwater basins. In addition, given the estimated maximum excavation depth of 11 feet for utility trenching and the estimated groundwater depth below the site (20 to 30 feet bgs), it is unlikely that future development of the site would require dewatering of subsurface groundwater during construction. Therefore, the project and future development on the site would not interfere with groundwater recharge activities or substantially deplete groundwater levels. **(Less than Significant Impact)**

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows?

There are no streams or rivers on-site; therefore, the proposed project and subsequent development allowed under the project would not affect the existing drainage pattern of any streams or rivers. Future development under the project could alter the existing drainage patterns of the site as a result of increased impervious surface area. However, future development of the site would be required to comply with the MRP, which requires the implementation of standard stormwater control measures to reduce the pollutant loads of stormwater runoff. Future development would also be subject to SMC Chapter 12.60 (Stormwater Management), which includes regulations for compliance with NPDES permits, best management practices, project design, and water quality to reduce the potential for site runoff to result in significant erosion,

[82] Santa Clara Valley Water District. *2021 Groundwater Management Plan, Santa Clara and Llagas Subbasins*. November 2021.

siltation, and/or flooding impacts. In addition, future development on-site would be reviewed by the City to confirm whether the surrounding storm drainage infrastructure has capacity to handle any potential increases in stormwater runoff from the site and implement localized improvements (if required). Based on this discussion, the proposed project and future development allowed by the project would not substantially alter the existing drainage pattern of the site or create or contribute runoff which would exceed existing stormwater drainage capacity or result in flooding on- or off-site. **(Less than Significant Impact)**

d) Would the project risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones?

As discussed in Section 4.10.1.2 Existing Conditions, the project site is not located within a 100-year flood hazard area nor is it subject to tsunamis or seiches. In addition, the residential use allowed by the project would not use or store substantial quantities of hazardous materials on-site. For these reasons, implementation of the proposed project and any future development allowed under the project would not risk release of pollutants due to inundation in flood hazard, tsunami, or seiche zones. **(Less than Significant Impact)**

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The San Francisco Basin Plan provides a framework for state and local governments to meet water quality objectives and criteria to protect the beneficial uses of local aquifers, streams, marshes, and San Francisco Bay. Consistent with the San Francisco Basin Plan, future development allowed on-site under the proposed project would comply with the MRP requirement to install LID treatment controls to treat stormwater runoff.

Valley Water prepared the GWMP for the Santa Clara and Llagas subbasins to ensure these groundwater basins within its jurisdiction are managed sustainably. Future development under the proposed project would not interfere with any actions set forth by Valley Water in its GWMP regarding groundwater recharge, transport of groundwater, and/or groundwater quality because the Santa Clara subbasin (which the project site is located in) has not been identified as a groundwater basin in a state of overdraft in the GWMP, future development would not interfere with groundwater recharge (refer to the discussion under checklist question b) for more detail), and future development would implement measures during construction and operation to reduce stormwater runoff. Therefore, the proposed project would not preclude the implementation of the GWMP.

For these reasons, the project would not conflict with water quality control plans or sustainable groundwater management plans. **(Less than Significant Impact)**

4.11 Land Use and Planning

4.11.1 Environmental Setting

4.11.1.1 *Regulatory Framework*

Regional and Local

Comprehensive Land Use Plan for Moffett Federal Airfield

Moffett Federal Airfield is located northwest of the project site. The Moffett Federal Airfield CLUP is intended to safeguard the general welfare of the inhabitants within the vicinity of the airport, as well as aircraft occupants.[83] The CLUP is also intended to ensure that surrounding new land uses do not affect the airport's continued operation.

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 land use and planning and are applicable to the proposed project.

Policy	Description
Land Use and Transportation Element	
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.
LT-1.3	Contribute to a healthy jobs-to-housing ratio in the region by considering jobs, housing, transportation, and quality of life as inseparable when making planning decisions that affect any of these components.

Sunnyvale Municipal Code

The Zoning Code, Title 19 of the SMC, defines the various zoning districts and allowable land uses within the City and provides development standards (i.e., building height limits, building density, sign regulations, etc.) to enhance the visual appeal of new development.

[83] Santa Clara County Airport Land Use Commission. *Moffett Federal Airfield Comprehensive Land Use Plan.* November 2, 2012. Page 1-1.

4.11.1.2 *Existing Conditions*

As discussed in Section 2.6 General Plan Designation and Zoning District, the existing General Plan land use designation of the project site is Low Density Residential which is intended to preserve single-family neighborhoods and allows for the development of zero to seven dwelling units per acre (du/ac).[84] The project site is zoned Low Density Residential (R-0), which is primarily reserved for the construction, use and occupancy of residences at a development density of no more than seven du/ac.[85] Maps of the existing General Plan land use and zoning designations on-site and in the site vicinity are shown on Figure 2.7-1 and Figure 2.7-2, respectively.

The project site is currently developed with one single-family residence (with an ancillary building), and is surrounded by residential land uses, with a commercial shopping center approximately 400 feet north of the project site at the southwest corner of Old San Francisco Road and South Wolfe Road.

4.11.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	☐	☐	☒	☐
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

a) Would the project physically divide an established community?

Examples of projects that have the potential to physically divide an established community include new freeways and highways, major arterial streets, and railroad lines. The project proposes a GPA and rezoning to increase the allowed residential density on-site. There is existing residential development surrounding the project site. Future construction of residential development would not divide an established community, as this development would not obstruct access to surrounding land uses. Therefore, the project would not physically divide the existing community. **(Less than Significant Impact)**

[84] City of Sunnyvale. *General Plan - Chapter 3: Land Use and Transportation*. June 2022. Pages 3-82 and 3-84.
[85] City of Sunnyvale. *Municipal Code.* Chapter 19.18.020 – Residential Zoning Districts.

b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Future development under the project would be subject to design review by the City to ensure that the project meets the development standards in SMC Chapter 19. The project is consistent with General Plan Policies LT-1.2 and LT-1.3 because it would facilitate future infill development that would minimize regional sprawl and provide housing units within the City. Future development under the project would meet the requirements of the proposed zoning and PD combining district overlay, including setbacks, building heights, and useable open space. For these reasons, the proposed project, and any future development of the site, would not conflict with land use plans, policies, or regulations adopted to avoid or mitigate an environmental effect. **(Less than Significant Impact)**

4.12 Mineral Resources

4.12.1 Environmental Setting

4.12.1.1 *Regulatory Framework*

State

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act (SMARA) was enacted by the California legislature in 1975 to address the need for a continuing supply of mineral resources, and to prevent or minimize the negative impacts of surface mining to public health, property, and the environment. As mandated under SMARA, the State Geologist has designated mineral land classifications in order to help identify and protect mineral resources in areas within the state subject to urban expansion or other irreversible land uses which would preclude mineral extraction. SMARA also allowed the State Mining and Geology Board (SMGB), after receiving classification information from the State Geologist, to designate lands containing mineral deposits of regional or statewide significance.

4.12.1.2 *Existing Conditions*

The project site is in an urban area and is currently developed with one single-family residence and associated improvements. According to the US Geologic Service (USGS), there are no critical mineral resources in Sunnyvale, including this project site.[86]

4.12.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

[86] United States Geological Survey. "Mineral Resources Online Spatial Data." Accessed September 11, 2024. https://mrdata.usgs.gov/general/map-us.html.

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state?

As stated in Section 4.12.1.2 Existing Conditions, there are no known mineral resources on-site, nor in the immediate vicinity of the project area. The proposed project and future development made possible by the project, therefore, would not result in the loss of availability of a known mineral resource. **(No Impact)**

b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

The project site is not identified in the General Plan as containing any locally important mineral resources and no known mineral resources have previously been discovered on-site. The proposed project and future development made possible by the project, therefore, would not result in impacts to locally important mineral resource recovery sites. **(No Impact)**

4.13 Noise

The following discussion is based, in part, on an Environmental Noise Assessment prepared by Salter, Inc. dated May 24, 2024. This report is attached as Appendix E to this Initial Study.

4.13.1 Environmental Setting

4.13.1.1 *Background Information*

Noise

Factors that influence sound as it is perceived by the human ear, include the actual level of sound, period of exposure, frequencies involved, and fluctuation in the noise level during exposure. Noise is measured on a decibel scale, which serves as an index of loudness. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness. Because the human ear cannot hear all pitches or frequencies, sound levels are frequently adjusted or weighted to correspond to human hearing. This adjusted unit is known as the A-weighted decibel, or dBA.

Since excessive noise levels can adversely affect human activities and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. Noise guidelines are generally expressed using one of several noise averaging methods, including L_{eq}, L_{dn}, or CNEL.[87] These descriptors are used to measure a location's overall noise exposure, given that there are times when noise levels are higher (e.g., when a jet is taking off from an airport or when a leaf blower is operating) and times when noise levels are lower (e.g., during lulls in traffic flows on freeways or in the middle of the night). L_{max} is the maximum A-weighted noise level during a measurement period.

Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Vibration amplitude can be quantified using Peak Particle Velocity (PPV), which is defined as the maximum instantaneous positive or negative peak of the vibration wave. PPV has been routinely used to measure and assess ground-borne construction vibration. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 inches/second (in/sec) PPV. Generally, vibration levels of 0.25 in/sec PPV have the potential to cause damage to historic buildings, vibration levels of 0.30 in/sec PPV have the potential to cause damage to older residential

[87] L_{eq} is a measurement of average energy level intensity of noise over a given period of time. Day-Night Level (L_{dn}) is a 24-hour average of noise levels, with a 10 dB penalty applied to noise occurring between 10:00 PM and 7:00 AM. Community Noise Equivalent Level (CNEL) includes an additional five dB applied to noise occurring between 7:00 PM and 10:00 PM. Where traffic noise predominates, the CNEL and L_{dn} are typically within two dBA of the peak-hour L_{eq}.

buildings with plastered walls or ceilings, and vibration levels of 0.50 in/sec PPV have the potential to cause damage to newer residential buildings.[88]

4.13.1.2 *Regulatory Framework*

State

California Building Standards Code

The CBSC establishes uniform minimum noise insulation performance standards to protect persons within new buildings housing people, including hotels, motels, dormitories, apartments, and dwellings other than single-family residences. Title 24 mandates that interior noise levels attributable to exterior sources do not exceed 45 L_{dn}/CNEL in any habitable room. Exterior windows must have a minimum Sound Transmission Class (STC) of 40 or Outdoor-Indoor Transmission Class (OITC) of 30 when the property falls within the 65 dBA L_{dn} noise contour for a freeway or expressway, railroad, or industrial source.

Regional and Local

Comprehensive Land Use Plan for Moffett Federal Airfield

The project site is located 3.1 miles southeast of the Moffett Federal Airfield, which is the closest airport to the site. As described in Section 4.9 Hazards and Hazardous Materials, the Moffett Federal Airfield CLUP is intended to safeguard the general welfare of the inhabitants within the vicinity of the airport, as well as aircraft occupants.[89] The CLUP is also intended to ensure that surrounding new land uses do not affect airport operations. The CLUP establishes 65 dBA CNEL as the maximum allowable exterior noise level considered compatible with residential uses and 45 dBA CNEL as the maximum allowable interior for residences.

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 noise and vibration and are applicable to the proposed project.

[88] California Department of Transportation. *Transportation and Construction Vibration Guidance Manual*. April 2020.
[89] Santa Clara County Airport Land Use Commission. *Moffett Federal Airfield – Comprehensive Land Use Plan.* Amended November 2016.

Policy	Description
Safety and Noise Element	
SN-8.1	Enforce and supplement state laws regarding interior noise levels of residential units.
SN-8.4	Require development projects to assess potential construction noise impacts on nearby noise-sensitive land uses and to minimize impacts on those uses, to the extent feasible, as determined by the Director of Community Development.
SN-9.1	Regulate land use operational noise including but not limited to hours of operation limits, consistent with operational noise standards in the Sunnyvale municipal code.
SN-9.2	When new equipment is installed on a property, including new stationary noise sources (e.g., heating, ventilation, and air conditioning systems, generators, heating boilers) that could affect existing sensitive land uses, construction of enclosures or other screening materials should be installed around the stationary noise source such that equipment is in compliance with the city's operational noise code.

Sunnyvale Municipal Code

SMC Section 19.42.030 includes operational noise standards enforced on residential zoned property lines. The applicable standards are listed below.

(a) Residential Noise Limits:

(1) Operational noise shall not exceed 50 dBA during nighttime or 60 dBA during daytime hours at any point on the property line of the adjacent single family or duplex uses.
(2) Operational noise shall not exceed 55 dBA during nighttime or 65 dBA during daytime hours on the primary useable open space of multi-family uses.
(3) Operational noise shall not exceed 60 dBA during nighttime or 70 dBA during daytime hours on the primary useable open space of residential uses located along major transportation corridors (freeways, expressways, arterials, and rail lines) or mixed-use residential properties.

(c) Special Exceptions from Noise Limits:

(1) Powered Equipment: Powered equipment used on a temporary basis during daytime hours is exempt from the operational noise limits. When used on a continuous basis or during nighttime hours, they should comply with operational noise limits. When used adjacent to residential uses, operation of powered equipment is not allowed during nighttime hours.
(2) Construction: Construction activity regulated by Title 16 of this code shall not be governed by this section.
(3) Deliveries: Noise from deliveries shall not be considered operational noise. It is unlawful for any person to make or allow to be made a nighttime delivery to a commercial or industrial establishment when the loading/unloading area of the establishment is adjacent to a residential use. Businesses legally operating at a specific location as of February 1, 1995, are exempt from this requirement.

(4) Leaf Blower: A "leaf blower" is a small, combustion engine-powered or electric device used for property or landscape maintenance that can be hand-held or carried by the operator and which operates by propelling air under pressure through a cylindrical tube. It is unlawful for any person to operate a leaf blower on private property in or adjacent to a residential use except between the hours of 8:00 a.m. and 8:00 p.m. Effective January 1, 2000, all leaf blowers operated in or adjacent to a residential area shall operate at or below a noise level of sixty-five dBA at a distance of fifty feet, as determined by a test conducted by the American National Standards Institute or an equivalent. The dBA rating shall be prominently displayed on the leaf blower. (Ord. 2623-99 § 1; prior zoning code § 19.24.020(b)—(d)).

(5) Warning Sounds: Warning sounds necessary for the protection of public health, safety, and welfare including but not limited to: civil defense and fire sirens; commercial and residential burglar or fire alarms; and emergency response warning noises are exempt from the operational noise limits.

(6) Emergency Utility and Street Repairs: Noise from emergency utility and street repairs are exempt from this chapter.

(7) Street Sweeping and Refuse Collection Services: Noise from street sweeping and refuse collection services (garbage, recycling, and organic materials) are exempt from this chapter.

Chapter 16.08 of the SMC limits construction activity to between 7:00 AM and 6:00 PM daily Monday through Friday. Construction operations on Saturday are limited to between 8:00 AM and 5:00 PM. No construction activities are allowed on Sunday or federal holidays when the city offices are closed. Exceptions to these hours may granted by the Chief Building Official when it is determined emergency construction activity is required or construction activity will not be a nuisance to surrounding properties. While the SMC does not define the acoustical time descriptor such as L_{eq} or L_{max} that is associated with the above limits, a reasonable interpretation of the SMC would identify the ambient base noise level criteria as L_{eq}.

4.13.1.3 *Existing Conditions*

The noise environment at the project site is currently dominated by the vehicular traffic from South Wolfe Road, as well as Old San Francisco Road/Reed Avenue to the north. Flights to and from the Airfield also occasionally pass overhead. The average ambient noise at the site ranges from 58 to 74 dBA L_{dn}. A summary of the long-term noise levels measured on-site is included in Table 4.13-1 below. The noise measurement locations are shown on Figure 4.13-1 below.

Table 4.13-1: Summary of Long-Term Noise Measurement Data (dBA)

Noise Measurement	Location	Average Noise Level (L_{dn})
Long-Term Measurement 1 (LT-1)	Front yard of existing residence	74
Long-Term Measurement 2 (LT-2)	Rear yard of existing residence	58

Source: Salter, Inc. *781 South Wolfe Road Draft Environmental Noise Assessment.* May 24, 2024.

NOISE MEASUREMENT LOCATIONS | FIGURE 4.13-1

4.13.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

CEQA does not define what noise level increase would be considered substantial. The significance criteria used in the below impact discussions are based on City practice, standards identified by the FTA, and standards in the CBC, CALGreen, General Plan, and SMC .

a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction Noise

The project would allow for the future construction of up to eight single-family residences on-site. Noise impacts resulting from construction depend upon the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, and the distance between construction noise sources and noise-sensitive areas. Sensitive receptors in proximity to the project site include the residential uses to the west, south and east of the project site. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (e.g., early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction lasts over extended periods of time. It is anticipated that construction noise from future development on the project site would temporarily increase ambient noise levels at nearby sensitive receptors.

Chapter 16.08 of the SMC allows for construction between the hours of 7:00 AM and 6:00 PM on weekdays and between 8:00 AM and 5:00 PM on Saturdays. Construction activity is not permitted

on Sundays or federal holidays when the City offices are closed. This chapter also states that no loud environmentally disruptive noises, such as air compressors without mufflers, continuously running motors or generators, loud playing musical instruments, radios, etc., would be allowed where such noises may be a nuisance to adjacent residential neighborhoods. Chapter 19.42.030 provides quantitative limits on noise levels; however, those limits do not apply to construction noise that is regulated by Chapter 16.08 of the SMC. The City does not establish quantitative thresholds for the impact of temporary increases in noise due to construction. It is the City's practice for in-fill projects that hourly average noise levels during construction that would exceed 60 dBA L_{eq} at residential land uses, and the ambient by at least five dBA L_{eq} for a period of more than one year, would require the implementation of noise attenuating mitigation measures to reduce impacts to a less than significant level.[90]

Project construction is estimated to take approximately 14 months. To reduce potential significant construction noise impacts, future development would be required to comply with the SMC limits on allowable construction hours and implement best management practices to attenuate construction noise, such as the following:

- Future development shall employ site-specific noise attenuation measures during construction to reduce the generation of construction noise and vibration. These measures shall be included in a Noise Control Plan that shall be submitted for review and approval by the City prior to issuance of demolition permit. Measures specified in the Noise Control Plan and implemented during construction shall include, at a minimum, the following noise control strategies:

    - Equipment and trucks used for construction shall use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds).
    - Impact tools (e.g., jackhammers, pavement breakers, and rock drills) used for construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools.
    - Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or include other measures.
    - Unnecessary idling of internal combustion engines shall be strictly prohibited.
    - Construction staging areas shall be established at locations that create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction. Locate material stockpiles, as well as maintenance/equipment staging and parking areas, as far as feasible from residential receptors.

[90] City of Sunnyvale. *2022 Land Use and Transportation Element Draft Environmental Impact Report*. June 2022.

- Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site.
- Where feasible, temporary power service from local utility companies shall be used instead of portable generators.
- Locate cranes as far from adjoining noise-sensitive receptors as possible.
- During final grading, substitute graders for bulldozers, where feasible. Wheeled heavy equipment are quieter than track equipment and should be used where feasible.

Future development under the project would conform with the SMC limits on allowable construction hours and implement best management practices to attenuate construction noise such as the ones listed above which include preparing and implementing a noise control plan to reduce construction noise by limiting unnecessary idling of equipment, requiring noise control measures on equipment and vehicles, and organizing construction staging areas to be as far away from surrounding residences as possible. **(Less than Significant Impact)**

Operational Noise

A significant noise impact would occur if future development under the project would generate a substantial temporary or permanent noise level increase over ambient noise levels that would exceed applicable noise standards at existing noise-sensitive receptors surrounding the project site. Future development of the site under the project would increase the number of residences on-site compared to existing conditions; however, it would not substantially increase permanent ambient noise levels in the project area because the proposed use and development density would be similar to the immediately surrounding area. A significant permanent noise level increase would occur if traffic generated by future development on-site would substantially increase noise levels at sensitive receivers in the vicinity. A substantial increase would occur if: a) the noise level increase is five dBA L_{dn} or greater, with a future noise level of less than the "normally acceptable" standard, or b) the noise level increase is three dBA L_{dn} or greater, with a future noise level equal to or greater than the "normally acceptable" standard. Project-generated traffic would be the main contributor to existing noise levels. It is estimated that eight single-family residences would generate approximately 80 daily trips (six AM peak-hour trips and eight PM peak-hour trips).[91] This increase in vehicle trips would not be expected to generate a perceptible increase in traffic noise because it would not double the roadway volumes on Wolfe Road[92] and, therefore, would not be expected to generate a perceptible increase in traffic noise.[93]

[91] Project trips were estimated using the Institute of Transportation Engineers (ITE) trip generation rates of 10 daily trips per dwelling unit, 0.7 AM peak-hour trips per dwelling unit, and 0.94 PM peak-hour trips per dwelling unit (Single-Family Detached Housing Land Use 210). Source: Institute of Transportation Engineers. *ITE Trip Generation Manual, 11th Edition*. 2021.

[92] City of Sunnyvale. *Land Use and Transportation Element Draft Environmental Impact Report. SCH No. 2012032003*. August 2016. Figure 3.4-2B.

[93] Generally, traffic volumes need to double to result in a perceptible (three dB) noise increase.

As discussed in Section 4.13.1.2 Regulatory Framework, Chapter 19.42 of the SMC includes operational noise standards for mechanical equipment adjacent to residential properties to prevent excessive operational noise levels for surrounding residents. Chapter 19.42 of the SMC outlines noise limits as measured on-site during daytime and nighttime hours, at the property line with adjacent residential uses, and for steady audible tones. The proposed project itself is a GPA and rezoning and does not include a specific development that could result in any direct operational noise impacts. Future development made possible by the project may include mechanical equipment at each residence (e.g., HVAC equipment) and would comply with all regulations in Chapter 19.42 of the SMC regarding operational noise.

Based on the above discussions, the project and future development under the project would not result in a significant increase in ambient noise. **(Less than Significant Impact)**

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Construction activities associated with future development could include grading, foundation work, paving, and new building framing and finishing. These construction activities may generate vibration when heavy equipment or impact tools (e.g., jackhammers, hoe rams) are used in proximity to existing buildings on surrounding properties, and this vibration could affect adjacent uses. A significant impact would occur if construction of future development on-site would generate excessive vibration levels for surrounding receptors. In accordance with City practice, groundborne vibration levels exceeding 0.25 in/sec PPV would have the potential to result in cosmetic damage to older buildings.

Future development of the project site would require subsequent environmental review, and as discussed under checklist question a) above, future development would be required to comply with the SMC limits on allowable construction hours and implement best management practices to attenuate construction noise and vibration. These best management practices would include preparation of a Noise Control Plan to detail measures that would be implemented during construction to reduce the generation of construction noise and vibration. The Noise Control Plan would be submitted for review and approval by the City which would ensure that potential vibration impacts are reduced to a less than significant level. Examples of measures that future development could implement under the future Noise Control Plan include, but are not limited to:

- Prohibiting the use of heavy vibration-generating construction equipment within 25 feet of residences. Instead, a smaller vibratory roller, such as the Caterpillar model CP433E vibratory compactor, could be used when compacting materials within 25 feet of residences adjoining the site.
- Avoiding dropping heavy equipment within 25 feet of residences. Alternative methods for breaking up existing pavement, such as a pavement grinder, could be used instead of dropping heavy objects within 25 feet of residences adjoining the site.

- Alerting heavy equipment operators in close proximity of the adjacent structures so they can exercise extra care.

In addition, future development of the project site would comply with all City construction standards and requirements (including those in SMC Chapter 16.08). Due to the type of development anticipated and required setbacks specified in the SMC, operation of future development under the project would not generate a substantial level of groundborne vibration or noise to the surrounding land uses. **(Less than Significant Impact)**

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The nearest airport to the project site is the Airfield, which is approximately 3.1 miles northwest of the site. According to the CLUP, the project site is not located within its AIA, nor is it located within the 65 dB noise contour of the Airfield.[94] Therefore, the project and any future development made possible by the project would not expose people residing or working in the project area to excessive noise levels. **(Less than Significant Impact)**

4.13.3 Non-CEQA Effects

Per California Building Industry Association v. Bay Area Air Quality Management District, 62 Cal. 4th 369 (BIA v. BAAQMD), effects of the environment on the project are not considered CEQA impacts. The following discussion is included for informational purposes only because the City of Sunnyvale has policies (including General Plan Policy SN-8.1) that address existing noise conditions affecting a proposed project.

Based on the General Plan noise and land use compatibility guidelines, residential development is "normally acceptable" in areas with ambient noise levels up to 60 dBA L_{dn} and is "conditionally acceptable" in areas with noise levels up to 75 dBA L_{dn}. Based on measurements taken on-site, the project area has existing noise levels of approximately 58 to 74 dBA L_{dn}. Therefore, the project site would be conditionally acceptable for future residential development. Future residential development on-site would be required to provide a detailed analysis of the noise reduction requirements and needed noise insulation features that would be included in the project design to demonstrate interior noise standards are met. These design features would be reviewed by the City prior to issuance of a building permit.

[94] Santa Clara County Airport Land Use Commission. *Moffett Federal Airfield Comprehensive Land Use Plan*. December 2018.

4.14 Population and Housing

4.14.1 Environmental Setting

4.14.1.1 *Regulatory Framework*

State

Housing-Element Law

State requirements mandating that housing be included as an element of each jurisdiction's general plan is known as housing-element law. The Regional Housing Need Allocation (RHNA) is the state-mandated process to identify the total number of housing units (by affordability level) that each jurisdiction must accommodate in its housing element. California housing-element law requires cities to: 1) zone adequate lands to accommodate its RHNA; 2) produce an inventory of sites that can accommodate its share of the RHNA; 3) identify governmental and non-governmental constraints to residential development; 4) develop strategies and a work plan to mitigate or eliminate those constraints; and 5) adopt a housing element and update it on a regular basis.[95] The City of Sunnyvale Housing Element and related land use policies were last updated in December 2023.[96]

Regional and Local

Plan Bay Area 2050

Plan Bay Area 2050 is a long-range plan for the nine-county San Francisco Bay Area that provides strategies that increase the availability of affordable housing, support a more equitable and efficient economy, improve the transportation network, and enhance the region's environmental resilience. Plan Bay Area 2050 promotes the development of a variety of housing types and densities within identified PDAs. PDAs are areas generally near existing job centers or frequent transit that are locally identified for housing and job growth.[97]

ABAG allocates regional housing needs to each city and county within the San Francisco Bay Area, based on statewide goals. These allocations are designed to lay the foundation for Plan Bay Area 2050's long-term envisioned growth pattern for the region. ABAG also develops a series of forecasts and models to project the growth of population, housing units, and jobs in the Bay Area. ABAG, MTC, and local jurisdiction planning staff created the Forecasting and Modeling Report, which is a

[95] California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements." Accessed September 11, 2024. http://hcd.ca.gov/community-development/housing-element/index.shtml.
[96] City of Sunnyvale. *2023-2031 Housing Element.* December 12, 2023. https://www.sunnyvale.ca.gov/home/showpublisheddocument/4964/638380668142030000.
[97] Association of Bay Area Governments and Metropolitan Transportation Commission. *Plan Bay Area 2050*. October 21, 2021. Page 20.

technical overview of the growth forecasts and land use models upon which Plan Bay Area 2050 is based.

City of Sunnyvale General Plan

The 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 population and housing resources and are applicable to the proposed project.

Policy	Description
Land Use and Transportation Element	
LT-1.3	Contribute to a healthy jobs-to-housing ratio in the region by considering jobs, housing, transportation, and quality of life as inseparable when making planning decisions that affect any of these components.
Housing Element	
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.
HE-4.3	Require new development to build to at least 75 percent of the maximum zoning density, unless an exception is granted by the City Council.

4.14.1.2 *Existing Conditions*

As of January 2024, the City of Sunnyvale has approximately 63,608 housing units and an approximate population of 157,566, with an average of 2.58 persons per household.[98] The City projects an overall population of 174,500 residents by the year 2035.[99] The project site is developed with one (currently unoccupied) single-family residence and associated improvements.

General Plan buildout (year 2040) is estimated to result in a total of 84,170 households citywide and a population of 222,210 residents.[100, 101]

[98] California Department of Finance. "Report E-5: Population and Housing Estimates for Cities, Counties, and the State, January 1, 2021-2024." Accessed September 12, 2024. https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fdof.ca.gov%2Fwp-content%2Fuploads%2Fsites%2F352%2FForecasting%2FDemographics%2FDocuments%2FE-5-2024_Geo_InternetVersion.xlsx&wdOrigin=BROWSELINK.

[99] City of Sunnyvale. *2017 Land Use and Transportation Element Draft Environmental Impact Report*. Updated June 2022. Page 3.2-5. SCH# 2012032003.

[100] City of Sunnyvale. *Moffett Park Specific Plan Draft Environmental Impact Report.* December 2022. Page 259. SCH# 2021080338.

[101] City of Sunnyvale. *Initial Study/Proposed Negative Declaration 2023 – 2031 Housing Element Update* (SCH# 2023100530). October 2023

4.14.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Assuming future development of the project site would construct approximately eight single-family residential units, future development would generate approximately 21 new residents.[102] This represents a 0.01 percent increase in the number of units anticipated by the City in 2040, and 0.01 percent of the increase in population anticipated through 2040. This increase in population is not substantial, given the overall population growth projected within Sunnyvale. Future development of the project site with approximately eight single-family housing units would not result in an expansion of urban services or the pressure to expand beyond the City's existing Sphere of Influence. For these reasons, the project would not induce substantial unplanned population growth. **(Less than Significant Impact)**

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

As discussed in Section 4.14.1.2 Existing Conditions, there is one existing single-family residence on-site, which is currently unoccupied. In addition, future implementation of the project would result in a net increase in seven residences on-site compared to existing conditions. Therefore, future redevelopment of the site would not displace any existing residents or substantial numbers of existing housing, necessitate the construction of replacement housing. **(No Impact)**

[102] Based on an average of 2.58 persons per household. 2.58 x 8 = 21 residents

4.15 Public Services

4.15.1 Environmental Setting

4.15.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

Government Code Section 65995 through 65998

California Government Code Section 65996 specifies that an acceptable method of offsetting a project's effect on the adequacy of school facilities is the payment of a school impact fee prior to the issuance of a building permit. Government Code Sections 65995 through 65998 set forth provisions for the payment of school impact fees by new development by "mitigating impacts on school facilities that occur (as a result of the planning, use, or development of real property" (Section 65996[a]). The legislation states that the payment of school impact fees "are hereby deemed to provide full and complete school facilities mitigation" under CEQA (Section 65996[b]).

Developers are required to pay a school impact fee to the school district to offset the increased demands on school facilities caused by the proposed residential development project. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

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 public services and are applicable to the proposed project.

Policy	Description
Land Use and Transportation Element	
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.
Community Character Element	
CC-7.2	Maintain a full-service Library adequate to meet community needs.
Safety and Noise Element	
SN-3.1	Provide rapid and timely response to all emergencies.
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.

Sunnyvale Municipal Code

SMC Chapter 16.52 is the City's Fire Code and, adopted by reference, the 2018 International Fire Code (IFC) in its entirety as published by the International Code Council and the California Fire Code under Ordinance 3018-13 are included in the City's Fire Code. The Fire Code regulates, among other things, issuance of permits where operations or business or the installation or modification of any systems regulated under the Fire Code are planned (Section 16.52.105), application and collection of applicable fire permit fees (Section 16.52.106), and installation of residential and commercial automatic sprinkler systems (Section 16.52.903).

SMC Chapter 18.10 (Parks and Open Space Dedication) defines the park in-lieu fees or land dedication required as a condition of approval of any final subdivision map or parcel map. In accordance with the open space and recreation sub element of the General Plan, five acres of land for public park and recreational facilities shall be devoted per each one thousand persons in a neighborhood planning area. As detailed in Chapter 18.10, as a condition of approval for any final subdivision map or parcel map, the subdivider shall dedicate land, pay an in-lieu fee thereof, or both, at the option of the city, for park or recreational purposes.

4.15.1.2 *Existing Conditions*

Fire and Police Protection Services

Fire and police protection services are provided to the project site by the Sunnyvale Department of Public Safety (DPS). The DPS is staffed by Public Safety Officers who are cross-trained as police

officers, firefighters, and emergency medical technicians.[103] The DPS is divided into nine separate programs: Police Services, Fire Services, Community Safety Services, Personnel and Training Services, Investigation Services, Communication Services, Public Safety Administration Services, Records Management and Property Services, and Fire Prevention and Hazardous Materials Services. The Fire Services program is responsible for responding to fire calls and providing emergency medical services. The Fire Services program provides fire prevention compliance inspections, fire code enforcement, and hazardous materials regulation. The Police Services program is responsible for providing law enforcement and SWAT services to the community.[104]

The City of Sunnyvale participates in a mutual aid program with neighboring cities, including the cities of Mountain View, Santa Clara, and San José. Through this program, should Sunnyvale need additional assistance, one or more of the mutual aid cities would provide assistance in whatever capacity was needed.

The Fire Services program operates a total of six fire stations that serve the City of Sunnyvale. The nearest fire station to the project site is Sunnyvale Fire Station #4 at 996 South Mathilda Avenue, which is approximately 0.5-mile south of the project site. DPS has an established response time goal of seven minutes and 59 seconds for the Fire Services program when responding to emergency medical services events and outdoor fires. In fiscal year 2023/24, 90 percent of emergency events were responded to within the established goal.[105] The Police Services program is based out of the Sunnyvale DPS complex at 700 All America Way, which is approximately 1.4 miles northwest of the project site. DPS does not have established response time goals or service ratio for the Police Services program; however, they do track average response times throughout each fiscal year. In fiscal year 2023/24, the average response time was four minutes and thirty-five seconds.[106]

Schools

The project site is within the boundaries of the Santa Clara Unified School District (SCUSD). SCUSD is comprised of 18 elementary schools, four middle schools, one K-8 school, and five high schools. Students on-site would attend Braly Elementary School at 675 Gail Avenue approximately 0.2-mile west of the site, Peterson Middle School at 1380 Rosalia Avenue approximately 1.1-miles southeast of the site, and Wilcox High School at 3250 Monroe Street approximately 1.6-miles northeast of the site.[107]

Table 4.15-1 shows the existing school capacities and recent enrollment data at Braly Elementary School, Peterson Middle School, and Wilcox High School. As shown in the table, there is available

[103] City of Sunnyvale. "Public Safety." Accessed September 11, 2024. https://www.sunnyvale.ca.gov/your-government/departments/public-safety.
[104] City of Sunnyvale. "DPS Organizational Chart." Accessed September 11, 2024. Available at https://www.sunnyvale.ca.gov/home/showpublisheddocument/3052/638100604224870000.
[105] Fanucchi, Ava. Public Safety Department Deputy Chief, City of Sunnyvale. Personal Communication. September 25, 2024.
[106] Ibid.
[107] Santa Clara Unified School District. "MySchool Locator." Accessed September 13, 2024. https://locator.pea.powerschool.com/?StudyID=217157.

enrollment capacity for 89 students at Braly Elementary School, 244 students at Peterson Middle School, and 208 students Wilcox High School.

Table 4.15-1: School Enrollment and Capacity

	2023 to 2024 Enrollment[1,2,3]	Existing Capacity[4]
Braly Elementary	362	451
Peterson Middle School	741	985
Wilcox High School	1,695	1,903

[1] California Department of Education: Data Quest. "2023-24 Enrollment by Grade Braly Elementary Report." Accessed September 18, 2024. https://dq.cde.ca.gov/dataquest/dqcensus/EnrGrdLevels.aspx?cds=43696746048813&agglevel=school&year=2023-24.
[2] California Department of Education: Data Quest. "2023-24 Enrollment by Grade Marian A. Peterson Middle Report." Accessed September 18, 2024. https://dq.cde.ca.gov/dataquest/dqcensus/EnrGrdLevels.aspx?cds=43696746101760&agglevel=school&year=2023-24.
[3] California Department of Education: Data Quest. "2023-24 Enrollment by Grade Adrian Wilcox High Report." Accessed September 18, 2024. https://dq.cde.ca.gov/dataquest/dqcensus/EnrGrdLevels.aspx?cds=43696744338802&agglevel=school&year=2023-24.
[4] Santa Clara Unified School District. *Residential And Commercial/Industrial Development School Fee Justification Study.* March 28, 2024. Accessed September 17, 2024.

The SCUSD estimates a student generation rate of approximately 0.1 elementary students, 0.05 middle school students, and 0.07 high school students per single-family dwelling unit.[108]

Parks

Parks and open space in the City are managed by the Parks Division within the Department of Public Works. The City currently has approximately 772 acres of parkland, including 185 acres of parks, 264 acres of special use facilities (including the Sunnyvale Golf Course and Baylands Park Wetlands), 87 acres of school open space, three acres of public grounds (including orchards and open space surrounding the Community Center and Civic Center campuses), and 48 acres of greenbelts and trails. The City's parkland total includes other recreational facilities such as the John W. Christian Greenbelt, a senior center, tennis courts, a skate park.[109] The nearest park facility is Braly Park, which is located approximately 0.3-mile west of the project site.

[108] Santa Clara Unified School District. *Residential And Commercial/Industrial Development School Fee Justification Study.* March 28, 2024.
[109] City of Sunnyvale. "Parks and Trails." Accessed September 13, 2024. https://www.sunnyvale.ca.gov/recreation-and-community/parks-and-trails.

Libraries

Sunnyvale Public Library is the sole public library within the City. It is located at 665 West Olive Avenue, which is approximately 1.4 miles northwest of the project site. Library features include book rentals, computer services, wireless internet, access to 3D printing, and a sewing lab.[110]

In 2007, the City of Sunnyvale developed a service ratio goal of one square foot per capita of building space for libraries.[111] Based on the current population (157,566 persons) and current library size (60,800 square feet), the City of Sunnyvale is providing 0.39 square feet per capita and is not meeting its goals.

Construction of the Lakewood Branch Library and Learning Center Project, which will provide an approximately 20,000 square foot branch library in North Sunnyvale, began in 2024 and is expected to be completed in late 2025.[112]

In September 2018, the City approved the Civic Center Modernization Project Master Plan. The Master Plan consists of three phases. The first phase replaced City Hall and built an addition to the Public Safety Headquarters, which included an Emergency Operations Center. Phase I was completed in March 2023. The second phase will be focused on the main library and will consider expanding or replacing the existing 60,800 square foot library with up to a 120,000 square foot library. The intent of the larger library is to serve existing and future growth in the City. The impacts of the new/larger library were analyzed in the certified Civic Center Modernization Master Plan EIR.[113] A measure for a $290 million bond to support the construction of a new Main Library was approved by voters in November 2024.[114, 115] Phase 3 is to relocate the DPS building from the corner of El Camino Real/Pastoria to the corner of Charles/Olive.

[110] City of Sunnyvale. "Sunnyvale Public Library." Accessed September 13, 2024. https://www.library.sunnyvale.ca.gov/home-library.
[111] City of Sunnyvale. *Council Report: Sunnyvale Library of the Future Study and Strategy: Facility Scenarios.* April 24, 2022. Page 2.
[112] City of Sunnyvale. "Lakewood Branch Library." Accessed September 13, 2024. https://www.sunnyvale.ca.gov/business-and-development/projects-in-sunnyvale/infrastructure-projects/lakewood-branch-library.
[113] City of Sunnyvale. *Civic Center Modernization Master Plan Draft Program Environmental Impact Report.* SCH #2017092075. April 2018. Certified September 2018.
[114] City of Sunnyvale. "Library Bond Measure Q&A". Accessed September 13, 2024. https://www.sunnyvale.ca.gov/your-government/ballot-measures/library-bond-measure/library-bond-measure-q-a#!/.
[115] City of Sunnyvale. "Elections." Accessed January 24, 2025. https://www.sunnyvale.ca.gov/your-government/city-clerk/elections.

4.15.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire Protection?	☐	☐	☒	☐
b) Police Protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☒	☐
d) Parks?	☐	☐	☒	☐
e) Other Public Facilities?	☐	☐	☒	☐

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services?

The proposed project would allow for the future development of up to eight single-family residential units that would incrementally increase the demand for fire protection services in the area. While the project would allow for up to seven additional units on-site, this alone would not require the construction of new or expanded fire protection facilities. In addition, the site is within the existing DPS service area and is in proximity to existing fire stations. Future development made possible by the project would also be required to meet current CBSC and requirements in SMC Chapter 16.52 that ensure future development includes adequate design and infrastructure for fire protection. For these reasons, the proposed project and future development made possible by the project would not result in a significant impact to fire protection services in the City or require the construction of new or expanded fire protection facilities. **(Less than Significant Impact)**

b) 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 police protection services?

Similar to fire protection services, while the project would allow for up to seven additional residential units on-site, this additional development alone would not require the construction of new or expanded police protection facilities. In addition, the site is within the existing DPS service area. Future development under the project would be constructed in accordance with building codes and would be reviewed by the DPS prior to issuance of building permits to ensure adequate lighting and security features are included. For those reasons, the proposed project and future development made possible by the project would not result in a significant impact to police protection services or require the construction of new or expanded police protection facilities. **(Less than Significant Impact)**

c) 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 schools?

Based on the student generation rates used by SCUSD, eight single-family residences would generate approximately one new elementary school student, one new middle school student, and one new high school student.

As shown in Table 4.15-1, Braly Elementary School, Peterson Middle School, and Wilcox High School all have existing capacity to accommodate project generated students based on current enrollment numbers. The additional students generated by future development would not exceed the existing capacity or necessitate the construction of additional school facilities.

It is acknowledged that school enrollment and capacity changes over time and could be different than it is today. In accordance with California Government Code Section 65996, future development under the project would be required to pay school impact fees to SCUSD to offset the increased demands on school facilities caused by the project. Payment of school impact fees is considered adequate mitigation of impacts to schools under CEQA. Therefore, the proposed project would have a less than significant impact on school facilities. **(Less than Significant Impact)**

d) 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 parks?

The project would allow residential development at a higher density than currently exists on-site. Future residents of the site would use existing parks in the area. The City collects park in-lieu fees from residential developments pursuant to SMC Chapter 18.10 and these fees are determined based on the number of units proposed and the density at which the project would be developed. The fees contribute to the cost of purchasing new land, buying equipment, or constructing improvements in neighborhood and district parks and recreational facilities. Future development under the project would be required to comply with SMC Chapter 18.10 to offset its increased demand for parks and recreational facilities. In addition, the single-family residences that could be developed in the future would have private outdoor space in both the front and back yards which would offset some of the usage of existing parks facilities. Thus, the project's impact on parks would be less than significant. **(Less than Significant Impact)**

e) 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 other public facilities?

Future residents resulting from implementation of the project would likely use nearby libraries. The Sunnyvale Public Library is the sole public library in the City, serving the City's existing population of approximately 157,566 residents. The incremental increase of up to seven new residential units on-site would not substantially reduce the library's capacity for service.

As discussed under Section 4.15.1.2 Existing Conditions, the Lakewood Branch library is expected to be constructed by late 2025. The project involves construction of an approximately 20,000 square foot branch library facility in the Lakewood Village neighborhood of Sunnyvale. Additionally, the City is planning to relocate and expand the Main Library by 2040.[116] It is possible that future residents would also use these library facilities; however, the incremental increase in residents from development under the project would not substantially reduce the capacity for service of these facilities. Therefore, the impact of the project and future development made possible by the project would be less than significant. **(Less than Significant Impact)**

[116] City of Sunnyvale. *Civic Center Addendum to Program Environmental Impact Report.* April 2020. Page 26.

4.16 Recreation

4.16.1 Environmental Setting

4.16.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

Regional and Local

Countywide Trails Master Plan

The Santa Clara County Trails Master Plan Update is a regional trails plan approved by the Santa Clara County Board of Supervisors. It provides a framework for implementing the County's vision of providing a contiguous trail network that connects cities to one another, cities to the county's regional open space resources, County parks to other County parks, and the northern and southern urbanized regions of the County. The plan identifies regional trail routes, sub-regional trail routes, connector trail routes, and historic trails.

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 recreation and are applicable to the proposed project.

Policy	Description
Land Use and Transportation Element	
LT-9.1	Ensure that the planned availability of open space in both the city and the region is adequate.
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.

Sunnyvale Municipal Code

SMC Chapter 18.10 (Parks and Open Space Dedication) defines the park in-lieu fees or land dedication required as a condition of approval of any final subdivision map or parcel map. In accordance with the open space and recreation sub element of the General Plan, five acres of land for public park and recreational facilities shall be devoted per each one thousand persons in a neighborhood planning area. As detailed in Chapter 18.10, as a condition of approval for any final subdivision map or parcel map, the subdivider shall dedicate land, pay an in-lieu fee thereof, or both, at the option of the city, for park or recreational purposes.

4.16.1.2 *Existing Conditions*

Parks and open space in the City are managed by the Parks Division within the Department of Public Works. The City currently has approximately 772 acres of parkland, including 185 acres of parks, 264 acres of special use facilities (including the Sunnyvale Golf Course and Baylands Park Wetlands), 87 acres of school open space, three acres of public grounds (including orchards and open space surrounding the Community Center and Civic Center campuses), and 48 acres of greenbelts and trails. The City's parkland total includes other recreational facilities such as the John W. Christian Greenbelt, a senior center, tennis courts, a skate park. In addition to Braly Park, which is located approximately 0.3-mile west of the project site and consists of tennis courts, open space, and a playground, other nearby recreational facilities include the Sunken Gardens Golf Course and the Indoor Sports Center at the Sunnyvale Community Center.

4.16.2 Impact Discussion

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated?	☐	☐	☒	☐
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Development under the proposed project would allow for up to four additional residential units that were not accounted for in the General Plan, which would incrementally increase the demand on existing parks and other recreational facilities.[117] The single-family residences that could be developed in the future would have private outdoor space in both the front and back yards which would offset some of the usage of existing parks and recreation facilities. As discussed in Section 0 Public Services, future development on-site would also be required to comply with SMC Chapter 18.10 by paying park land dedication fees to offset its increased demand for parks and recreational facilities. For these reasons, the project would not result in a substantial physical deterioration of park and recreational facilities. **(Less than Significant Impact)**

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The project does not include the construction of any recreational facilities. As discussed under checklist question a), future development would comply with SMC Chapter 18.10 to offset its park and recreation demand. If the in-lieu fees are used to construct new or expanded recreation facilities, those facilities would be subject to a separate CEQA review when proposed. **(Less than Significant Impact)**

[117] California Department of Finance. "Report E-5: Population and Housing Estimates for Cities, Counties, and the State, January 1, 2021-2024". Accessed September 12, 2024.

4.17 Transportation

4.17.1 Environmental Setting

4.17.1.1 *Regulatory Framework*

State

Senate Bill 743

SB 743 establishes criteria for determining the significance of transportation impacts using a VMT metric intended to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. Specifically, SB 743 requires analysis of VMT in determining the significance of transportation impacts. Local jurisdictions were required by the Governor's Office of Planning and Research (OPR) to implement a VMT policy by July 1, 2020.

SB 743 did not authorize OPR to set specific VMT impact thresholds, but it did direct OPR to develop guidelines for jurisdictions to utilize. CEQA Guidelines Section 15064.3(b)(1) describes factors that might indicate whether a development project's VMT may be significant. Notably, projects located within 0.50 mile of transit should be considered to have a less than significant transportation impact based on OPR guidance.

Regional and Local

Regional Transportation Plan

MTC is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including Santa Clara County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and ABAG adopted Plan Bay Area 2050 in October 2021, which includes a Regional Transportation Plan to guide regional transportation investment for revenues from federal, state, regional and local sources through 2050.

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 transportation and traffic and are applicable to the proposed project.

Policy	Description
Land Use and Transportation Element	
LT-1.6	Integrate land use planning in Sunnyvale and the regional transportation system.
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.
LT-3.2	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.
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.
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.
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.
LT-3.27	Require appropriate roadway design practice for private development consistent with City standards and the intended use of the roadway.
Safety and Noise Element	
SN-3.5	Facilitate the safe movement of pedestrians, bicyclists, and vehicles.

City of Sunnyvale Active Transportation Plan 2020

The City's Active Transportation Plan 2020 was approved by the Sunnyvale City Council in August 2020. The plan recommends improvements that integrate pedestrian, bicycling, and safe routes to schools throughout the City to create a connected and efficient network. The Active Transportation Plan serves as an update to the 2006 Bicycle Plan, 2007 Pedestrian Safety and Opportunities Study, and the 2012 Comprehensive School Traffic Study. The Active Transportation Plan 2020 identified the construction of a Class IV separated bicycle lane along Fremont Avenue and the maintenance of the existing Class II bicycle lane on Wolfe Road.

City Council Policy 1.2.8: Transportation Analysis Policy

In June 2020, the Sunnyvale City Council adopted Council Policy 1.2.8 to comply with the requirements set forth in SB 743, which requires the use of VMT rather than level-of-service (LOS) to identify significant transportation impacts under CEQA. Council Policy 1.2.8 states that a land use project is not required to conduct a VMT analysis to identify significant transportation impacts under CEQA if it meets any of the exemption criteria under Section 2. Exemption of the policy. These exemptions can be related to the size (small infill projects generating 110 daily trips or less), specific land use, or location of the proposed project.

Vision Zero Plan

Adopted on July 30, 2019, the City's Vision Zero Plan establishes a phased approach to reduce roadway fatalities and serious injuries by 50 percent by 2029, with an ultimate goal of zero percent by 2039. The plan established a High Injury Network that identifies traffic corridors with the highest concentrations of fatal and serious injury collisions. The plan includes the following safety strategies to reach its established goals.

Strategy	Description
Vision Zero Program Initiation	
LT-1.6	Integrate land use planning in Sunnyvale and the regional transportation system.
Street Design and Operation	
B.9	When identifying safety improvements, consider all road users and how countermeasures follow the City's Complete Streets Policy.
D.1	Continue building and improving the bicycle network consistent with the Sunnyvale Bicycle Plan and Santa Clara Countywide Bike Plan.
D.2	Install pedestrian countdown timers at every signalized crossing location.
D.4	Complete projects that improve bicycle and pedestrian safety related to turning vehicles at intersections.

City of Sunnyvale Development Review Process

The City's standard development review process includes review of proposed site plans by the DPS and completion of project-specific Local Transportation Analyses (LTAs), as warranted. Site plans and project-specific LTAs are reviewed by the Department of Public Works to ensure specific projects are consistent with the City's site design standards.

4.17.1.2 *Existing Conditions*

Regional Access

Regional access to the project site is provided by the Central Expressway, Lawrence Expressway, and El Camino Real, as described below.

Central Expressway is a divided four-lane, east-west expressway between De La Cruz Boulevard in Santa Clara and San Antonio Road in Mountain View. Central Expressway provides access to the site via North Wolfe Road.

Lawrence Expressway is a divided four-lane, north-south expressway between SR 237 in north Sunnyvale and Saratoga Avenue in the City of San José. Lawrence Expressway provides access to the project site via Reed Avenue and South Wolfe Road.

El Camino Real (SR 82) is connects the cities of San Francisco and San José. It is a divided six-lane arterial road traveling northwest-southeast, providing access to the project site via South Wolfe Road.

Local Roadway Access

Local roadway access to the project site is provided by Wolfe Road and Old San Francisco Road, as described below.

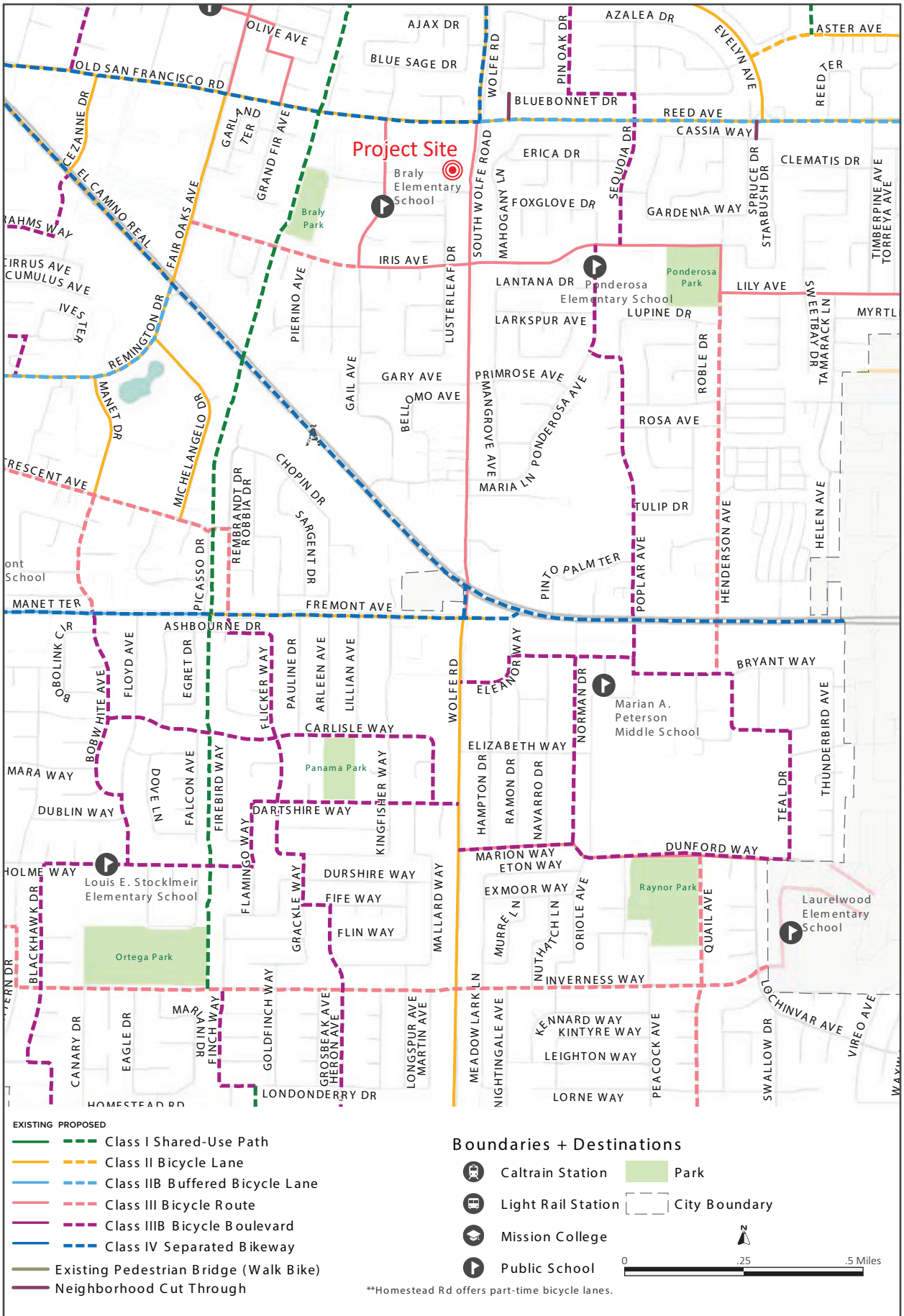
Wolfe Road is a four-lane north-south roadway extending from Fair Oaks Avenue to the north to Stevens Creek Boulevard in the south. This road provides direct access to the project site via two private driveways on the eastern site boundary.

Old San Francisco Road is a four-lane east-west roadway extending from Forest Avenue to South Sunnyvale Avenue. This road provides access to the site via South Wolfe Road. East of the South Wolfe Road/Old San Francisco Road intersection, Old San Francisco Road becomes Reed Avenue.

Existing Bicycle, Pedestrian, and Transit Facilities

Bicycle Facilities

Bicycle facilities within the vicinity of the project site consist of Class II bike lanes and Class III bike routes. Class II bike lanes are characterized as on-street bike lanes with a striped lane, pavement markings, and signage for one way bicycle traffic. Class III bike routes are typically characterized as streets where the lanes are wide enough, and the number of vehicles is low enough for both bicycles and vehicles to share the road. North of El Camino Road, Wolfe Road is classified as a Class III bike route that is oriented in a north-south direction. In the project vicinity, Old San Francisco Road/Reed Avenue contains Class II bike lanes that are generally oriented in an east-west direction. The existing bicycle facilities are shown on Figure 4.17-1, as are the planned improvements identified in the City's Active Transportation Plan 2020.



EXISTING BICYCLE FACILITIES | FIGURE 4.17-1

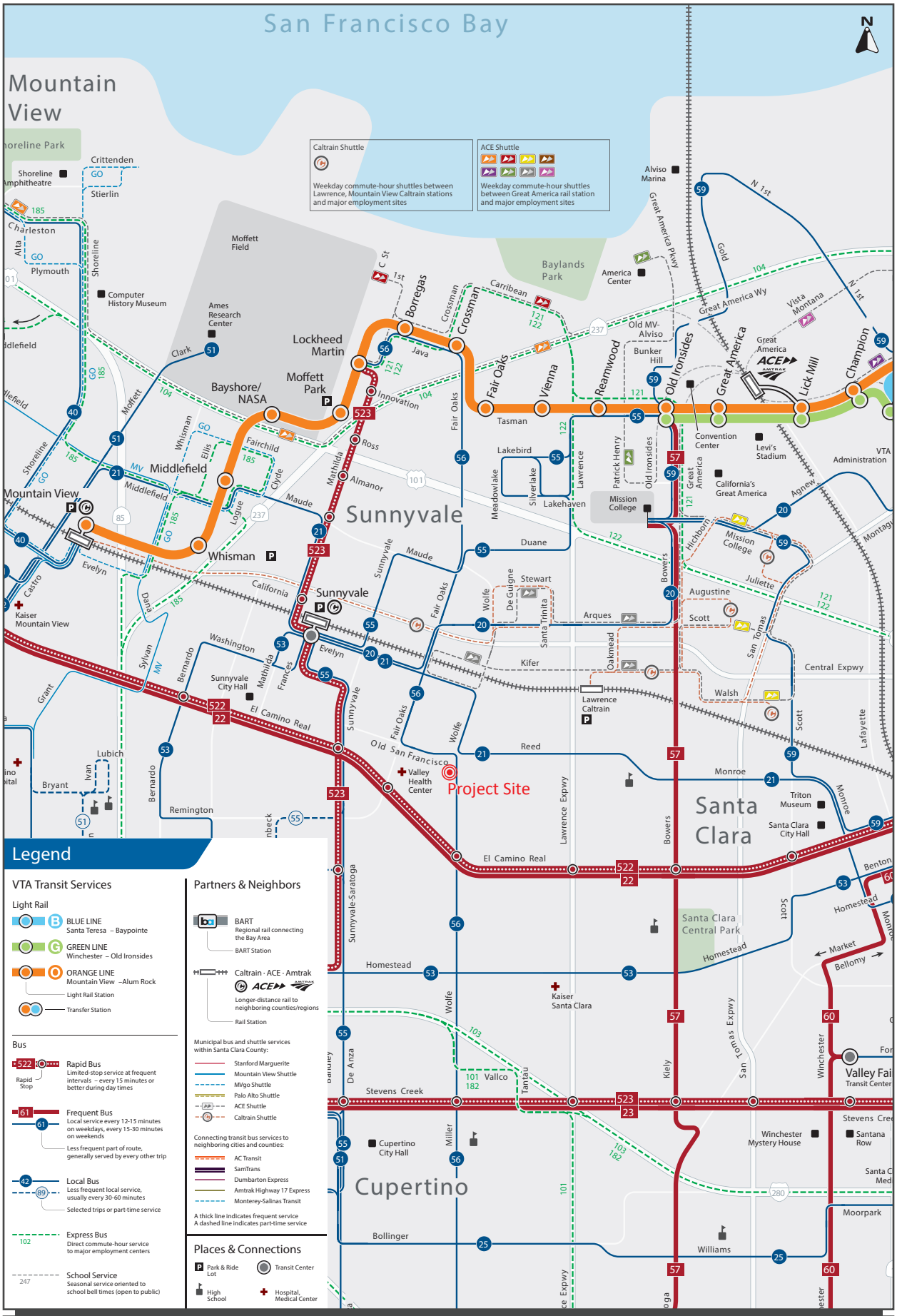
Pedestrian Facilities

The street adjacent to the project site, South Wolfe Road, has sidewalks on both sides of the street. The nearest intersection, South Wolfe Road/Old San Francisco Road, is a signalized intersection that has striped crosswalks and pedestrian push-buttons on all four sides of the intersection.

Transit Facilities

The existing bus transit services in the vicinity of the project site are provided by the Santa Clara Valley Transportation Authority (VTA). The nearest bus stop is at the intersection of South Wolfe Road and Old San Francisco Road, approximately 615 feet north of the project site. The VTA services operating in the vicinity of the project area are listed below with information regarding their headways (i.e., the frequency at which transit vehicles arrive at the transit stop during peak travel hours). Existing transit facilities are shown on Figure 4.17-2.

- Local Route 56 runs from the Lockheed Martin transit stop to De Anza College with peak headways of approximately 30 minutes
- Local Route 21 runs from the Santa Clara Transit Center to Arboretum and Sandhill Road with peak headways of approximately 30 minutes



EXISTING TRANSIT FACILITIES | FIGURE 4.17-2

4.17.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities?	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

a) Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities?

Roadway System

The project's effect on the roadway system was evaluated consistent with Council Policy 1.2.8 and the City's Transportation Analysis Guideline. Based on the trip generation rate for a "Single-Family Detached" land use provided in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, the future development of eight detached single-family residences on-site would generate approximately 80 new trips per day (six AM peak-hour trips and eight PM peak-hour trips).[118] The projected increase in net-new peak-hour trips generated by the change in land use on-site would be under the threshold of 100 AM and PM peak hour trips established in the City's Transportation Analysis Guidelines. Therefore, the project would not trigger the requirement to conduct an LTA for Level of Service (LOS) analysis and is assumed to not result in roadway LOS deficiencies. As a result, the project would comply with the City's Council Policy 1.2.8 and Transportation Analysis Guidelines. As discussed under checklist question b) below, the project would have a less than significant VMT impact. Based on this discussion, the project and future development made possible by the project would not conflict with any program, plan, ordinance, or policy addressing the roadway system. **(Less than Significant Impact)**

[118] Project trips were estimated using the Institute of Transportation Engineers (ITE) trip generation rates of 10 daily trips per dwelling unit, 0.7 AM peak-hour trips per dwelling unit, and 0.94 PM peak-hour trips per dwelling unit (Single-Family Detached Housing Land Use 210). Source: Institute of Transportation Engineers. *ITE Trip Generation Manual, 11th Edition*. 2021.

Bicycle Facilities

Bicycle facilities within the vicinity of the project site consist primarily of Class III bike routes and Class II bike lanes. The City's Active Transportation Plan 2020 identified the construction of a Class IV separated bikeway along both Wolfe Road and Old San Francisco Road north of the South Wolfe Road/Old San Francisco Road intersection. Additionally, a Class IIB buffered bicycle lane is proposed along Reed Avenue. Funding for these proposed improvements would be sourced from a variety of local, regional, state, and federal grant programs. These additions to the bicycle network would improve bicycle access in the site vicinity. The project and any future development under the project would not interfere with the construction of improved bicycle facilities; therefore, it would be consistent with the City's Active Transportation Plan 2020. Based on this discussion, future development under the project would not impede implementation of any planned improvements, nor would it conflict with another program, plan, ordinance, or policy addressing the bicycle circulation system. **(Less than Significant Impact)**

Pedestrian Facilities

Pedestrian facilities in the project area consist of sidewalks, striped crosswalks, and pedestrian push-buttons at signalized intersections. The City's Active Transportation Plan 2020 outlines future improvements planned at the nearby South Wolfe Road/Old San Francisco Road intersection. These improvements include removing vegetation that may obstruct sight distance, as well as ensuring pedestrian crosswalk signals, activation push buttons, and pedestrian crossing timing meets current national standards. Additionally, the curb ramps will be evaluated to ensure ADA compliance. The project and any future development under the project would not interfere with the implementation of the recommended pedestrian improvements, consistent with Strategies D.2 and D.4 of the City's Vision Zero Plan. Based on this discussion, the project and future development made possible by the project would not conflict with any program, plan, ordinance, or policy addressing the pedestrian circulation system. **(Less than Significant Impact)**

Transit Facilities

The project vicinity is served by LTA Local Route 56 and Local Route 21. Although future development under the project could generate additional transit users, it is not expected that these additional users would exceed the capacity of or obstruct the operation of the existing transit facilities, or conflict with a program, plan, ordinance, or policy addressing the transit circulation system. **(Less than Significant Impact)**

b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

The City of Sunnyvale adopted Council Policy 1.2.8 to implement a VMT analysis policy consistent with the requirements of SB 743 and CEQA Guidelines Section 15064.3, subdivision (b). Pursuant to CEQA Guidelines Section 15064.3, subdivision (b), land use projects within one-half mile of an existing major transit stop or a stop along a high-quality transit corridor are presumed to result in a

less than significant transportation impact. Council Policy 1.2.8 implements additional requirements and criteria for projects to screened out of preparing a VMT analysis. These criteria include proximity to transit, land use density, design that supports the multi-modal transportation network, transit-oriented design, parking supply, and number of affordable residential units.

The future development of eight single-family residences on-site would meet the definition of a small infill project as defined in Section 2 of Council Policy 1.2.8 because it would be an infill project generating fewer than 110 daily vehicle trips. Therefore, the project is exempt from VMT analysis and is assumed to have a less than significant VMT impact. **(Less than Significant Impact)**

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The proposed project would change the General Plan land use designation from Low Density Residential to Low-Medium Density Residential. The project would not result in any direct physical changes to the environment, but would facilitate the future development of eight single-family residences on-site that would result in physical changes to the environment.

Pursuant to the City's design review process, when an application is filed to redevelop the site consistent with the proposed project, the City would review the site plan to ensure consistency with the City's site design guidelines and address potential design hazards. Therefore, the proposed project would not substantially increase transportation hazards. **(Less than Significant Impact)**

d) Would the project result in inadequate emergency access?

Future development under the project would be reviewed by the DPS and designed consistent with the City's site design standards, applicable CBC regulations, and Fire Code requirements to ensure adequate emergency access. **(Less than Significant Impact)**

4.18 Tribal Cultural Resources

4.18.1 Environmental Setting

4.18.1.1 *Regulatory Framework*

State

Assembly Bill 52

AB 52, effective July 2015, established a new category of resources for consideration by public agencies called Tribal Cultural Resources (TCRs). AB 52 requires lead agencies to provide notice of projects to tribes that are traditionally and culturally affiliated with the geographic area if they have requested to be notified. Where a project may have a significant impact on a TCR, consultation is required until the parties agree to measures to mitigate or avoid a significant effect on a TCR or until it is concluded that mutual agreement cannot be reached.

Under AB 52, TCRs are defined as follows:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are also either:
    - Included or determined to be eligible for inclusion in the California Register of Historic Resources, or
    - Included in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).
- A resource determined by the lead agency to be a TCR.

Senate Bill 18

The intent of SB 18 is to aid in the protection of traditional tribal cultural places through local land use planning by requiring city governments to consult with California Native American tribes on projects which include adoption or amendment of general plans (defined in Government Code Section 65300 et seq.) and specific plans (defined in Government Code Section 65450 et seq.). SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process.

4.18.1.2 *Existing Conditions*

AB 52 consultation is required only if the tribes have sent written requests for notification of projects to the lead agency. The Tamien Nation tribe is the only tribe that has requested notification of all projects within the City of Sunnyvale; however, the Muwekma Ohlone Tribe also requested specific details about this project.

On October 15, 2024, representatives of nine tribes were notified via certified mail about the proposed project under SB 18 and AB 52. The City received responses from the Tamien Nation Tribe

and Muwekma Ohlone Tribe; however, the other seven tribes did not respond with a request to participate in the consultation process. The Tamien Nation Tribe responded during the 30-day consultation period and requested a consultation meeting that was held November 12, 2024. At this meeting, the Tamien Nation Tribe requested information from this Initial Study and related appendices regarding cultural resources, tribal cultural resources, biological resources, water resources, and any project-specific mitigation measures or mitigation measures from the City's LUTE EIR that would be required to reduce potentially significant impacts to a less than significant level. The Muwekma Ohlone Tribe also responded during the 30-day consultation period and requested a consultation meeting that was held November 11, 2024. At this meeting, the Muwekma Ohlone Tribe requested information from this Initial Study and related appendices regarding cultural resources and tribal cultural resources.

There are no known TCRs on-site. As discussed in Section 4.5 Cultural Resources, the site has a low sensitivity for Native American resources and a low sensitivity for historic-era archaeological resources.

4.18.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	☐	☐	☒	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

As stated in Section 4.18.1.2 Existing Conditions, there are no known TCRs on-site.

While there is the potential for unknown Native American artifacts or human remains (both of which could be considered TCRs) to be present in the project area, as discussed in Section 4.5 Cultural Resources, impacts of future development under the project would be less than significant by implementing measures compliant with the California Native American Historical, Cultural, and Sacred Sites Act, Public Resources Code Section 5097 and 5097.98, General Plan Policy CC-5.5, and General Plan Action LT-1.10f such as preserving archaeological resources, halting all ground-disturbing activities if resources are encountered, retaining a qualified archaeologist to evaluate the significance of the encountered resources pursuant to existing regulations, notifying the Santa Clara County Coroner and NAHC as applicable, and implementing measures to protect and reinter the remains. **(Less than Significant Impact)**

b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is 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?

As discussed under checklist question a) above, no TCRs were identified on the project site and the implementation of measures compliant with the California Native American Historical, Cultural, and Sacred Sites Act, Public Resources Code Section 5097 and 5097.98, General Plan Policy CC-5.5, and General Plan Action LT-1.10f would reduce impacts to unknown, buried cultural resources (including TCRs) (if present on-site) to a less than significant level. **(Less than Significant Impact)**

4.19 Utilities and Service Systems

4.19.1 Environmental Setting

4.19.1.1 *Regulatory Framework*

State

State Water Code

Pursuant to the State Water Code, water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (approximately 980 million gallons) of water annually must prepare and adopt an urban water management plan (UWMP) and update it every five years. As part of a UWMP, water agencies are required to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon, water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought events. The City of Sunnyvale adopted its most recent UWMP in June 2020.

Assembly Bill 939

The California Integrated Waste Management Act of 1989, or AB 939, established the California Integrated Waste Management Board (CIWMB), required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of solid waste generated (from 1990 levels) by 2000 and thereafter. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures.

Senate Bill 1383

SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The bill grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that at least 20 percent of currently disposed edible food is recovered for human consumption by 2025. CalRecycle released an analysis titled "Analysis of the Progress Toward the SB 1383 Organic Wase Reduction Goals" in August 2020 (revised November 2020), which recommended maintaining the disposal reduction targets set forth in SB 1383.[119]

California Green Building Standards Code

CALGreen establishes mandatory green building standards for all buildings in California. The code is updated every three years.[120] CALGreen covers five categories: planning and design, energy

[119] California Department of Resources Recycling and Recovery. "Analysis of the Progress Toward the SB 1383 Organic Wase Reduction Goals (DRRR-2020-1693)." Accessed September 11, 2024. https://www2.calrecycle.ca.gov/Publications/Details/1693.
[120] California Building Standards Commission. "California Building Standards Code." Accessed September 11, 2024. https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo.

efficiency, water efficiency and conservation, material conservation and resources efficiency, and indoor environmental quality. These standards include the following mandatory set of measures, as well as more rigorous voluntary guidelines, for new construction projects to achieve specific green building performance levels:

- Reducing indoor water use by 20 percent;
- Reducing wastewater by 20 percent;
- Recycling and/or salvaging 65 percent of nonhazardous construction and demolition debris; and
- Providing readily accessible areas for recycling by occupants.

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 utilities and service systems and are applicable to the proposed project.

Policy	Description
Environmental Management Element	
EM-1.3	Provide enough redundancy in the water supply system so that minimum potable water demand and fire suppression requirements can be met under both normal and emergency circumstances.
EM-2.1	Lower overall water demand through the effective use of water conservation programs in the residential, commercial, industrial and landscaping arenas.
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 (hydro modification) of surface runoff as part of land use and development decisions.
EM-14.2	Maximize diversion of solid waste from disposal by use of demand management techniques, providing and promoting recycling programs, and encouraging private sector recycling.
EM-14.3	Meet or exceed all federal, state and local laws and regulations concerning solid waste diversion and implementation of recycling and source reduction programs.

Sunnyvale Water Pollution Control Plan Master Plan

In 2016, the City adopted its Water Pollution Control Plant Master Plan to rebuild the Donald M. Somers Water Pollution Control Plant (WPCP) over the next 20 years. Implementation of the plan will upgrade existing outdated equipment and aging infrastructure, complying with all applicable federal, state, and local regulations. In March 2023, a Notice to Proceed was issued for the planned update to the WPCP Master Plan. It is anticipated that the updated WPCP Master Plan will be available in March 2025.

Sunnyvale Water Utility Master Plan

The City's Water Utility Master Plan (WUMP) was adopted in 2010 and later updated as part of the Potable Water System Comprehensive Preliminary Design Study Report (CPDS, 2013). The City's WUMP and CPDS identify Capital Improvement Projects (CIPs) and pipeline upsizing projects to address the City's fire flow deficiencies and provide sufficient fire flow in the City through 2033.[121]

Sunnyvale Wastewater Collection System Master Plan

The City's 2015 Wastewater Collection System Master Plan (WWMP) evaluated the capacity and condition of the sanitary sewer and storm drain collection system in order to recommend a long-term Capital Improvement Program with improvements.[122] Based on the findings, the WWMP identifies CIPs to be implemented to ensure the sanitary sewer and storm drain systems can accommodate the existing development and projected growth in the City. Improvements needed for the City's sewer system, including the WPCP, are funded through the collection of sewer connection fees. Developers are required to pay the appropriate sewer connection fee prior to redevelopment of a property.

Sunnyvale Municipal Code

Section 12.16.020 (Types of charges and fees) states that the City Council from time to time shall establish by resolution fees and charges for sewage services provided by the City. Such fees and charges shall be based on cost influencing factors such as flow, pollutant loading rates, volumes, and the degree of effort required for purposes of billing, inspection, sampling, testing and permitting.

Section 12.40.010 (Allocation of Sewage Treatment Capacity) states that the entire sewage treatment capacity of the WPCP shall be allocated to four categories as follows: (A) Industrial (consisting of zoning districts M-S and M-3, or any replacement district intended to be primarily for manufacturing land use); (B) Commercial/Public (consisting of all zoning districts O, P-F, C-1, C-2, C-3, C-4); (C) Residential (consisting of all zoning districts R-0, R-1, R-2, R-3, R-4, R-5, R-MH); which allocations shall total 96 percent of the WPCP's rated capacity. In addition, a fourth category, (D) "Reserves" shall be established totaling four percent of the WPCP's rated capacity.

Section 12.40.030 (Initial baseline limits) states there shall be established for each of Categories A, B and C, an "Initial Baseline Limit," which shall be defined as the initial allocations, less the present estimated vacant land needs of 1.485 MGD for Category A (Industrial), 0.256 MGD for Category B (Commercial/Public), and 1.160 MGD for Category C (Residential).

Section 12.40.060 (Monitoring of Wastewater Flows) states the Director of Community Development or his or her designate shall monitor wastewater flows to the WPCP and periodically

[121] City of Sunnyvale. *Water Utility Master Plan*. November 2010. Page 9, Table 7-2 for CIPs and Table 8-2 for pipeline upsizing.
[122] The 2015 WWMP evaluated 12-inch or larger pipelines.

calculate, on the basis of water sales information, and any other relevant information, the amount of wastewater flow originating from the zoning districts comprising each of the wastewater capacity allocation categories.

Section 12.40.070 (Declaration of need for wastewater capacity evaluations) states if the calculated amount of wastewater from any allocation category reaches the baseline limit for such category, the Director of Community Development, or designate, shall immediately issue and cause to be filed with the City Clerk a Declaration of Need for Wastewater Capacity Evaluation. The City Clerk shall within 10 days publish this Declaration in the official newspaper of the City. Thereupon for a period of 60 days, or until the Declaration is withdrawn, whichever is earlier, no new wastewater discharge permits shall be issued, and no existing permits shall be modified to permit increased flow. The Director of Community Development or his or her designate shall perform within such 60 days an analysis of the remaining vacant land in each wastewater capacity allocation category, and the wastewater capacity anticipated to be needed to service such vacant land when developed. For each acre of vacant land in Categories A and B, three thousand gallons per acre per day will be reserved. For each vacant acre of land within Category C, capacity needs based upon the maximum density allowed in each zoning district making up Category C, will be calculated and reserved. A new baseline limit for each capacity allocation category shall be calculated by subtracting vacant land needs in each category from total WPCP capacity allocation in each category.

Chapter 19.37 (Landscaping, Irrigation and Usable Open Space) promotes the conservation and efficient use of water. All new landscaping installations of 500 square feet or more or rehabilitated landscaping projects of 1,000 square feet or more are subject to water-efficiency design, planting, and irrigation requirements.

Sunnyvale Construction and Demolition Waste Diversion

The City requires remodel or demolition projects where 50 percent or more of the exterior wall will be removed to recycle or reuse at least 65 percent of the project's nonhazardous waste.[123] Recycling of nonhazardous waste reduces the energy use to produce new materials from raw, non-renewable resources.

In order to reduce the amount of solid waste disposed of within the City, contractors are required to use a waste diversion and recycling tracking system called Green Halo to create a Construction and Demolition Waste Management Plan (CDWMP) for any construction and demolition projects. This program helps the contractor and City track diversion rates for construction waste.[124]

[123] City of Sunnyvale. "Construction Waste." January 1, 2022. Accessed September 11, 2024. https://www.sunnyvale.ca.gov/business-and-development/planning-and-building/construction-waste.

4.19.1.2 *Existing Conditions*

The project site is located in a developed area within the City of Sunnyvale served by existing wastewater/sanitary sewer, water, stormwater, and solid waste service systems.

Wastewater Treatment and Sanitary Sewer System

Wastewater within the City is treated at the WPCP, which collects wastewater from residential, commercial, and industrial sources in Sunnyvale, the Rancho Rinconada portion of Cupertino, and the Airfield. Sewage is collected through approximately 310 miles of gravity pipelines which direct the flow of wastewater through five interceptors (the Lawrence, Borregas, Lockheed, Moffett, and Cannery interceptors) to the WPCP for treatment. Treated effluent from the WPCP is discharged into the San Francisco Bay via the Guadalupe Slough.[125]

The WPCP has five different process areas, which are comprised of preliminary, primary, secondary, tertiary, and solid processing facilities. The Average Dry Weather Flow (ADWF) processing capacity of the WPCP is 19.5 mgd. The amount of influent wastewater handled by the WPCP varies within the time of day and within seasonal changes in demand. In 2023, the ADWF was approximately 14.2 mgd.[126]

Sewage generated on-site flows to an existing 12-inch main line in South Wolfe Road.[127]

Water Supply and Demand

Water service is provided to the project site by the Sunnyvale municipal water system. Potable water supply in the City is sourced from the San Francisco Public Utilities Commission (SFPUC), Santa Clara Valley Water District (Valley Water), and groundwater from six City-owned wells.[128] The City also provides recycled water that has been treated at the WPCP to certain locations throughout Sunnyvale. There is a 24-inch recycled water line in Wolfe Road that was recently extended to the north to provide recycled water to properties along Kifer Road. The City's cumulative water demand in 2040 is estimated to be approximately 25,618 acre feet per year (AFY) which is equivalent to approximately 22.87 million gallons per day (mgd).[129] The total water supply available to the City in 2040 is projected to be 35,255 AFY (or approximately 31.47 mgd),[130] which exceeds the demand and results in a surplus of available water. Projections from the 2020 UWMP indicate that the City will be able to meet water demands during normal, single-dry year, and five consecutive dry-year conditions.

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[125] City of Sunnyvale. *Wastewater Collection System Master Plan.* December 2015. Pages 9-15.
[126] City of Sunnyvale. *Water Pollution Control Plant 2023 Annual NPDES Report*. February 1, 2024. Page 10.
[127] City of Sunnyvale. "Utility Maps." Accessed October 4, 2024. https://www.sunnyvale.ca.gov/city-services/online-services/maps-and-gis/utility-maps.
[128] City of Sunnyvale. *2020 Urban Water Management Plan.* Adopted June 29, 2021.
[129] City of Sunnyvale. *Water Supply Assessment for the Moffett Park Specific Plan Update Project*. April 2023. Table 4-1.
[130] City of Sunnyvale. *2020 Urban Water Management Plan.* Adopted June 29, 2021. Table 6-8.

Water System

Water for domestic and fire service uses is provided by existing water mains on South Wolfe Road. There is also a 24-inch recycled water line in Wolfe Road.

Storm Drain System

The City stormwater system is comprised of approximately 150 miles of storm drains and two pump systems that convey water to four separate waterways that lead to San Francisco Bay. These waterways are the Sunnyvale West Channel, Sunnyvale East Channel, Stevens Creek, and Calabazas Creek.[131]

The project site consists of approximately 18,000 square feet (or 60 percent) of impervious area. The remaining 11,980 square feet (or 40 percent) of the site consists of pervious area, which is comprised of landscaping and other permeable surfaces. Runoff from the project site flows untreated into the nearest drainage inlets on South Wolfe Road to a 36-inch storm drain line in South Wolfe Road.[132] Stormwater runoff flows to and is eventually discharged into the San Francisco Bay.

Solid Waste

Bay Counties Waste Services, Inc. provides collection services for recyclable materials, organic waste, and solid waste in the City. Solid waste collected in the City is transported to the Sunnyvale Materials Recovery and Transfer Station (SMaRT Station®). The SMaRT Station currently serves the cities of Mountain View, Palo Alto, and Sunnyvale. The SMaRT Station processes an average tonnage of 392 tons of municipal solid waste per day, with a permitted peak capacity of 1,500 tons of material each day. The SMaRT Station receives municipal solid waste, recyclables, and yard trimmings. The SMaRT Station diverts approximately 50 percent of the materials delivered from being landfilled. [133, 134] Diverted materials primarily include compostable organics, concrete, dirt, carpet, mattresses, and yard trimmings. The remaining waste is disposed of at Kirby Canyon Landfill in south San José.

[131] City of Sunnyvale. *2020 Urban Water Management Plan.* Adopted June 29, 2021. Page 6-5.
[132] City of Sunnyvale. "Utility Maps." Accessed November 13, 2024. https://www.sunnyvale.ca.gov/city-services/online-services/maps-and-gis/utility-maps.
[133] California Department of Resources Recycling and Recovery. "Sunnyvale MRF & Transfer Station (43-AA-0009)." Accessed September 24, 2024. Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteInspection/Index/3376.
[134] City of Sunnyvale. "SMaRT Station Annual Report 2022-2023." Accessed: September 15, 2023. Available at: https://www.sunnyvale.ca.gov/homes-streets-and-property/recycling-and-garbage/smart-station-recycling-center.

Kirby Canyon Landfill has a capacity of 36.4 million cubic yards and is permitted to receive 2,600 tons of waste per day.[135] As of January 2023, Kirby Canyon Landfill had approximately 13.3 million cubic yards of capacity remaining and an estimated closure date of 2055.[136]

The existing residence on-site is currently vacant; therefore, no solid waste is generated by the existing use. Previously, residents on-site would have generated approximately 0.64 tons (or 1,280 pounds or 0.69 cubic yard) per year of solid waste.[137]

4.19.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Be noncompliant with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

[135] California Department of Resources Recycling and Recovery. "Kirby Canyon Recycle & Disposal Facility (43-AN-0008)." Accessed September 15, 2023. Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1370?siteID=3393.
[136] Azevedo, Becky, Technical Manager. Personal Communication. September 27, 2024.
[137] The estimated solid waste tonnage is based on the CalEEMod default assumptions and the assumption that the single existing residence contains 2.58 residents. The calculated cubic yards is based on a compaction rate of 1,850 pounds per cubic yard.

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Future development under the project would connect to existing water, wastewater, and other utility lines in the vicinity of the site. No new or expanded utility infrastructure is required as a result of this project, as described in more detail below.

Water Infrastructure

Assuming future development under the project would construct approximately eight single-family residential units, it would result in approximately 21 residents on-site.[138] Based on per capita estimates provided in the City's 2020 UWMP, these residents would generate demand for approximately 881,475 gallons of water per year (which is equivalent to 2,415 gallons per day or 0.002 mgd).[139] It is estimated that approximately 617,000 gallons would be for indoor uses, and 264,475 gallons would be used outdoors.[140]

It is assumed the future residences would connect to existing potable water lines in South Wolfe Road and the City has confirmed no substantial new or expanded water supply infrastructure (whose construction would result in significant effects) is required.[141] **(Less than Significant Impact)**

Sanitary Sewer Infrastructure

It is assumed that the future residences resulting from the project would connect to existing 12-inch main line in South Wolfe Road. It is estimated the future residences would generate approximately 617,000 gallons of wastewater per year or 1,690 gallons per day (or 0.0017 mgd).[142] Wastewater from the project would be collected and treated at the WPCP, which has a processing capacity of 19.5 mgd and an ADWF of approximately 14.2 mgd. Given the estimated sewage generation estimated for future development under the project (0.0017 mgd) and the available processing capacity at the WPCP (5.3 mgd), there is sufficient treatment capacity at the WPCP to serve future development under the project.

It is assumed future development under the project would connect to the existing 12-inch sewer line in South Wolfe Road and the City has confirmed no new or expanded sewer infrastructure

[138] Based on an average of 2.58 persons per household. 2.58 x 8 = 21 residents
[139] Based on the water use rate of 115 gallons per capita per day. Source: City of Sunnyvale. *2020 Urban Water Management Plan.* Adopted June 29, 2021. Page 4-7.
[140] It is estimated that 70 percent of demand occurs indoors and 30 percent occurs outdoors. Source: United States Environmental Protection Agency. "How We Use Water." Accessed November 12, 2024. Available at: https://www.epa.gov/watersense/how-we-use-water.
[141] Vashist, Aastha. Senior Planner, City of Sunnyvale. Personal Communication. February 18, 2025.
[142] Wastewater is assumed to be 100 percent of the total indoor water use on-site (617,000 gallons of indoor water)

(whose construction would result in significant environmental impacts) would be required.[143] The applicant of future development on-site would be required to pay sewer connection fees prior to redevelopment of the site that would fund sanitary sewer CIPs. Based on this discussion, wastewater generated by future development on-site would be adequately served by the existing remaining processing capacity at the WPCP and local sewer system infrastructure, and the future developer of the site would pay sewer connection fees to reduce impacts to the sanitary sewer system to a less than significant level. **(Less than Significant Impact)**

Stormwater Drainage Infrastructure

As detailed in Section 4.19.1.2 above, the project site consists of approximately 18,000 square feet (or 60 percent) of impervious area and 11,980 square feet (or 40 percent) of pervious area. Runoff from the project site flows into the nearest drainage inlets then into the stormwater main line in South Wolfe Road.

The project would result in new residential development on-site that would require new lateral connections to existing stormwater lines. As discussed in Section 4.10 Hydrology and Water Quality, future development under the project would comply with Provision C.3 of the MRP and SMC Section 12.60 which requires the implementation LID-based stormwater treatment controls to reduce potential runoff from the project to the maximum extent feasible. In addition, future development on-site would be reviewed by the City to ensure the surrounding storm drainage infrastructure has capacity to handle any potential increases in stormwater runoff from the site. Improvements, if required, could include upsizing of storm drain lines serving the site and downstream of the site. Impacts of these types of improvements are typically minimal and can be reduced to a less than significant level with implementation of typical construction BMPs. For these reasons, future development of the project site would not result in significant impacts from construction of new or expanded storm drainage infrastructure to serve the project. **(Less than Significant Impact)**

Electric Power and Telecommunications Facilities

The project would result in a future increase in residential density and development on-site, which would connect to existing electric power and telecommunications infrastructure. It is not anticipated that future development on the project site would require new or expanded electric power and telecommunications facilities, aside from connections to existing facilities which would not result in significant environmental effects with implementation of typical construction BMPs. **(Less than Significant Impact)**

[143] Vashist, Aastha. Senior Planner, City of Sunnyvale. Personal Communication. February 18, 2025.

b) Would the project have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

As part of Sunnyvale's 2020 UWMP, a Drought Risk Assessment was conducted to determine whether the City would be able to adequately meet the demand for water during normal, single-dry year, and five consecutive dry-year conditions. The assessment was calculated in five-year intervals from 2025 to 2040. This assessment found that the City has adequate water supplies to maintain a surplus level of water supply during normal, dry, and multiple (five-year) drought years even when accounting for future growth in the City.[144]

As discussed under checklist question a) above, future development allowed under the project would increase the demand for potable water on-site to 2,415 gpd (or approximately 2.7 AFY). Based on the City's projected water supply (35,255 AFY), future projected water demand (25,618 AFY), and project demand (2.7 AFY), the City would continue to have adequate water supply to serve development within the City and future development allowed under the project during normal, single- and multiple-dry years. Therefore, the project's impact on available water supply would be less than significant. **(Less than Significant Impact)**

c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Existing Plus Project Conditions

As discussed above in Section 4.19.1.2 Existing Conditions, the current capacity at the WPCP is 19.5 mgd. Based on the most recently published data in 2023, the current ADWF is approximately 14.2 mgd.[145] Therefore, the available treatment capacity at the WPCP is 5.3 mgd.

As described above, future development made possible by the project is estimated to generate approximately 1,690 gallons per day (0.0017 mgd) of wastewater. Given the existing, available treatment capacity at the WPCP (5.3 mgd) and the project's net increase in ADWF (0.0017 mgd), there is sufficient capacity at the WPCP to serve the project and existing treatment demand. **(Less than Significant Impact)**

Cumulative Plus Project Impacts

The projected wastewater flow for the WPCP in 2035 is estimated to be 23.23 mgd of ADWF, which would exceed the WPCP's processing capacity of 19.5 mgd due to the approval of recent plan area projects, including the Moffett Park Specific Plan Update, Lawrence Station Area Plan, and

[144] City of Sunnyvale. *2020 Urban Water Management Plan.* Adopted June 29, 2021. Pages 7-24 through 7-26.
[145] City of Sunnyvale. *Water Pollution Control Plant 2023 Annual NPDES Report*. February 1, 2024. Page 10.

Downtown Specific Plan Amendments projects.[146] The City is aware an update to the WPCP Master Plan is needed to plan for adequate wastewater treatment in the future. Subsequent environmental review for the WPCP Master Plan update will 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 these undetermined improvements. For this reason, the environmental impact from the construction of new or expanded wastewater treatment facilities to provide adequate cumulative wastewater treatment that includes these three larger cumulative projects has been previously and conservatively disclosed as significant and unavoidable by the City.[147]

Under future cumulative conditions, the project's 1,690 gpd (or approximately 0.0017 mgd) of sewage generation would incrementally increase the 2035 projected wastewater flow. This 0.0017 mgd increase does not meaningfully change the amount of wastewater estimated to be generated under cumulative conditions. Most of the cumulative wastewater generation above the WPCP's existing capacity is attributed to the build out of the large plan area projects recently approved by the City. The estimated sewage generation from the buildout of the Moffett Park Specific Plan, Lawrence Station Area Plan, and Downtown Specific Plan Amendments projects total 3.73 mgd. For these reasons, the project's contribution to the cumulative wastewater treatment impact is not cumulatively considerable.

As described above, the City's WPCP operates under the NPDES permit and is required to treat wastewater to meet applicable water quality standards prior to discharge. Compliance with the NPDES is enforced by monitoring and reporting the type and volume of pollutants discharged in an annual Discharge Monitoring Report prepared by the City. In addition, the City periodically calculates the amount of wastewater flow originating from each of the wastewater capacity allocation categories based on water sales information, and other relevant information. Through the annual monitoring reports and periodic calculations, the City actively monitors the wastewater flows to the WPCP to ensure continued capacity at the WPCP to treat existing and approved development in the City. If the flow of one of the categories reaches to its Initial Baseline Limits, the City will issue a Declaration of Need for Wastewater Capacity Evaluation and will not issue new or modify to increase capacity of wastewater discharge permits until a new baseline limit can be established to ensure there is sufficient capacity reserved for vacant land in each category. For these reasons, existing regulations (including compliance with the NPDES permit and Municipal Code) ensure adequate sewage treatment for development in the City.

Based on the above discussion, the project's contribution to a cumulative wastewater treatment impact is not cumulatively considerable. **(Less than Significant Cumulative Impact)**

[146] City of Sunnyvale. *Moffett Park Specific Plan Draft Environmental Impact Report*. SCH# 2021080338. December 2022. Page 339.

[147] Sources: 1) City of Sunnyvale. *Downtown Specific Plan Amendments and Specific Developments Project Draft Environmental Impact Report*. SCH# 2018052020. Page 300. 2) City of Sunnyvale. *Lawrence Station Area Plan Update/Intuitive Surgical Corporate Campus Project Draft Subsequent Environmental Impact Report*. May 2021. SCH# 2019012022. Page 3.15-22. 3) City of Sunnyvale. *Moffett Park Specific Plan Draft Environmental Impact Report*. SCH# 2021080338. December 2022. Page 339.

d) Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Future development of eight single-family residences under the project would generate approximately 5.2 tons (or 10,400 pounds or 5.62 cubic yards) per year of solid waste.[148]

The City has implemented a waste reduction goal to divert 90 percent of solid waste out of the landfills by 2030.[149] Future development on-site would be subject to the CALGreen and the City's construction waste management requirements, in addition to SB 1383 which requires residential developments to recycle their organic waste. Compliance with these waste reduction programs would further reduce solid waste generated by the project.

Given the remaining capacity at Kirby Canyon Landfill (13.3 million cubic yards), estimated lifespan of the landfill (year 2055), and project's estimated solid waste generation (5.62 cubic yards per year), there would be sufficient capacity at Kirby Canyon Landfill to accommodate the solid waste disposal needs of future development made possible by the project. The construction and operation of future development would comply with applicable federal, state, and local regulations and policies related to diversion of materials from disposal. Adherence to these policies and requirements would result in less than significant impact. **(Less than Significant Impact)**

e) Would the project be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste?

Future development on-site made possible by the project would comply with state and local regulations related to solid waste reduction including CALGreen and the City's requirements regarding the diversion of construction waste and debris by recycling or reusing a minimum of 65 percent of the non-hazardous waste. In addition, the future development would comply with General Plan Policy EM-14.2 by maximizing their diversion of solid waste through participation in a recycling program. Bay Counties Waste Services, Inc. provides collection services for recyclable materials, organic waste, and solid waste in the City. Consistent with General Plan Policy EM-14.3, future occupants of the site would be required to recycle waste consistent with federal, state, and local requirements. Therefore, future development made possible by the project would comply with federal, state, and local solid waste statutes and regulations. **(Less than Significant Impact)**

[148] Solid waste tonnage based on the CalEEMod default assumptions. Cubic yards based on a compaction rate of 1,850 pounds per cubic yard.
[149] City of Sunnyvale. "Managing Resources Sustainably." Accessed: October 4, 2023. Available at: https://sunnyvaleclimateaction.org/category/managing-resources-sustainably#understanding-waste-levels.

4.20 Wildfire

4.20.1 Environmental Setting

4.20.1.1 *Existing Conditions*

The project site is in an urban area surrounded by existing development. The site is not located within an identified Very High Fire Hazard Severity Zone in an SRA or an LRA. [150,151] The project site is not located near wildlands that could present a fire hazard.

4.20.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

The project site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones; therefore, the project would not result in wildfire impacts. **(No Impact)**

[150] California Department of Forestry and Fire Protection. *Santa Clara County Fire Hazard Safety Zone Map – State Responsibility Area.* June 15, 2023.
[151] California Department of Forestry and Fire Protection. *Santa Clara County Fire Hazard Safety Zone Map – Local Responsibility Area.* October 2008.

4.21 Mandatory Findings of Significance

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☒	☐
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

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

As discussed in Section 4.4 Biological Resources, implementation of the project would not impact sensitive habitats or special-status species. Future development under the project would comply with existing regulations, including the MBTA and CDFW regulations, to avoid significant impacts to nesting birds. As discussed in Sections 4.5 Cultural Resources and 4.18 Tribal Cultural Resources, there are no known cultural resources (including TCRs) on-site and future development under the project would comply with existing regulations, including NHPA, CRHR, Archaeological Resource Protection Act of 1979, Public Resources Code Sections, California Health and Safety Code sections, General Plan Policies CC 5.1, CC-5.3, CC-5.4, and General Plan Action LT-1.10f, to reduce impacts to unknown resources (if encountered on-site during construction) to a less than significant level. For these reasons, future development made possible by the project would not degrade the quality of the environment. **(Less than Significant Impact)**

b) Does the project have impacts that are individually limited, but cumulatively considerable?

Under Section 15065(a)(3) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has potential environmental effects "that are individually limited, but cumulatively considerable." As defined in Section 15065(a)(3) of the CEQA Guidelines, cumulatively considerable means "that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." In addition, under Section 15152(f) of the CEQA Guidelines, where a lead agency has determined that a cumulative effect has been adequately addressed in a prior EIR, the effect is not treated as significant for purposes of later environmental review and need not be discussed in detail.

The project would allow for future development of up to eight single-family residential units on-site. The project and future development made possible by the project would not result in impacts to agricultural and forestry resources, mineral resources, or wildfires (as discussed in Sections 4.2 Agricultural and Forestry Resources, 4.12 Mineral Resources, and 4.20 Wildfire); therefore, the project would not contribute to cumulative impacts to these resources. As discussed in Section 4.1 Aesthetics, future development made possible by the project would comply with local policies and regulations and be subject to the City's design review process, which would reduce potential aesthetic impacts to a less than significant level. All projects in the City would be subject to those same regulations and processes, therefore, the project and future development under the project would not contribute to a cumulative aesthetic impact. Impacts related to geology and soils and hazards and hazardous materials from foreseeable development as a result of the project are site-specific and, therefore, would not contribute to a significant cumulative impact to those resources.

The geographic boundary for cumulative construction air quality (specifically TACs) and noise impacts are 1,000 feet and 500 feet from the project site, respectively. Based on City records, there are no cumulative projects within 1,000 feet of the project site that are either recently approved or pending review.[152] In addition, as discussed throughout this Initial Study, the project is a GPA and rezoning that is intended to allow for future residential development at a higher density on-site. No physical development is proposed at this time; therefore, when an application is filed, the conditions at that time would be confirmed to ensure any necessary measures (e.g., compliance with existing regulations including General Plan policies and BAAQMD best management practices) are implemented to reduce cumulative construction air quality and noise impacts to a less than significant level.

Given the existing regulations protecting biological resources (i.e., nesting and migratory birds and trees), cultural resources (including TCRs), and hydrology and water quality, cumulative projects

[152] City of Sunnyvale. "Development Reports." Accessed December 6, 2024. https://www.sunnyvale.ca.gov/business-and-development/projects-in-sunnyvale/development-reports.

(including future development under the proposed project) would not result in significant cumulative impacts to those resources beyond what was disclosed in the certified 2017 LUTE EIR.[153]

In general, an individual project's impact on broader resources including air quality (specifically criteria air pollutants), energy, GHGs, and VMT are evaluated at a cumulative level. That is, if a project results in a significant impact to criteria air pollutants, energy, GHGs, and VMT, the project would be considered to have a significant cumulative impact to those resources as well. As discussed in Sections 4.3 Air Quality, Section 4.6 Energy, and 4.8 Greenhouse Gas Emissions, future development allowed as a result of the GPA and rezoning would result in less than significant (and, therefore, less than cumulatively considerable) criteria air pollutant, energy, GHG, and VMT impacts.

The geographic boundary for cumulative land use, public services, recreation, and utilities and service systems impacts is the City's boundaries and, for the purposes of this analysis, the cumulative analysis on these environmental resources focuses on the incremental effect of GPA projects with respect to the buildout of the General Plan because these GPA projects have not been evaluated previously (unlike the buildout of the adopted General Plan). While the proposed project would amend the General Plan designation and zoning on-site to allow for higher density residential uses compared to what is currently allowed, the residential land use on-site does not change. In addition, cumulative GPA projects in the City (such as the General Plan amendments proposed for 665 South Knickerbocker Drive and approved for 1313 South Wolfe Avenue) would comply with plans, policies, and regulations adopted with the purpose of reducing an environmental impact (which the project does, as described in Section 4.11 Land Use and Planning).

The cumulative GPA projects mentioned above could result in approximately 133 additional residential units generating 343 new residents. When considered with the project's estimated increase in population (21 residents) the cumulative total population growth from these General Plan amendments would not be substantial given the overall population growth projected within Sunnyvale (i.e., 84,170 residential units and 222,210 residents by year 2040) and would not result in an expansion of urban services or the pressure to expand beyond the City's existing Sphere of Influence. In addition, none of the cumulative GPA projects (including the proposed project) would divide an existing community or displace people or housing. Therefore, the project would not make a cumulatively considerable contribution to a population and housing impact.

The proposed project with the other General Plan amendment cumulative projects would incrementally increase the demand for public services in the area, including fire, police protection, schools, parks, community centers, and libraries because these projects would incrementally increase the amount of residential development and population needing services compared to the current General Plan buildout. While demand on these facilities would increase, the cumulative projects would comply with local regulations related to public services such as payment of park in-lieu and school impact fees. In addition, DPS continually evaluates its service levels and works with

[153] City of Sunnyvale. *2017 Land Use and Transportation Element Draft Environmental Impact Report*. August 2016. Pages 3.9-21, 3.10-15, and 3.8-23. SCH# 2012032003.

the City Council during the budget process to balance resources and plan for future needs. As concluded in the LUTE EIR, if any new or expanded police or fire facilities are required in the future, they would be constructed on previously disturbed sites within the City and are not expected to result in significant unavoidable environmental impacts.[154] It is possible that new or physically altered school facilities would be needed in the future to serve the students generated by future planned growth. School districts routinely evaluate enrollment trends and capacity as part of facility planning. Any new or physically altered school facilities proposed by the local school districts would be subject to subsequent project-level environmental review and mitigation by the school districts and in accordance with CEQA and other applicable regulations. Therefore, the proposed project would not make a cumulatively considerable contribution to the degradation of public facilities in the area.

The cumulative projects would contribute to a cumulative impact to the WPCP and sanitary sewer system. However, as discussed in Section 4.19 Utilities and Service Systems, the project's contribution to the cumulative wastewater treatment capacity impact at the WPCP is not cumulatively considerable. In addition, the cumulative projects (including proposed project) would pay appropriate connection fees to mitigate their fair-share contribution to the necessary cumulative water and sewer utility CIPs. In addition, the incremental increase in solid waste generation from the cumulative General Plan amendment projects (including the proposed project, which is estimated to generate 5.62 cubic yards – or 0.00000562 million cubic yards – per year) would not substantially change the City's estimated generation of 0.25 million cubic yards per year at buildout of the General Plan, which was determined to be adequately served by Kirby Canyon Landfill and other local landfills.[155]

Based on the above discussion, the project would not result in a cumulatively considerable contribution to a significant cumulative impact. **(Less than Significant Cumulative Impact)**

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Consistent with Section 15065(a)(4) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. Under this standard, a change to the physical environment that might otherwise be minor must be treated as significant if it would cause substantial adverse effects to humans, either directly or indirectly. This factor relates to adverse changes to the environment of human beings generally, and not effects on particular individuals.

[154] City of Sunnyvale. *Land Use and Transportation Element Draft Environmental Impact Report.* SCH#2012032003. August 2016. Pages 4.0-5 and 4.0-6.
[155] City of Sunnyvale. *Moffett Park Specific Plan Draft Environmental Impact Report.* December 2022. Page 341. SCH# 2021080338.

The potential for the proposed project to result in changes to the environment that could directly or indirectly affect human beings is evaluated in each section of this Initial Study. In particular, the resource areas that could directly affect human beings include air quality, geology and soils, hazards and hazardous materials, and noise. The potential project-related impacts discussed in Section 4.3 Air Quality, Section 4.9 Hazards and Hazardous Materials, and Section 4.13 Noise would be reduced to a less than significant level with adherence to existing regulations, including General Plan policies identified in those sections and best management practices required by the City. No other direct or indirect adverse effects of the project on human beings have been identified. **(Less than Significant Impact)**

Section 5.0 References

The analysis in this Initial Study is based on the professional judgement and expertise of the environmental specialists preparing this document, based upon review of the site, surrounding conditions, site plans, and the following references:

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Personal Communication

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Section 6.0 Lead Agency and Consultants

6.1 Lead Agency

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Section 7.0 Acronyms and Abbreviations

AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACM	Asbestos-Containing Material
ALUC	Airport Land Use Commission
APN	Assessor's Parcel Number
ATCM	Asbestos Airborne Toxic Control Measure
BAAQMD	Bay Area Air Quality Management District
Bay Area	San Francisco Bay Area
Btu	British Thermal Unit
CAAQS	California Ambient Air Quality Standard
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health
CalARP	California Accidental Release Prevention
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards
Caltrans	California Department of Transportation
CBC	California Building Code
CARB	California Air Resources Board
CBSC	California Building Standards Code
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFC	Chlorofluorocarbon
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH_4	Methane
CLUP	Comprehensive Land Use Plan
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide

CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalents
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
dBA	A-weighted decibel
L_{dn}	Day/Night Average Sound Level
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FHSZ	Fire Hazard Severity Zone
FMMP	Farmland Mapping and Monitoring Program
GHG	Greenhouse Gases
GHGRS	Greenhouse Gas Reduction Strategy
GWh	Gigawatt Hour
GWP	Global Warming Potential
Habitat Plan	Santa Clara Valley Habitat Plan
HSWA	Hazardous and Solid Waste Amendments
L_{eq}	Energy-Equivalent Sound/Noise Descriptor
L_{max}	Maximum A-weighted noise level during a measurement period
LOS	Level of Service
LRA	Local Responsibility Area
MBTA	Migratory Bird Treaty Act
$MMTCO_2e$	Million Metric Tons of Carbon Dioxide Equivalent
ND	Negative Declaration
mpg	Miles per Gallon
MSL	Mean Sea Level

MTC	Metropolitan Transportation Commission
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standard
NAHC	Native American Heritage Commission
NCP	National Contingency Plan
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_2	Nitrogen Dioxide
NOA	Naturally Occurring Asbestos
NOD	Notice of Determination
NO_x	Nitrogen Oxides
NRHP	National Register of Historic Places
O_3	Ozone
PCB	Polychlorinated Biphenyls
PCF	Perfluorocarbon
PDA	Priority Development Areas
PG&E	Pacific Gas and Electric Company
PM	Particulate Matter
PM_{10}	Particulate matter with a diameter of 10 microns or less
$PM_{2.5}$	Particulate matter with a diameter of 2.5 microns or less
PPV	Peak Particle Velocity
R&D	Research and Development
RAP	Removal Action Plan
RCRA	Resource Conservation and Recovery Act
ROG	Reactive Organic Gases
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	State Bill
SCS	Sustainable Communities Strategy
SF_6	Sulfur Hexafluoride
SHMA	Seismic Hazards Mapping Act
SMARA	Surface Mining and Reclamation Act

SMGB	State Mining and Geology Board
SMP	Site Management Plan
SO_x	Sulfur Oxides
SR	State Route
SRA	State Responsibility Area
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants
Title 24	Title 24, Part 6 of the California Code of Regulations
TSCA	Toxic Substances Control Act
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
VMT	Vehicle Miles Traveled
Williamson Act	California Land Conservation Act
WUI	Wildland-Urban Interface
ZNE	Zero Net Carbon Emission
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACM	Asbestos-Containing Material