Initial Study

171-175 Monroe Street Residential

Prepared by

CITY OF SANTA CLARA CALIFORNIA
1852
THE MISSION CITY

In Consultation with

50 YEARS EST. 1972
DAVID J. POWERS & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS & PLANNERS

May 2022

TABLE OF CONTENTS

TABLE OF CONTENTS

Figures

Tables

Appendices

All appendices are incorporated into this document by this reference. No other documents are incorporated by reference.

SECTION 1.0 INTRODUCTION AND PURPOSE

1.1 PURPOSE OF THE INITIAL STUDY

The City of Santa Clara, as the Lead Agency, has prepared this Initial Study for the 171-175 Monroe Street Residential Project in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 et seq.) and the regulations and policies of the City Santa Clara, California.

The project proposes to demolish the existing single-family residences at 171-175 Monroe Street, Santa Clara, and construct eight new single-family residences on the project site. This Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the proposed project.

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:

Nimisha Agrawal
Associate Planner
nagrawal@santaclaraca.gov
1500 Warburton Avenue
Santa Clara, CA 95050

1.3 CONSIDERATION OF THE INITIAL STUDY AND PROJECT

Following the conclusion of the public review period, the City of Santa Clara will consider the adoption of the Initial Study/Mitigated Negative Declaration (MND) 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 Santa Clara 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

171-175 Monroe Street Residential

2.2 LEAD AGENCY CONTACT

Nimisha Agrawal
Associate Planner
1500 Warburton Avenue
Santa Clara, CA 95050

2.3 PROJECT APPLICANT

Mr. Ratnajee Arumilli
27933 Baker Lane
Los Altos Hills, CA 94022

2.4 PROJECT LOCATION

The approximately 0.4-acre site is located at 171-175 Monroe Street in the City of Santa Clara.

2.5 ASSESSOR'S PARCEL NUMBERS

269-47-017 and 269-47-018

2.6 GENERAL PLAN DESIGNATION AND ZONING DISTRICT

The project site has a General Plan land use designation of Medium Density Residential and is zoned R1-6L (Single-Family Residential).

SECTION 3.0 PROJECT DESCRIPTION

3.1 PROJECT OVERVIEW AND LOCATION

The approximately 0.4-acre site is located at 171-175 Monroe Street (Assessor's Parcel Numbers 269-47-017 and 269-47-018) in the City of Santa Clara (see Figure 3.2-1 through Figure 3.2-3). The project site has a General Plan land use designation of Medium Density Residential and is zoned R1-6L (Single-Family Residential). The project site is bounded by Monroe Street to the west, residences to the north and south, and Washington Park to the east.

The project site is currently developed with two single-family residences and associated accessory structures. The project proposes to demolish the two existing residences and redevelop the site with eight new single-family residences. The project components, including the single-family residences, landscaping, and construction details, are described below. A site plan for the proposed project is provided in Figure 3.2-4.

3.2 PROJECT COMPONENTS

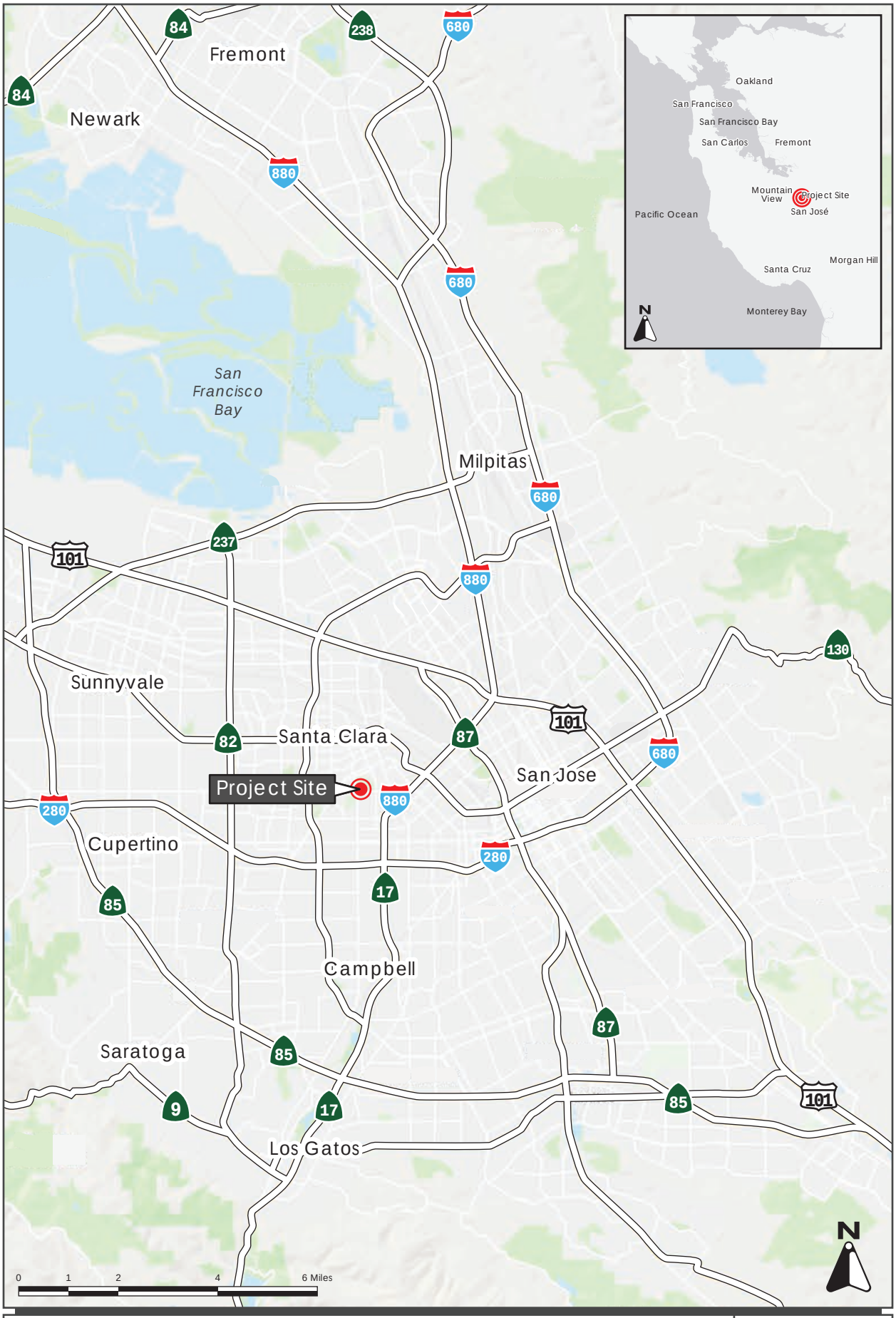
3.2.1 Rezoning

The project proposes to rezone the project site from R1-6L to PD (Planned Development). The current R1-6L zoning would restrict the project to two stories per residence and 25 feet in maximum height. The current zoning would also require minimum lot widths of 60 feet, front yards, rear yards, and driveways no less than 20 feet long, side yards no less than five feet wide, and would limit maximum building coverage to 40 percent of the area of any lot. The PD rezoning would modify the allowed building height, setbacks, and building coverage on the project site as long as the project is found generally consistent with the surrounding neighborhood.

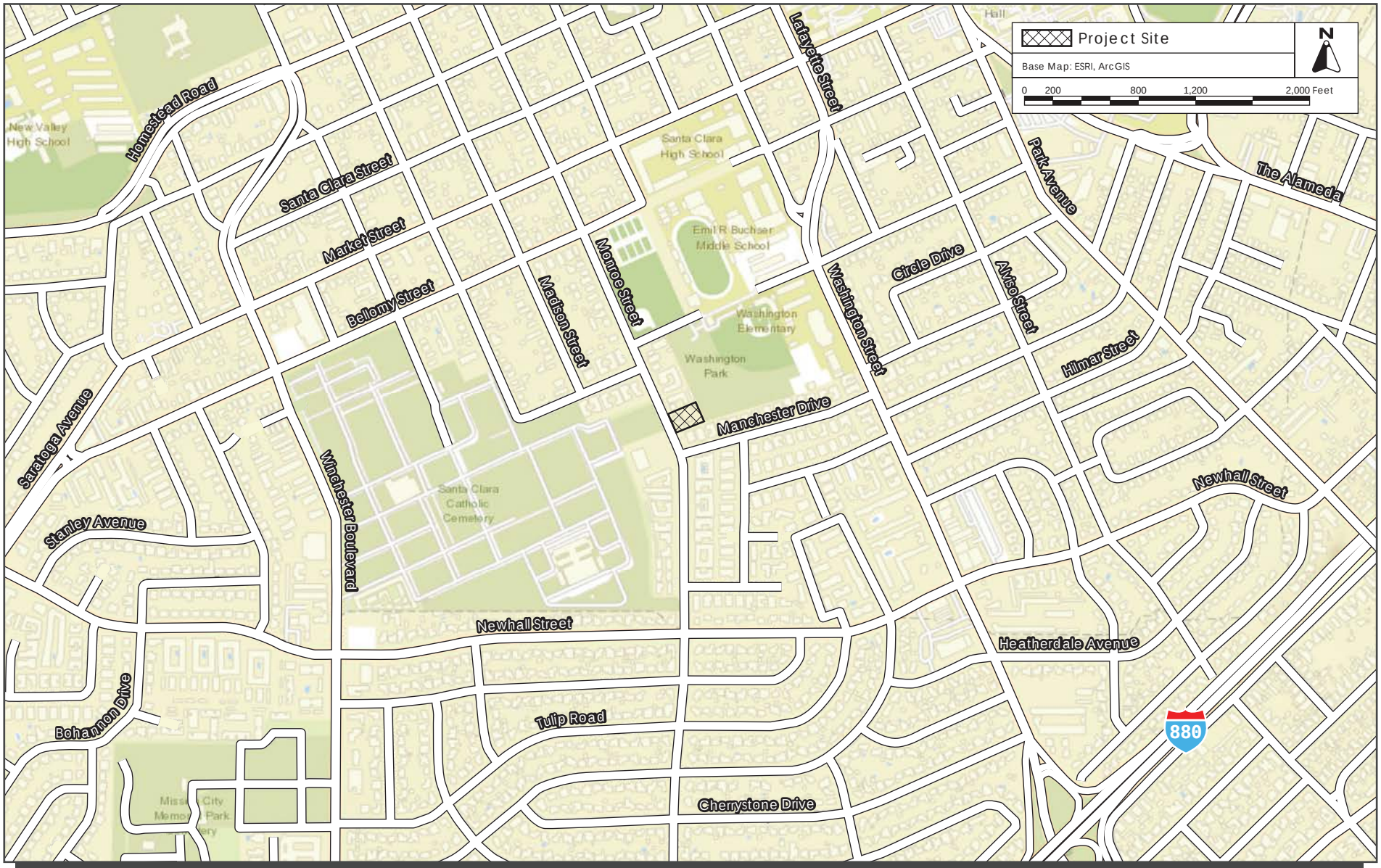
3.2.2 Single-Family Residences

The project proposes to demolish the two existing single-family residences and accessory structures in order to construct eight new single-family residences on-site. Each of the residences would include a two-car garage. The proposed residences would be setback a minimum of approximately 12 feet from Monroe Street, five feet from the private driveway of the residences at 177 Monroe Street (north of the project site), five feet from the rear yards of the residences at 1295 Manchester Drive (south of the project site), and four feet from the school sports field.

Six of the proposed residences would contain four bedrooms and would be approximately 2,520 square-feet in size (living area plus garage). The four-bedroom residences would be three stories tall and reach a maximum height of approximately 40 feet (see Figure 3.2-5). The other two residences (located along the street frontage) would contain three bedrooms and would be approximately 1,956 square-feet in size (living area plus garage). The three-bedroom residences would be two stories tall and reach a maximum height of approximately 30 feet (see Figure 3.2-6).

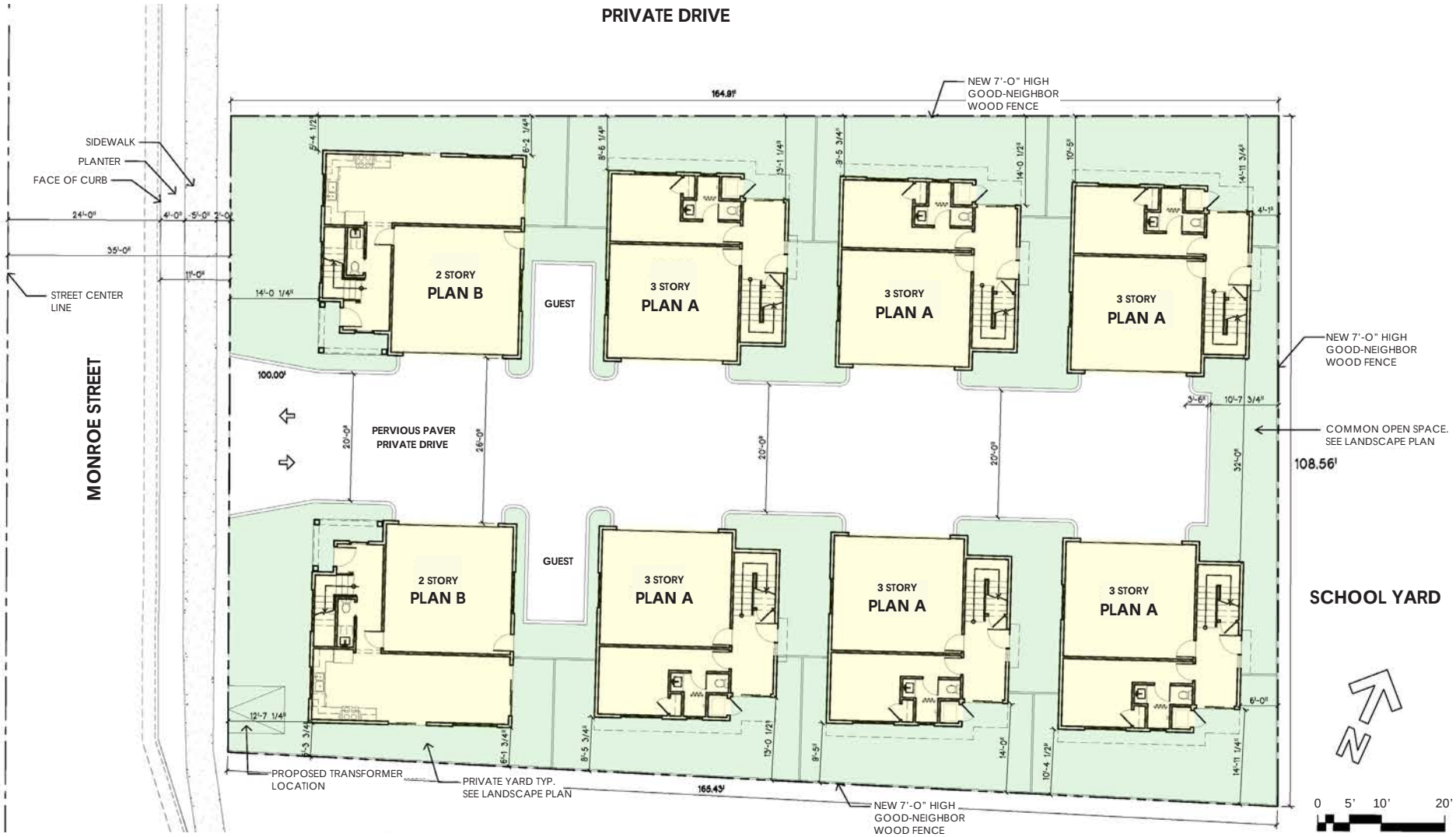


REGIONAL MAP | FIGURE 3.2-1



VICINITY MAP | FIGURE 3.2-2

AERIAL PHOTOGRAPH AND SURROUNDING LAND USES | FIGURE 3.2-3

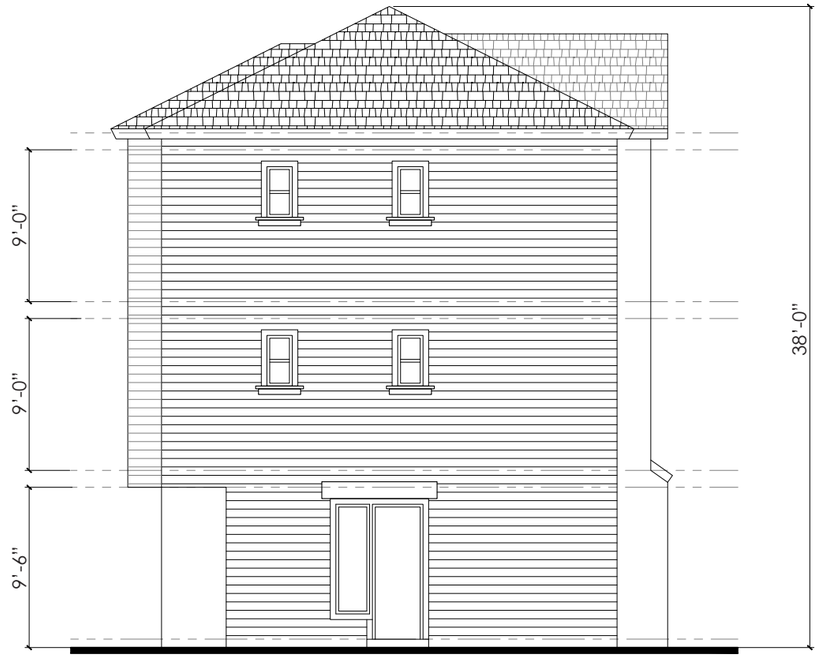


Source: LPMD Architects, December 20, 2018.

PROPOSED SITE PLAN | FIGURE 3.2-4

RIGHT ELEVATION

FRONT ELEVATION



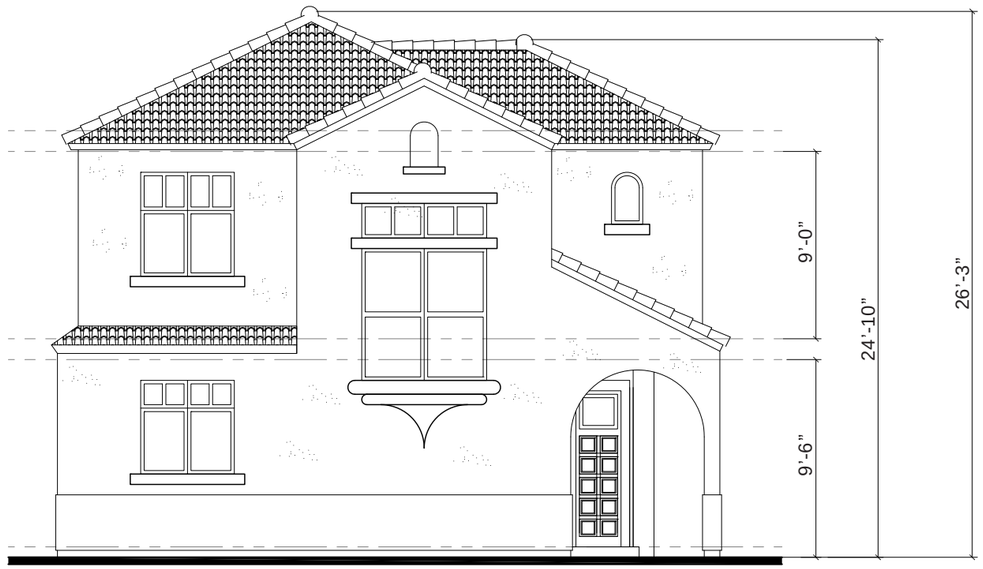
LEFT ELEVATION

REAR ELEVATION

Source: LPMD Architects, December 18, 2020.

CONCEPTUAL BUILDING ELEVATIONS - PLAN A | FIGURE 3.2-5

RIGHT ELEVATION



FRONT ELEVATION

LEFT ELEVATION

REAR ELEVATION

Source: LPMD Architects, December 18, 2020.

CONCEPTUAL BUILDING ELEVATIONS - PLAN B | FIGURE 3.2-6

3.2.3 Landscaping and Open Space

The project site currently contains 13 trees. As proposed, the project would remove all the existing trees from the site. New landscaping would, however, be provided throughout the project site as part of the project. The project would include accent trees and shrubs around each residence, streetscape landscaping, and community open space on the eastern end of the project site, adjacent to the school sports field. The project would plant 21 new trees on-site, resulting in a net increase of eight trees.

3.2.4 Site Access and Parking

Access to the proposed residences would be provided via a new private drive off Monroe Street. The drive would run through the center of the project site, providing access to all of the proposed residences. The drive would be a minimum of approximately 20 feet wide. Each proposed residence would include a two-car garage and the project would include a total of two guest parking spaces on-site.

3.2.5 Construction Details

Construction, which includes demolition, site preparation, and construction of the project, is estimated to take approximately 10 months.

3.3 USES OF THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

This Initial Study/MND provides decision makers in the City of Santa Clara (the Lead Agency), responsible agencies, and the general public with relevant environmental information to use in considering the proposed project. It is intended that this Initial Study be used for discretionary approvals necessary to implement the project, as proposed. These discretionary actions may include, but are not limited to, the following:

- Rezoning
- Tentative Map Approval
- Architectural Review Approval
- Grading and Building Permits

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). Each impact is numbered to correspond to the checklist question being answered. For example, Impact BIO-1 answers the first checklist question in the Biological Resources section. Mitigation measures are also 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

Senate Bill 743

Senate Bill (SB) 743 was adopted in 2013 and requires lead agencies to use alternatives to level of service (LOS) for evaluating transportation impacts, specifically vehicle miles traveled (VMT). SB 743 also included changes to CEQA that apply to transit-oriented developments, as related to aesthetics and parking impacts. Under SB 743, a project's aesthetic impacts will no longer be considered significant impacts on the environment if:

- The project is a residential, mixed-use residential, or employment center project, and
- The project is located on an infill site within a transit priority area.[1]

SB 743 also clarifies that local governments retain their ability to regulate a project's aesthetics impacts outside of the CEQA process.

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. There are no state-designated scenic highways in the City of Santa Clara. Interstate 280 (I-280) from the San Mateo County line to State Route (SR) 17, which includes segments in Santa Clara, is an eligible, but not officially designated, State Scenic Highway.[2]

In Santa Clara County, the one state-designated scenic highway is 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, I-280 from the San Mateo County line to SR 17, and the entire length of SR 152 within the County.

[1] An "infill site" is defined as "a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses." A "transit priority area" is defined as "an area within 0.5 mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." A "major transit stop" means "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." Source: Public Resources Code Section 21009. Accessed September 17, 2021. https://codes.findlaw.com/ca/public-resources-code/prc-sect-21099.html.

[2] California Department of Transportation. "Scenic Highways." Accessed September 17, 2021. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

Local

Santa Clara General Plan

The City of Santa Clara 2010-2035 General Plan (General Plan) includes policies for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies are specific to aesthetics and are applicable to the proposed project.

Policies	Description
5.3.1-P3	Support high quality design consistent with adopted design guidelines and the City's architectural review process.
5.3.1-P10	Provide opportunities for increased landscaping and trees in the community, including requirements for new development to provide street trees and a minimum 2:1 on- or off-site replacement for trees removed as part of the proposal to help increase the urban forest and minimize the heat island effect.
5.3.1-P28	Encourage undergrounding of new utility lines and utility equipment throughout the City.
5.3.4-P10	Require parking to be substantially below-grade or in structures with active uses along streets.

Santa Clara City Code

The City Code includes regulations associated with protection of the City's visual character, to promote a sound and attractive community appearance, as stated in Chapter 8.30 Public Nuisances and Chapter 18.52 Regulations for Public, Quasi-Public, and Public Park or Recreation Zoning Districts.[3] The City Code also includes an Architectural Review process, as outlined in Zoning Ordinance Chapter 18.76. The Architectural Review process is intended to serve the following purposes:

- Encourage the orderly and harmonious appearance of structures and properties;
- Maintain the public health, safety, and welfare;
- Maintain property and improvement values throughout the City;
- Encourage the physical development of the City that is consistent with the General Plan and other City regulations; and
- Enhance the aesthetic appearance, functional relationships, neighborhood compatibility and excellent design quality.

Architectural Policies – Community Design Guidelines

Through the architectural review process the City considers plans and drawings for design, aesthetic considerations, and consistency with zoning standards, generally prior to submittal for building permits. The architectural review process follows the City's Community Design Guidelines. The intent of these guidelines is to provide consistent development standards in the interest of continued maintenance and enhancement of the high-quality living and working environment in the City.

[3] City of Santa Clara. 2010. *City of Santa Clara 2010-2035 General Plan*.

4.1.1.2 *Existing Conditions*

Project Site

The project site is currently developed with two, one-story, single-family residences and their associated driveways. The property located at 175 Monroe Street, the southernmost of the two, also has a detached garage. The existing residences on-site have wood siding exteriors and gable roofs[4] overlain with asphalt shingles. The residences are set back 10 to 12 feet from the sidewalk. The residence at 175 Monroe as constructed in 1916 and has metal awnings on the front windows, metal bar railings on the stairs, and is in somewhat poor condition. The residence at 171 Monroe was constructed in 1940 and is in good condition aside from a broken white picket fence that encloses the front yard.

The project site contains 13 trees as well as several bushes, and grass lawns.

Surrounding Land Uses

The project site is bounded by Monroe Street to the west, residences to the north and south, and Washington Park to the east. The multi-family residences to the north and south of the project site are two stories and mostly have gable roofs, and stucco exteriors. The multi-family residences are of newer construction with larger setbacks to the roadways and minimal decorative elements.

The properties across Monroe Street, including the Santa Clara Mission Cemetery, are bordered by a large hedge and are not visible from the project site. Washington Park, adjacent to the western border of the project site, primarily consists of a grass sports field.

Scenic Views, Resources, and Corridors

Based on the City's General Plan, views of the Santa Cruz Mountains and the Diablo Range and stretches of open space and undeveloped land in the Ulistac Natural Area are scenic features in the Santa Clara area. The project site and the surrounding area are relatively flat and prominent viewpoints are limited. The project area has minimal to no scenic views of the Diablo foothills to the east, Santa Cruz Mountains to the west, and Santa Teresa Hills to the south. No natural scenic resources, such as outcroppings, are present on-site or within the project area. Additionally, the project site is located more than 7.5 miles from SR 9.

Light and Glare

Sources of light and glare are abundant in the urban environment of the project site and project area, including but not limited to streetlights, vehicular headlights, internal/external building lights, security lights, and reflective building surfaces and windows.

[4] A gable roof is a type of roof design where two sides slope downward toward the walls and the other two sides include walls that extend from the bottom of the eaves to the peak of the ride. Source: Pro-Tech Roofing, Inc. "Hip vs. Gable Roof". Accessed September 17, 2021. https://www.tulsaprotech.com/hip-vs-gable-roof/

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:				
1) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
3) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? [5] If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Impact AES-1: The project would not have a substantial adverse effect on a scenic vista. **(No Impact)**

Scenic resources within the City are visible from roadways and public trails, but not from residential neighborhoods, according to the certified 2010-2035 General Plan Integrated Final EIR (General Plan FEIR).[6] The project site is located within a relatively flat, urban, developed area of the City of Santa Clara. The project would redevelop the site with new single-family residences that would be visually compatible with the existing neighborhood. Therefore, the project would not have an adverse effect on a scenic vista. **(No Impact)**

Impact AES-2: The project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. **(No Impact)**

The nearest state scenic highway, SR-9, is more than 7.5 miles from the project site. The project site is not visible from SR-9 due to the distance and the surrounding urban landscape. Therefore, the project would not damage scenic resources within a state scenic highway. **(No Impact)**

[5] Public views are those that are experienced from publicly accessible vantage points.
[6] City of Santa Clara. 2010-2035 General Plan Integrated Final Environmental Impact Report. SCH# 2008092005. January 2011. Page 141.

Impact AES-3:	The project would not conflict with applicable zoning and other regulations governing scenic quality. **(Less than Significant Impact)**

The project proposes to rezone the project site from R1-6L to PD. The PD rezoning would modify the allowed building height, setbacks, and building coverage on the project site as long as the project is found generally consistent with the surrounding neighborhood. The two proposed residences along Monroe Street would be two stories tall, while the six other residences would be three stories tall. The two-story residences would have wood siding, gable roofs, and composition shingles. The three-story residences would have stucco exteriors, gable roofs, and tile shingles. Redevelopment of the project site would be subject to the City's Architectural Review process to ensure that the proposed residences are compatible with the existing neighborhood. Therefore, the proposed residences would be generally consistent with the surrounding neighborhood and would not conflict with applicable zoning and other regulations governing scenic quality. **(Less than Significant Impact)**

Impact AES-4:	The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. **(Less than Significant Impact)**

Due to the project area's developed character, the current level of light and glare is typical of that in an urban setting. Nighttime lighting impacts are considered significant when they interfere with or intrude into neighboring residences. Light pollution is typically related to the use of high voltage light fixtures with inadequate shields and improper positioning or orientation. Lighting on the project site will be reviewed by Planning staff, and through the City's architectural review process, prior to issuance of building permits for consistency with the City's Design Guidelines to reduce light and glare and to ensure the project would not create a substantial new source of 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.[7]

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.[8]

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.[9] Programs such as CAL FIRE's Fire and Resource Assessment Program and are used to identify whether forest land, timberland, or timberland production areas that could be affected are located on or adjacent to a project site.[10]

[7] California Department of Conservation. "Farmland Mapping and Monitoring Program." Accessed June 30, 2021. http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx.
[8] California Department of Conservation. "Williamson Act." http://www.conservation.ca.gov/dlrp/lca.
[9] 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)).
[10] California Department of Forestry and Fire Protection. "Fire and Resource Assessment Program." Accessed June 30, 2021. http://frap.fire.ca.gov/.

4.2.1.2 *Existing Conditions*

The project site is currently developed with two single-family residences. The project site is designated as Urban and Built-Up Land by the California Department of Conservation.[11] The project site is not subject to a Williamson Act contract.[12]

4.2.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
3) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
4) Result in a loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
5) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Impact AG-1: The project would not 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. **(No Impact)**

The project site is designated as Urban and Built-Up Land by the California Department of Conservation. The project site does not contain any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. **(No Impact)**

[11] California Department of Conservation. California Important Farmland Finder. Accessed June 30, 2021. https://maps.conservation.ca.gov/DLRP/CIFF/

[12] County of Santa Clara. Williamson Act Properties Geodatabase. Accessed June 30, 2021. https://sccplanning.maps.arcgis.com/apps/webappviewer/index.html?id=1f39e32b4c0644b0915354c3e59778ce

Impact AG-2:	The project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. **(No Impact)**

The project site is currently zoned R1-6L (Single-Family Residential) and is not subject to a Williamson Act contract. Therefore, the project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. **(No Impact)**

Impact AG-3:	The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. **(No Impact)**

The project site is currently zoned R1-6L (Single-Family Residential). Therefore, the project would not conflict with existing zoning for forest land or timberland. **(No Impact)**

Impact AG-4:	The project would not result in a loss of forest land or conversion of forest land to non-forest use. **(No Impact)**

The project site is currently developed with two single-family residences and does not contain any forest land. Therefore, the project would not result in a loss of forest land or conversion of forest land to non-forest use. **(No Impact)**

Impact AG-5:	The project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. **(No Impact)**

As previously discussed, the project site does not contain any farmland or forest land. The project site is surrounded by urban land uses. Therefore, the project would not involve changes in the existing environment which could result in conversion of farmland or forest land. **(No Impact)**

4.3 AIR QUALITY

The following discussion is based, in part, on a Construction Community Risk Assessment prepared for the project by Illingworth & Rodkin, Inc., dated September 2021. A copy of this report is included in Appendix A of this Initial Study.

4.3.1 Environmental Setting

4.3.1.1 *Background Information*

Criteria Pollutants

Air quality in the Bay Area is assessed related to six common air pollutants (referred to as criteria pollutants), including ground-level ozone (O_3), nitrogen oxides (NO_x), particulate matter (PM), carbon monoxide (CO), sulfur oxides (SO_x), and lead.[13] Criteria pollutants are regulated because they result in health effects. An overview of the sources of criteria pollutants and their associated health are summarized in Table 4.3-1. The most commonly regulated criteria pollutants in the Bay Area are discussed further below.

Table 4.3-1: Health Effects of Air Pollutants

Pollutants	Sources	Primary Effects
Ozone (O_3)	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	• Aggravation of respiratory and cardiovascular diseases • Irritation of eyes • Cardiopulmonary function impairment
Nitrogen Dioxide (NO_2)	Motor vehicle exhaust, high temperature stationary combustion, atmospheric reactions	• Aggravation of respiratory illness • Reduced visibility
Fine Particulate Matter ($PM_{2.5}$) and Coarse Particulate Matter (PM_{10})	Stationary combustion of solid fuels, construction activities, industrial processes, atmospheric chemical reactions	• Reduced lung function, especially in children • Aggravation of respiratory and cardiorespiratory diseases • Increased cough and chest discomfort • Reduced visibility
Toxic Air Contaminants (TACs)	Cars and trucks, especially diesel-fueled; industrial sources, such as chrome platers; dry cleaners and service stations; building materials and products	• Cancer • Chronic eye, lung, or skin irritation • Neurological and reproductive disorders

High O_3 levels are caused by the cumulative emissions of reactive organic gases (ROG) and NO_x. These precursor pollutants react under certain meteorological conditions to form high O_3 levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to

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

reduce O_3 levels. The highest O_3 levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources.

PM is a problematic air pollutant of the Bay Area. PM is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM_{10}) and fine particulate matter where particles have a diameter of 2.5 micrometers or less ($PM_{2.5}$). Elevated concentrations of PM_{10} and $PM_{2.5}$ are the result of both region-wide emissions and localized emissions.

Toxic Air Contaminants

TACs are a broad class of compounds known to have health effects. They include but are not limited to criteria pollutants. 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).

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs. Diesel exhaust 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 (most susceptible to injury).[14] Chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the California Air Resources Board (CARB).

Sensitive Receptors

Some groups of people are more affected by air pollution than others. CARB has identified the following persons 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.

4.3.1.2 *Regulatory Framework*

Federal and State

Clean Air Act

At the federal level, the United States Environmental Protection Agency (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), including PM, O_3, CO, SO_x, NO_x, and lead.

[14] California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed September 1, 2021. https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health.

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.

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, the plan involves application of emission control strategies to existing diesel vehicles and equipment to reduce DPM (in additional to 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 and Local

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. Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards will be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect public health, the 2017 CAP describes how BAAQMD will continue its progress toward attaining state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-greenhouse gases (GHGs) that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.[15]

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 impacts, and recommended mitigation measures.

[15] BAAQMD. *Final 2017 Clean Air Plan.* April 19, 2017. http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans.

City of Santa Clara 2010 – 2035 General Plan

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

Policies	Description
5.10.5-P3	Encourage implementation of technological advances that minimize public health hazards and reduce the generation of air pollutants.
5.10.5-P4	Encourage measures to reduce greenhouse gas emissions to reach 30 percent below 1990 levels by 2020.
5.10.5-P6	Require "Best Management Practices" for construction dust abatement.

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 Clean Air Act and state Clean Air Act. The area is also considered nonattainment for PM_{10} under the state act, but not the federal act. The area has attained both state and federal ambient air quality standards for CO. As part of an effort to attain and maintain ambient air quality standards for O_3 and PM_{10}, BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for O_3 precursor pollutants (ROG and NO_X), PM_{10}, and $PM_{2.5}$, and apply to both construction period and operational period impacts.

Existing sensitive receptors in the project vicinity include residences to the north and south of the project site and students at Washington Elementary School and Buchser Middle School to the east and northeast of the project site, respectively.

4.3.2 Impact Discussion

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

4.3.2.1 *Thresholds of Significance*

Impacts from the Project

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for judgment on the part of the lead agency and must be based to the extent possible on scientific and factual data. The City of Santa Clara has considered the air quality thresholds updated by BAAQMD in May 2017 and regards these thresholds to be based on the best information available for the San Francisco Bay Area Air Basin and conservative in terms of the assessment of health effects associated with TACs and $PM_{2.5}$. The BAAQMD CEQA Air Quality thresholds used in this analysis are identified in Table 4.3-2 below.

Table 4.3-2: BAAQMD Air Quality Significance Thresholds

Pollutant	Construction Thresholds	Operation Thresholds	
	Average Daily Emissions (pounds/day)	Average Daily Emissions (pounds/day)	Annual Average Emissions (tons/year)
Criteria Air Pollutants			
ROG, NO_x	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
CO	Not Applicable	9.0 ppm (eight-hour) or 20.0 ppm (one-hour)	
Fugitive Dust	Dust Control Measures/Best Management Practices	Not Applicable	
Health Risks and Hazards for New Sources (within a 1,000-foot Zone of Influence)			
Health Hazard	**Single Source**	**Combined Cumulative Sources**	
Excess Cancer Risk	10 per one million	100 per one million	
Hazard Index	1.0	10.0	
Incremental Annual $PM_{2.5}$	0.3 $\mu g/m^3$	0.8 $\mu g/m^3$ (average)	

Impact AIR-1: The project would not conflict with or obstruct implementation of the applicable air quality plan. **(Less than Significant Impact)**

Clean Air Plan

BAAQMD is the regional agency responsible for overseeing compliance with state and federal laws, regulations, and programs within the San Francisco Bay Area Air Basin. As previously stated, BAAQMD's most recently adopted plan is the 2017 CAP. The primary goals of the CAP are to attain air quality standards, reduce population exposure and protect public health, and reduce GHG

emissions and protect the climate. BAAQMD has also developed CEQA guidelines to assist lead agencies in evaluating the significance of air quality impacts. In formulating compliance strategies, BAAQMD relies on planned land uses established by local general plans. Land use planning affects vehicle travel, which in turn affects region-wide emissions of air pollutants and GHGs.

The 2017 CAP includes control measures are intended to reduce air pollutant emissions in the Bay Area either directly or indirectly. Plans must show consistency with the control measures listed within the CAP. The proposed project would not conflict with the latest Clean Air planning efforts because the project would have emissions below the BAAQMD thresholds (as described below), would be an urban infill development, and would be located near transit with regional connections.

Construction Period Emissions

The California Emissions Estimator Model (CalEEMod) Version 2020.4.0 was used to estimate emissions from construction of the project. The project land use type and size, and anticipated construction schedule were input to CalEEMod. The model output from CalEEMod along with construction and operational inputs can be found in Appendix A.

CalEEMod provided annual emissions for construction including both on-site and off-site construction activities. On-site activities are primarily made up of construction equipment emissions, while off-site activity includes worker, hauling, and vendor traffic. The project construction schedule and equipment usage assume the project would take 10 months to construct. Average daily emissions were computed by dividing the total construction emissions by the number of construction days. Table 4.3-3 shows average daily construction emissions of ROG, NO_X, PM_{10} exhaust, and $PM_{2.5}$ exhaust during construction of the project.

Table 4.3-3: Construction Period Emissions

Year	ROG	NO_X	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
Total Construction Emissions (tons)	0.15	0.35	0.01	0.01
Average daily emissions (pounds)[1]	1.40	3.29	0.14	0.13
BAAQMD Thresholds (pounds per day)	54 lbs./day	54 lbs./day	82 lbs./day	54 lbs./day
Exceed Threshold?	No	No	No	No

[1]Assumes 213 workdays

As shown in Table 4.3-3, above, project construction emission would not exceed the BAAQMD significance thresholds. Therefore, project construction would not emit a significant level of criteria air pollutants and would not conflict with or obstruct implementation of the 2017 CAP.

Operational Period Emissions

The 2011 BAAQMD CEQA Air Quality Guidelines contain a screening table that lists the minimum unit count for residential projects, below which the project would not result in the generation of operational criteria air pollutants that exceed the threshold of significance. The screening threshold

for single family residences is 325 dwelling units. The project proposes six net new single-family residences, which falls below the screening threshold. Given that the project would not exceed the BAAQMD screening criteria, it would not result in the generation of operational-related criteria air pollutants and/or precursors that exceed the thresholds shown in Table 4.3-2. Thus, the project is not required to incorporate project-specific control measures listed in the 2017 CAP. Further, implementation of the project would not inhibit BAAQMD or partner agencies from attaining state and federal air quality standards and eliminating health-risk disparities from exposure to air pollution among Bay Area communities, as described within the 2017 CAP. **(Less than Significant Impact)**

Impact AIR-2:	The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. **(Less than Significant Impact)**

Per the BAAQMD CEQA Air Quality Guidelines, air pollution by its nature is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. As discussed above, the proposed project would not, by itself, result in any air pollutant emissions exceeding BAAQMD's significance thresholds. As a result, the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment. **(Less than Significant Impact)**

Impact AIR-3:	As mitigated, the project would not expose sensitive receptors to substantial pollutant concentrations. **(Less than Significant Impact with Mitigation Incorporated)**

Dust Generation

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 could deposit mud on local streets, which could be an additional source of airborne dust after it dries. General Plan Policy 5.10.5-P6 requires best management practices (BMPs) to be implemented for construction dust abatement.

Condition of Approval: The project will implement the following measures to control dust and exhaust during construction, pursuant to General Plan Policy 5.10.5-P6.

> BASIC AIR QUALITY CONSTRUCTION MEASURES: The applicant shall require all construction contractors to implement the basic construction measures recommended by the BAAQMD to reduce fugitive dust emissions. Additional measures may be identified by the BAAQMD or contractor as appropriate. Emission reduction measures will include, at a minimum, the following:

- 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.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

BAAQMD CEQA Air Quality Guidelines consider dust generation impacts to be less than significant if BMPs are implemented to reduce these emissions. Therefore, the project, with the implementation of the above Condition of Approval, would result in a less than significant construction dust emissions impact.

Community Health Risk Impacts

The project would introduce new sources of TACs during construction and operation that would affect nearby sensitive receptors. Sensitive receptors in the project vicinity include residences to the north and south of the project site and students at Washington Elementary School and Buchser Middle School to the east and northeast of the project site, respectively. Project construction activities would generate dust and equipment exhaust while project operation would generate traffic consisting of mostly light-duty gasoline-powered vehicles.

Project Operations

The project does not propose the use of any stationary sources of TACs that have the potential for substantial emissions, such as diesel-powered emergency generators. Per BAAQMD methodology, a road with less than 10,000 total vehicles per day is considered a low-impact source of TACs. The project would result in approximately 57 net new daily trips (see Section 4.17 Transportation) from primarily light-duty vehicles. Monroe Street does not exceed 10,000 total vehicles per day and the

addition of 57 net new daily vehicles would not cause substantial increase in vehicle emissions on the roadway.

Construction

Community risk impacts were addressed by predicting increased cancer risk, the increase in annual $PM_{2.5}$ concentrations and computing the Hazard Index (HI) for non-cancer health risks. The maximally exposed individual ("MEI") was determined to be located on the second floor of a multi-family residence south of the project site (see Figure 4.3-1). To give the most conservative analysis, the MEI was assumed to be an infant. Given the project site's proximity to two schools, the project's health risk impacts at the nearest school were also considered. The maximum increased cancer risks were adjusted using child exposure parameters. The project risk impacts are summarized in Table 4.3-4.

Table 4.3-4: Construction Risk Impacts at the Off-Sit MEI and Nearest School

Source	Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Hazard Index
Project Impact			
Project Construction	**12.90 (infant)**	0.08	0.02
BAAQMD Single-Source Threshold	10	0.3	1.0
Exceed Threshold?	Yes	No	No
Most Affected Nearby School – Washington Elementary School			
Project Construction	0.01 (child)	<0.01	<0.01
BAAQMD Single-Source Threshold	10.0	0.3	1.0
Exceed Threshold?	No	No	No

As shown in Table 4.3-4, above, project construction would exceed the BAAQMD single-source threshold for increased cancer risk at the MEI. This would be a significant impact.

Source: Illingworth & Rodkin, Inc., September 1, 2021.

LOCATIONS OF SENSITIVE RECEPTORS AND MEI | FIGURE 4.3-1

Mitigation Measure: The project would implement the mitigation measures listed below to reduce TAC impacts to nearby sensitive receptors to a less than significant level.

MM AIR-3.1: All construction equipment larger than 25 horsepower used at the site for more than two continuous days or 20 hours total shall meet U.S. EPA Tier 4 emission standards for particulate matter (PM_{10} and $PM_{2.5}$). If use of Tier 4 equipment is not feasible, equipment that meets U.S. EPA emissions standards for Tier 2 or 3 engines and include particulate matter emissions control equivalent to CARB Level 3 verifiable diesel emission control devices that altogether achieve a 25 percent reduction in particulate matter exhaust in comparison to uncontrolled equipment shall be used. The use of equipment that is powered by electricity or alternatively fueled equipment (i.e., non-diesel) would also meet this requirement.

Alternatively, the applicant could develop a TAC reduction plan that reduces on- and near-site construction diesel particulate matter emissions by 25 percent or greater. Such a plan shall be reviewed and approved by the City prior to the issuance of demolition, grading, or building permits (whichever occurs first).

With implementation of the condition of approval and mitigation measure MM AIR-3.1, the project's construction cancer risk impact would be reduced by 79 percent to 2.81 chances per million. A plan that reduces DPM emissions by 25 percent would reduce cancer risk to 9.7 chances per million. Therefore, with implementation of MM AIR-3.1, the project's construction cancer risk would be reduced below the BAAQMD single-source threshold. Other health risk impacts associated with project construction would be less than significant without mitigation.

Cumulative Community Health Risks

Cumulative TAC impacts are analyzed by combining the community risk impacts of the project construction and nearby sources of TACs within 1,000 feet of the project site. TAC sources include rail lines, highways, busy surface streets (>10,000 average daily trips or ADT), and stationary sources identified by BAAQMD. A review of the project area indicates that no roadways within the project vicinity exceed 10,000 vehicles per day. Additionally, there are no stationary sources within 1,000 feet of the project site that are identified by BAAQMD. BAAQMD's cumulative sources thresholds are higher than the single-source thresholds. The significance threshold for cancer risk is 100 chances per million. The project, at 12.9 chances per million in an unmitigated scenario, would fall below this threshold, as well as the thresholds for annual $PM_{2.5}$ emissions and the HI. Therefore, the project would not result in a significant cumulative impact on sensitive receptors in the project area and, with implementation of MM AIR-3.1, would not expose sensitive receptors to substantial pollutant concentrations. **(Less than Significant Impact with Mitigation Incorporated)**

Impact AIR-4:	The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. **(Less than Significant Impact)**

The project would generate localized emissions of diesel exhaust during construction equipment operation and truck activity. These emissions may be noticeable by adjacent receptors; however, the

odors would be localized and temporary and would not substantially affect people off-site. For these reasons, implementation of the proposed project would not result in significant long-term or short-term odor impacts, affecting a substantial number of people. **(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 only because the City of Santa Clara has policies that address existing air quality conditions affecting a proposed project.

On-Site Community Health Risk Impacts – New Project Residents

As previously discussed, there are no existing TAC sources within 1,000 feet of the project site. There are no roadways that exceed 10,000 vehicles per day within 1,000 feet of the project and there are no BAAQMD-identified stationary TAC sources within 1,000 feet of the project. Therefore, the project would not expose the new proposed sensitive receptors on-site to existing adverse air quality conditions.

4.4 BIOLOGICAL RESOURCES

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. The taking and killing of birds resulting from an activity is not prohibited by the MBTA when the underlying purpose of that activity is not to take birds.[16] Nesting birds are considered special-status species and are protected by the USFWS. 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.

[16] United States Department of the Interior. "Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take." Accessed July 30, 2021. https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf.

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 Santa Clara 2010 – 2035 General Plan

General Plan policies applicable to biological resources include, but are not limited to, the following listed below.

Policies	Description
5.3.1-P10	Provide opportunities for increased landscaping and trees in the community, including requirements for new development to provide street trees and a minimum 2:1 on- or off-site replacement for trees removed as part of the proposal to help increase the urban forest and minimize the heat island effect.
5.10.1-P4	Protect all healthy cedars, redwoods, oaks, olives, bay laurel, and pepper trees of any size, and all other trees over 36 inches in circumference measured from 48 inches above-grade on private and public property, as well as in the public right-of-way.

4.4.1.2 *Existing Conditions*

The project site is located in an urban area of the City of Santa Clara. The site is currently developed with two single-family residences. There are no special status species known to occur on-site and the site does not provide suitable habitat for special status species. There are 13 existing trees on-site including three crape myrtle, one privet, two walnut, one black willow, three acacia, one persimmon, and two peach trees. More detail on each tree is given in Table 4.4-1.

Table 4.4-1: Summary of Existing Trees On-Site

Tag Number	Species	Diameter	Circumference	Protected?
344	Crape myrtle	6”	19”	No
345	Crape myrtle	14”	44	Yes
346	Privot	26”	82”	Yes
347	Walnut	9”	28”	No
348	Black willow	31”	31	No
349	Acacia	15”	47”	Yes
350	Crape myrtle	10”	31”	No
351	Acacia	25”	79”	Yes
352	Persimmon	17”	53”	Yes
353	Acacia	41”	129”	Yes

Table 4.4-1: Summary of Existing Trees On-Site				
Tag Number	**Species**	**Diameter**	**Circumference**	**Protected?**
354	Walnut	26”	82”	Yes
355	Peach	5”	16”	No
356	Peach	5”	16”	No

In accordance with General Plan Policy 5.10.1-P4, seven out of the 13 trees are considered protected trees because they all have circumferences of 37 inches and larger at breast height (four and a half feet above grade). The remaining five trees all have circumferences less than 36 inches at breast height. However, trees have larger circumferences when measured from 48 inches above-grade and therefore, more of the existing trees may also be considered protected trees per General Plan Policy 5.10.1-P4.

4.4.2 Impact Discussion

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

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Impact BIO-1: As mitigated, the project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. **(Less than Significant Impact with Mitigation Incorporated)**

There are no candidate, sensitive, or special status species present on the project site. The proposed project would not have any effect, directly or indirectly, on species identified by any plans, policies, regulations, or by the CDFW or USFWS.

The mature trees on the project site could provide nesting habitat for birds, including migratory birds and raptors. Nesting birds are among the species protected under provisions of the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 2800.

Construction of the project during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes abandonment and/or loss of reproductive effort is considered a taking by the CDFW. Any loss of fertile eggs, nesting raptors, or any activities resulting in nest abandonment would constitute an impact. Construction activities such as tree removal and site grading that disturb a nesting bird or raptor on-site or immediately adjacent to the construction zone would also constitute an impact.

Mitigation Measure: The project will be required to implement the following mitigation measures to reduce impacts to raptors and nesting birds to a less than significant level:

MM BIO-1.1: Pre-construction nesting bird surveys shall be completed prior to tree removal if removal or construction is proposed to commence during the breeding season (February 1 to August 31) in order to avoid impacts to nesting birds. Surveys shall be completed by a qualified biologist no more than 14 days before construction begins. During this survey, the biologist or ornithologist shall inspect all trees and other possible nesting habitats in and within 250 feet of the project boundary.

If an active nest is found in an area that would be disturbed by construction, the ornithologist shall designate an adequate buffer zone (~250 feet) to be established around the nest, in consultation with the California Department of Fish and Wildlife (CDFW). The buffer would ensure that nests shall not be disturbed until

the young have fledged (left the nest), the nest is vacated, and there is no evidence of second nesting attempts.

The applicant shall submit a report indicating the results of the survey and any designated buffer zones to the satisfaction of the Director of Community Development, prior to the removal of trees and issuance of a grading permit or demolition permit.

Conformance to state and federal law protecting nesting birds through implementation of mitigation measure MM BIO-1.1 would reduce potential impacts to a less than significant level. **(Less Than Significant Impact with Mitigation Incorporated)**

Impact BIO-2:	The project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. **(No Impact)**

The project site is located in a developed, urban area of Santa Clara. There is no riparian habitat or other sensitive habitat areas on or adjacent to the project site. Therefore, the project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. **(No Impact)**

Impact BIO-3:	The project would not have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. **(No Impact)**

There are no federally protected wetlands on or adjacent to the project site. **(No Impact)**

Impact BIO-4:	The project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. **(Less than Significant Impact)**

The project site is surrounded by developed, urban land uses. The project site is not part of an established native or migratory wildlife corridor or nursery site. The project would not interfere substantially with the movement of any native resident or migratory wildlife species. **(Less than Significant Impact)**

Impact BIO-5:	The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. **(Less than Significant Impact)**

As proposed, the project would remove all 13 existing trees on the project site, seven of which are ordinance sized trees. As outlined in General Plan Policy 5.3.1-P10, new development is required to provide street trees and a minimum 2:1 on- or off-site replacement for trees removed. As part of the

landscape plan, the project proposes to plant 21 new trees on-site. Based on the replacement rate required by the General Plan, the project would provide more than enough replacement trees. Therefore, the project would offset the impact of removing the existing trees and would be in compliance with local policies protecting biological resources. **(Less than Significant Impact)**

Impact BIO-6:	The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. **(No Impact)**

The project site is not located within an adopted Habitat Conservation Plan, Natural Community Plan, or other approved habitat conservation plan. The project, therefore, 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, on Department of Parks and Recreation Primary Records prepared for the existing single-family residences on-site by Urban Programmers, dated March 2017. Copies of these reports are included in Appendix B of this Initial Study. The following discussion is also based, in part, on a Cultural Resources Record Search prepared for the project by Archaeological/Historical Consultants in February 2022. A copy of this report is on file with the City of Santa Clara.

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.

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.[17]

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

[17] California Office of Historic Preservation. "CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6." Accessed August 31, 2020. http://www.ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf.

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.

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 Sections 5097 and 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 Sections 5097 and 5097.98. These codes protect such remains from 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.

Local

Santa Clara General Plan

General Plan policies applicable to cultural resources include, but are not limited to, the following listed below.

Policies	Description
5.6.3-P1	Require that new development avoid or reduce potential impacts to archaeological, paleontological and cultural resources.
5.6.3-P4	Require that a qualified paleontologist/archaeologist monitor all grading and/or excavation if there is a potential to affect archeological or paleontological resources, including sites within 500 feet of natural water courses and the Old Quad neighborhood.
5.6.3-P5	In the event that archeological/paleontological resources are discovered, require that work be suspended until the significance of the find and recommended actions are determined by a qualified archeologist/paleontologist.
5.6.3-P6	In the event that human remains are discovered, work with the appropriate Native American representative and follow the procedures set forth in State Law.

City of Santa Clara Historic Preservation Ordinance (City Code Chapter 18.106)

The City's Historic Preservation Ordinance promotes the identification, protection, enhancement and perpetuation of buildings, structures and properties within the City that reflect special elements of the City's heritage. A building, structure, object or site is eligible for inclusion in the Historic Resource Inventory if it meets all of the following designation criteria:1) is fifty (50) years of age or older; 2) maintains historic integrity and; 3) is either historically, culturally, architecturally, geographically, or archaeologically significant.

4.5.1.2 *Existing Conditions*

Regional Context

The Santa Clara Valley was occupied by the Ohlone tribe prior to the Spanish mission colonization in the 1700s. The Ohlone lived in relatively large, semi-permanent villages and a complex, hierarchical social organization.[18] After Spanish settlement in the region, the land was primarily used for vast ranches. Santa Clara was developed into a small town during the 1800s and maintained a relatively small population until after World War II. The invention of the semiconductor chip in the 1950s led to the birth of the electronics industry, which shaped Santa Clara and the surrounding region into what is now known as Silicon Valley.[19]

Existing Structures On-Site

171 Monroe Street

The residence located at 171 Monroe Street is a California Ranch style house with a projecting gable on one side and a recessed porch extending across the rest of the front façade (see Photo 1). The house is typical of the California Ranch style with wood siding, a concrete porch and double-hung rectangular windows that have exterior screens. The house was constructed circa 1940. The property is lot 16 of the George Roth Subdivision. The house was constructed for Manuel and Laura Vierra who owned several lots on the block. The house was occupied by Joseph and Agnes Vierra. Joseph was a laborer, turned ranch worker, turned glazer. The family lived in the house until Agnes sold it in 1993.

The house was evaluated to determine if it was eligible for listing as a historic resource under the NRHP and/or CRHR. The residence does not meet the criteria for having been associated with an event or broad pattern that contributed significantly to local or regional history. A trend that was prevalent after WWI was for families to divide property or add a house to a doublewide lot or sometimes an even smaller parcel. This trend was seen in most urban centers in California. The division of a large parcel and the addition of a house on this parcel is not a significant contribution to

[18] City of Santa Clara. 2010-2035 General Plan Environmental Impact Report. January 2011. Pages 316-317.
[19] Ibid.

the broad pattern of local or regional history. Therefore, this residence is not eligible for listing under Criterion 1 of the CRHR or Criteria A of the NRHP.

The residence is not associated with any individuals who were important to local history. Therefore, this residence is not eligible for listing under Criterion 2 of the CRHR or Criteria B of the NRHP.

The residence represents a slightly altered version of a modest Ranch style. The buildings (house and garage) do not exhibit significant characteristics important to the state or country, thus they are not eligible for individual listing in the under Criterion 3 of the CRHR or Criteria C of the NRHP.

The buildings do not have the potential to yield any prehistory or history of the area; therefore, the buildings would not be eligible under Criterion 4 of the CRHR or Criterion D of the NRHP.

The house was also evaluated to determine if it was eligible for listing as a historic resource under the local landmark criteria. With regard to the Historic or Cultural Significance criteria, the structure is a modest house in a vernacular Ranch style of the late 1930s. The vernacular style does not exhibit architectural character or interest that reflects the heritage and cultural development of the City, region, state or nation. No historically important event is associated with the property, and the property is not associated with an individual or group who contributed in a significant way to the political or social life in the community. Research did not uncover any strong associations by the owners or occupants to any political, social, or cultural organizations or events. The property is not associated with a significant industrial, institutional, commercial, agricultural, or transportation activity and no individual or direct association with broad patterns of local history was identified. Lastly, there is no notable historical relationship between the buildings on-site and the immediate surrounding environment.

With regard to the Architectural Significance criteria, the house is a vernacular style that does not characterize an architectural style associated with a particular era (it spanned from 1935-1960) or particular ethnic group. The designer or carpenter for the building was not identified. It is unlikely that an architect designed the building. Alterations have diminished the craftsmanship of the original builder, who was likely a carpenter/contractor. The house is a modest variation of the Ranch style. Owning to the efficiency of the style, thousands of similar buildings were constructed throughout Santa Clara and the neighboring communities. The house is not architecturally unique or innovative. The property lacks architectural distinction and does not have a relationship to other building or areas that are potentially eligible for preservation because of architectural significance. Isolated from other similar buildings the house does not exhibit any symbolic meaning that could be recognized by the general population and was constructed using common materials without innovative methods of construction. Lastly, the building is not notable and does not exhibit special attributes either aesthetic or functional.

With regard to the Geographic Significance criteria, the immediate and surrounding area is developed with multi-family buildings. The subject house and the one next door are isolated from other single-family houses and do not contribute to the multi-family neighborhood. The building is isolated, it is not compatible with the design, size or massing of the multi-family buildings in the immediate area. The property does not have historical landscape or features associated with the building and the property has very minimal landscaping without a notable use of landscaping design.

Based on the assessment of the structures on-site, the house and garage are not eligible for listing on the NRHP or CRHR, and does not meet the criteria for classification as a City landmark.

175 Monroe Street

The residence located at 175 Monroe Street is a modest wood frame vernacular Craftsman style house sheathed in horizontal board siding with a front facing gable and pitched roof. The front façade is flat with the front door off center, between two windows. Both windows have metal awnings that are not original to the building. The front door is also not original to the building. There are pipe railings that are not original on either side of the concrete steps leading to the front door. The style defining feature are the brackets that support the eaves on the front façade and exposed rafter tails. The house was altered in 1949, by enclosing the original recessed front porch, and adding a section to the rear.

The early history of the house is uncertain, although according to Santa Clara County Assessor's records, the house was constructed in 1916 and moved to its existing location in 1920. This house was purchased by Manuel and Laura Vierra before 1920. Manuel worked as a laborer and a ranch worker. The house was eventually transferred to Edward and Alberta Stefani, the granddaughter of Manuel and Laura.

The house was evaluated to determine if it was eligible for listing as a historic resource under the NRHP and/or CRHR. The residence does not meet the criteria for having been associated with an event or broad pattern that contributed significantly to local or regional history. Therefore, this residence is not eligible for listing under Criterion 1 of the CRHR or Criteria A of the NRHP.

The residence is not associated with any individuals who were important to local history. Therefore, this residence is not eligible for listing under Criterion 2 of the CRHR or Criteria B of the NRHP.

The residence represents a significantly altered version of a vernacular Craftsman style, causing it to lose integrity. The carport and shed behind the house have also had the original materials and design altered. The building does not exhibit significant characteristics important to the state or country, thus they are not eligible for individual listing in the under Criterion 3 of the CRHR or Criteria C of the NRHP.

The building does not have the potential to yield any prehistory or history of the area; therefore, the buildings would not be eligible under Criterion 4 of the CRHR or Criterion D of the NRHP.

The house was also evaluated to determine if it was eligible for listing as a historic resource under the local landmark criteria. With regard to the Historic or Cultural Significance criteria, the house has been altered, does not exhibit architectural character or interest, and has lost integrity. No historically important event is associated with the property, and the property is not associated with an individual

or group who contributed in a significant way to the political or social life in the community. Research did not uncover any strong associations by the owners or occupants to any political, social, or cultural organizations or events. The property is not associated with a significant industrial, institutional, commercial, agricultural, or transportation activity and no individual or direct association with broad patterns of local history was identified. Lastly, there is no notable historical relationship between the buildings on-site and the immediate surrounding environment.

With regard to the Architectural Significance criteria, the house characterizes an architectural style associated with a particular era. The carpenter for the building was not identified, but alternations made to the structure have ruined the original design. The house is not architecturally unique or innovative. When the building was remodeled in 1949, brackets of the Craftsman style were added. Before that, it appears to have been a very plain, utilitarian design. The property does not have a relationship to other buildings or areas and is not architecturally significant. The house does not exhibit any symbolic meaning and was constructed using common materials without innovative methods of construction. Lastly, the building is not notable and does not exhibit special attributes either aesthetic or functional.

With regard to the Geographic Significance criteria, the structure is not in proximity to other similar residences and so is not connected to a broad pattern of local history. The structure is isolated from other single-family houses and does not contribute to the multi-family neighborhood. Furthermore, the building is not compatible with the design, size or massing of the multi-family buildings in the immediate area. The property does not have historical landscape or features associated with the building and the property has very minimal landscaping without a notable use of landscaping design.

Based on the assessment of the structure on-site, the house is not eligible for listing on the NRHP or CRHR, and does not meet the criteria for classification as a City landmark.

Archaeological Records Search

A records search for previous studies and recorded cultural sites within the project vicinity was completed at the Northwest Information Center on February 4, 2022. The records search revealed that no cultural resources are known to exist within the project site nor within a one-eighth mile radius of the project site. The records search identified one cultural resources report within the project vicinity conducted by Far Western Anthropological Research Group, Inc. and Foothill Resources, Ltd in the year 2000. This survey identified 16 cultural resources, however, none of the resources identified were located in the project site or within the one-eighth mile search radius of the project site.

Additionally, a records search of the NAHC Sacred Lands File was completed on February 10, 2022. The results of the records search were negative, no cultural resources were identified by the NAHC.

4.5.2 Impact Discussion

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

Impact CUL-1: The project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. **(No Impact)**

While both of the existing single-family residences on-site are over 50 years old, neither houses on-site are eligible for listing on the CRHR or NRHP, and do not qualify as a City landmark. Therefore, the project would not cause a substantial adverse change in the significance of a historical resource. **(No Impact)**

Impact CUL-2: As mitigated, the project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. **(Less than Significant Impact with Mitigation Incorporated)**

The project site and surrounding vicinity do not contain any known archaeological resources, as revealed by the records search conducted for the project. However, archaeological resources have been discovered within the general project vicinity.[20,21] Thus, the project could result in the disturbance of previously undiscovered archaeological resources during the grading phase of project construction.

Mitigation Measures

MM CUL-2.1: Prior to any ground-disturbing activity on the Project site, all project personnel shall receive mandatory tribal cultural resource sensitivity training from Tamien Nation.

[20] Holman & Associates. *CEQA Archaeological Literature Search for 906-950 Monroe Street.* September 11, 2020.
[21] Far Western Archaeological Research Group and Foothill Resources. *Cultural Resources Survey for the Level (3) Communications Long Haul Fiber Optics Project, Segment WS05: San Jose to San Luis Obispo."* 2000.

MM CUL-2.2: Prior to the commencement of any ground-disturbing activity on the project site, the Permittee shall retain tribal monitors from Tamien Nation, as needed, to be present during all ground-disturbing activity associated with the project. Should Tamien Nation choose not to send a monitor for any of the above-referenced ground disturbing activity, work may continue without the monitor, provided that the Permittee has given a minimum of five days' written notice to Tamien Nation. Permittee shall document receipt of notification in writing.

MM CUL-2.3: In the event that prehistoric or historic resources are encountered during excavation and/or grading of the site, all activity within a 50-foot radius of the find shall be stopped, the Community Development Director will be notified, and a qualified archeologist shall examine the find and provide recommendations for further treatment, if warranted. Construction and potential impacts to the area(s) within a radius determined by the archaeologist shall not recommence until the assessment is complete.

With implementation of MM CUL-2.1 through MM CUL-2.3, impacts to any incidental discoveries of archaeological resources would be reduced to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

Impact CUL-3: As mitigated, the project would not disturb any human remains, including those interred outside of dedicated cemeteries. **(Less than Significant Impact with Mitigation Incorporated)**

As described above, the site has no known archaeological resources, including human remains. In the event human remains are unearthed during project construction, damage to or destruction of significant archaeological remains would be a potentially significant impact.

Mitigation Measures

MM CUL-3-1: In the event that human remains are discovered during excavation and/or grading of the site, all activity within a 50-foot radius of the find shall be stopped. The Santa Clara County Coroner shall be notified and shall make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission (NAHC) immediately. Once NAHC identifies the most likely descendants, the descendants will make recommendations regarding proper burial, which will be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines.

With implementation of MM CUL-3.1, any potential impacts from incidental discoveries of human remains would be reduced to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

4.6 ENERGY

4.6.1 Environmental Setting

4.6.1.1 *Regulatory Framework*

Federal and State

Energy Star and 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 To Achieve Carbon Neutrality

In September 2018, Governor Brown issued an executive order, EO-B-55-18 To Achieve Carbon Neutrality, setting a statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." The executive order requires CARB to "ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal." EO-B-55-18 supplements EO S-3-05 by requiring not only emissions reductions, but also that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO_2 from the atmosphere through sequestration.

California Building Standards Code

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6 of the California Code of Regulations (Title 24), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years.[22] Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.[23]

[22] California Building Standards Commission. "California Building Standards Code." Accessed August 3, 2021. https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo.
[23] California Energy Commission (CEC). "2019 Building Energy Efficiency Standards." Accessed August 3, 2021. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency.

California Green Building Standards Code

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.

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars program in 2012 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 2015 through 2025. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel savings.[24]

Local

City of Santa Clara 2010 – 2035 General Plan

Energy-related General Plan policies applicable to the project are shown in the following table.

Policy	Description
5.10.2-P2	Encourage development patterns that reduce vehicle miles traveled and air pollution.
5.10.3-P1	Promote the use of renewable energy resources, conservation and recycling programs.
5.10.3-P3	Maximize the efficient use of energy throughout the community by achieving adopted electricity efficiency targets and promoting natural gas efficiency, consistent with the Climate Action Plan.
5.10.3-P4	Encourage new development to incorporate sustainable building design, site planning and construction, including encouraging solar opportunities.
5.10.3-P5	Reduce energy consumption through sustainable construction practices, materials, and recycling.
5.10.3-P6	Promote sustainable buildings and land planning for all new development, including programs that reduce energy and water consumption in new development.

Construction and Demolition Debris Recycling Program

The City of Santa Clara requires applicants seeking building or demolition permits for projects greater than 5,000 square feet to recycle at least 65 percent of discards. Applicants may also meet the City's recycling requirement by reprocessing and reusing construction materials on site or salvaging material, such as wood or fixtures, for reuse.

[24] California Air Resources Board. "The Advanced Clean Cars Program." Accessed August 3,2021. https://www.arb.ca.gov/msprog/acc/acc.htm.

4.6.1.2 *Existing Conditions*

Total energy usage in California was approximately 7,802 trillion British thermal units (Btu) in the year 2019, the most recent year for which this data was available.[25] Out of the 50 states, California is ranked second in total energy consumption and 46th in energy consumption per capita. The breakdown by sector was approximately 19 percent (1,456 trillion Btu) for residential uses, 19 percent (1,468 trillion Btu) for commercial uses, 23 percent (1,805 trillion Btu) for industrial uses, and 39 percent (3,073 trillion Btu) for transportation.[26] This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

Electricity

Electricity in Santa Clara County in 2019 was consumed primarily by the commercial sector (76 percent), followed by the residential sector consuming 24 percent. In 2019, a total of approximately 16,664 gigawatt hours (GWh) of electricity was consumed in Santa Clara County.[27]

Silicon Valley Power (SVP) is the City of Santa Clara's energy utility and would provide electricity service to the project site. Starting in January 2018, SVP began providing residential customers with carbon-free power as their standard, default power supply. This means the power generation produces no net carbon emissions.[28]

Natural Gas

PG&E provides natural gas services within the City of Santa Clara. In 2019, approximately one percent of California's natural gas supply came from in-state production, while the remaining supply was imported from other western states and Canada.[29] In 2019 residential and commercial customers in California used 33 percent of the state's natural gas, power plants used 26 percent, the industrial sector used 35 percent, and other uses used six percent.[30] Transportation accounted for one percent of natural gas use in California. In 2019, Santa Clara County used approximately two percent of the state's total consumption of natural gas.[31]

[25] United States Energy Information Administration. "State Profile and Energy Estimates, 2019." Accessed August 3, 2021. https://www.eia.gov/state/?sid=CA#tabs-2.
[26] Ibid.
[27] California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed August 3, 2021. http://ecdms.energy.ca.gov/elecbycounty.aspx.
[28] Silicon Valley Power. "Did you Know." Accessed August 3, 2021. https://www.siliconvalleypower.com/svp-and-community/about-svp/faqs.
[29] California Gas and Electric Utilities. 2020 *California Gas Report.* Accessed August 3, 2021. https://www.socalgas.com/sites/default/files/2020-10/2020_California_Gas_Report_Joint_Utility_Biennial_Comprehensive_Filing.pdf.
[30] United States Energy Information Administration. "State Profile and Energy Estimates, 2019." Accessed August 3, 2021. https://www.eia.gov/state/?sid=CA#tabs-2.
[31] California Energy Commission. "Natural Gas Consumption by County." Accessed August 3, 2021. http://ecdms.energy.ca.gov/gasbycounty.aspx.

Fuel for Motor Vehicles

In 2019, 15.4 billion gallons of gasoline were sold in California.[32] 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 24.9 mpg in 2019.[33] 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 March 2020 to require all cars and light duty trucks achieve an overall industry average fuel economy of 40.4 mpg by model year 2026. [34,35]

4.6.2 Impact Discussion

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

Impact EN-1: The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. **(Less than Significant Impact)**

Construction Energy Use

Construction activities would include demolition of the existing single-family residences on-site and construction of eight new single-family residences. The overall construction schedule and process is already designed to be efficient in order to avoid excess monetary costs. That is, equipment and fuel would not be used wastefully on the site because of the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, the opportunities for future efficiency gains during construction are limited. Therefore, energy would not be wasted or used inefficiently by construction equipment.

[32] California Department of Tax and Fee Administration. "Net Taxable Gasoline Gallons." Accessed August 3, 2021. https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=VehicleTaxableFuelDist.
[33] United States Environmental Protection Agency. "The 2020 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." January 2021. https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1010U68.pdf
[34] United States Department of Energy. *Energy Independence & Security Act of 2007.* Accessed August 3, 2021. http://www.afdc.energy.gov/laws/eisa.
[35] Public Law 110–140—December 19, 2007. *Energy Independence & Security Act of 2007.* Accessed August 3, 2021. http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf.

Operational Energy Use

The proposed development would consume electricity primarily from heating and cooling, lighting, appliances, electronics, and water heating. The proposed single-family residences would consume a total of approximately 626,666 kilowatt hours of electricity and approximately 213,036 kBtu of natural gas per year.[36] Operational energy would also be consumed during each vehicle trip generated by future residents. The project would generate approximately 172,336 VMT annually.[37] Assuming the EPA average fuel economy estimate of 24.9 miles per gallon, the project would consume approximately 6,921 gallons of gasoline per year.[38] New automobiles purchased by future occupants of the proposed project would be subject to fuel economy and efficiency standards applied throughout the State of California, which means that over time the fuel efficiency of vehicles associated with the project site would improve. Therefore, the project would not result in wasteful, inefficient, or unnecessary consumption of energy resources. **(Less than Significant Impact)**

Impact EN-2:	The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **(Less than Significant Impact)**

According to the 2019 Integrated Energy Policy Report, the state is working towards decarbonizing the energy system and moving towards a 100 percent carbon-free system by 2045.[39] The project would obtain energy from SVP which provides 100 percent carbon free electricity to the project site. The project is required to comply with applicable regulations and City policies that would conserve energy and water and reduce fuel consumption and waste generation. For these reasons, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **(Less Than Significant Impact)**

[36] Illingworth & Rodkin, Inc. *171-175 Monroe Street Single-Family Homes Construction Community Risk Assessment.* September 1, 2021. Attachment 2: CalEEMod Modeling Inputs and Outputs.
[37] Ibid.
[38] 172,336 VMT/year ÷ 24.9 gallons/mile = 6,921 gallons/year
[39] California Energy Commission. *2019 Integrated Energy Policy Report*. 2019.

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 California Building Code (CBC), Part 2 of the California Building Standards Code, prescribes standards for constructing safe buildings. The CBC contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The CBC requires that a site-specific geotechnical investigation report be prepared 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. The CBC is updated every three years.

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.

Local

Santa Clara General Plan

General Plan policies applicable to geology and soils include, but are not limited to, the following listed below.

Policies	Description
5.10.5-P5	Regulate development, including remodeling or structural rehabilitation, to ensure adequate mitigation of safety hazards, including flooding, seismic, erosion, liquefaction and subsidence dangers.
5.10.5-P6	Require that new development is designed to meet current safety standards and implement appropriate building code to reduce risks associated with geologic conditions.
5.10.5-P7	Implement all recommendations and design solutions identified in project soils reports to reduce potential adverse effects associated with unstable soils or seismic hazards.

Santa Clara City Code

Title 15 of the Santa Clara City Code includes the City's adopted Building and Construction Code. These regulations are based on the CBC and include requirements for building foundations, walls, and seismic resistant design. Requirements for grading and excavation permits and erosion control are included in Chapter 15.15 Building Code. Requirements for building safety and earthquake reduction hazard are addressed in Chapter 15.55 Seismic Hazard Identification.

4.7.1.2 *Existing Conditions*

Regional Geology

The project site is located in the Santa Clara Valley, a relatively flat alluvial basin, bounded by the Santa Cruz Mountains to the southwest and west, the Diablo Mountain Range to the east, and San Francisco Bay to the north. The Santa Clara Valley consists of a large structural basin containing alluvial deposits from the Diablo Range and Santa Cruz Mountains.

Seismicity

The San Francisco Bay Area is classified as Zone 4 for seismic activity, the most seismically active region in the United States. Based on a 2015 forecast completed by the United States Geological Survey (USGS), there is a 72 percent probability of experiencing at least a magnitude 6.7 earthquake during the next 30 years.[40] The project area is not located within the Alquist-Priolo Earthquake Fault Zone[41] or the Santa Clara County Geologic Hazard Zone[42]. There are no active faults within the City; therefore, fault rupture is very low. Active faults near the project site are shown in Table 4.7-1, below.

Table 4.7-1: Active Faults Near the Project Site

Fault	Distance from Site (miles)
Monte Vista – Shannon	5.8
Hayward	7.1
Calaveras	9.9
San Andreas	9.5
San Gregorio	24

Geologic Hazards

Fault Rupture

There are no known surface expressions of any fault within the project site. As described above, the project site in not located within any state or county designated fault hazard zone[43,44]. Fault rupture is not likely to occur on-site.

Ground Shaking

As described above, there is a high likelihood of a moderate to severe earthquake occurring in the Bay Area region within the operational lifespan of any building at the project site. In the event of a moderate to severe earthquake, strong ground shaking on-site is likely.

[40] United States Geological Survey. "UCERF3: A New Earthquake Forecast for California's Complex Fault System." Accessed July 23, 2021. https://pubs.usgs.gov/fs/2015/3009/pdf/fs2015-3009.pdf.
[41] California Department of Conservation. "CGS Information Warehouse: Regulatory Maps." Accessed July 23, 2021. http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps.
[42] Santa Clara County, *Santa Clara County Geologic Hazard Zones. Map 19.* Accessed July 23, 2021. https://www.sccgov.org/sites/dpd/DocsForms/Documents/GEO_GeohazardATLAS.pdf.
[43] California Department of Conservation Website. Accessed July 23, 2021. Available at http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps.
[44] Santa Clara County. *Santa Clara County Geologic Hazard Zones. Map 19.* Accessed July 23, 2021. Available at https://www.sccgov.org/sites/dpd/DocsForms/Documents/GEO_GeohazardATLAS.pdf.

Liquefaction Hazards

During strong seismic shaking, cyclically induced stresses can result in increased pore pressures within the soil matrix that can cause soil softening, and potentially significant ground deformation due to soil settlement. The site is located within a state designated Liquefaction Hazard Zone.[45]

Lateral Spreading Hazards

Lateral spreading is a type of seismically induced ground failure related to liquefaction. It occurs when flat-lying soil deposits move laterally toward a free face, such as a river channel or deep excavation. The project site is level topographically, and there are no free faces in the vicinity. As a result, lateral spreading risk on-site is low.

4.7.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) 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?	☐	☐	☒	☐
2) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
3) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
4) Be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐

[45] California Department of Conservation Website. Accessed July 23, 2021. Available at http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
6) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☒	☐	☐

Impact GEO-1: As mitigated, the project would not 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. **(Less than Significant Impact with Mitigation Incorporated)**

The project site is located within a seismically active region and could experience intense ground shaking in the event of a large earthquake. While no active faults are known to cross the project site, ground shaking could damage the proposed buildings and result in ground failures, including liquefaction.

The project would be required to adhere to the most recent CBC and a site-specific geotechnical report, as well as utilize standard engineering techniques to increase the likelihood that the project could withstand minor earthquakes without damage and major earthquakes without collapse. Geologic conditions on the site would require the new building be designed and constructed in accordance with standard engineering techniques and current CBC requirements, to avoid or minimize potential damage from seismic shaking and liquefaction on the site.

The site is not located within a landslide hazard zone. The project site is located in a mapped liquefaction hazard zone. Buildings constructed on-site could experience settlement in the event of strong ground shaking as a result of an earthquake.

Mitigation Measures

MM GEO-1.1: To avoid or minimize potential damage from seismic shaking, the project would be built using standard engineering and seismic safety design techniques. Building redevelopment design and construction at the site shall be completed in conformance with the recommendations of a design-level geotechnical investigation, which will be included in a report to the City. The report shall be reviewed and approved by the City of Santa Clara's Building Division as part of the building permit review and issuance process. The

building shall meet the requirements of applicable Building and Fire Codes, including the 2019 California Building Code, as adopted or updated by the City. The project shall be designed to withstand potential geologic hazards identified on the site and the project shall be designed to reduce the risk to life or property to the extent feasible and in compliance with the Building Code.

With implementation of the identified mitigation measure, project impacts would be reduced to a less than significant level. **(Less Than Significant Impact with Mitigation Incorporated)**

Impact GEO-2:	As mitigated, the project would not result in substantial soil erosion or the loss of topsoil. **(Less than Significant Impact with Mitigation Incorporated)**

The project would result in ground disturbance due to demolition of existing buildings, grading, and trenching for utilities. Ground disturbance would expose soils and increase the potential for wind or water-related erosion and sedimentation until construction is complete.

Mitigation Measures

The following mitigation measures will be implemented to reduce possible construction-related erosion impacts:

MM GEO-2.1: All excavation and grading work would be scheduled in dry weather months or construction sites would be weatherized[46] to withstand or avoid erosion.

MM GEO-2.2: Stockpiles and excavated soils would be covered during construction with secured tarps or plastic sheeting.

MM GEO-2.3: Vegetation in disturbed areas would be replanted as quickly as possible after construction.

Implementation of the identified mitigation measures would reduce erosion and sedimentation impacts to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

Impact GEO-3:	The project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. **(Less than Significant Impact)**

The project is not located near any cliffs or mountains and would not result in a significant impact from on- or off-site landslides. The site is not subject to lateral spreading and would not result in significant geological impacts due to lateral spreading. Refer to the response to Impact GEO-1 regarding other geologic conditions. **(Less than Significant Impact)**

[46] Weatherized refers to measures that would protect exposed soils from rain and stormwater runoff.

Impact GEO-4:	The project would not be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property. **(Less than Significant Impact)**

The characteristics of the soil on-site beyond those identified above are not currently known, however, the potential for soil expansion would be discussed in the geotechnical report to be prepared for the project. The project would be designed and constructed in conformance the requirements of the CBC and the recommendations of the geotechnical report prepared for the site. For these reasons, the project would not result in risks to life or property as a result of on-site soil expansivity. **(Less than Significant Impact)**

Impact GEO-5:	The project would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. **(No Impact)**

The project site is located within a developed urban area of Santa Clara and would be served by existing municipal sewers for the disposal of wastewater from the project site. As a result, the project site would not need to support septic tanks or alternative wastewater disposal systems. **(No Impact)**

Impact GEO-6:	As mitigated, the project would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature. **(Less than Significant Impact with Mitigation Incorporated)**

Project construction would include grading and trenching for utilities. However, the project does not include any basement levels and the surface soil has been previously disturbed by the existing development. Thus, it is unlikely that any paleontological resources would be disturbed. However, the following mitigation measure would ensure that the proper precautions are taken during an inadvertent paleontological discovery.

Mitigation Measure

The project will be required to implement the following mitigation measure to reduce potential impacts to paleontological resources to a less than significant level:

MM GEO-6.1: Should a unique paleontological resource or site or unique geological feature be identified at the project site during any phase of construction, all ground disturbing activities within 25 feet shall cease and the City's Community Development Director notified immediately. A qualified paleontologist shall evaluate the find and prescribe mitigation measures to reduce impacts to a less than significant level. Work may proceed on other parts of the project site while mitigation for paleontological resources or geologic features is implemented. Upon completion of the paleontological assessment, a report shall be submitted to the City and, if paleontological materials are recovered, a paleontological repository, such as the University of California Museum of Paleontology.

With implementation of MM GEO-6.1, impacts to undiscovered paleontological resources would be reduced to a less than significant level. **(Less than Significant with Mitigation Incorporated)**

4.8 GREENHOUSE GAS EMISSIONS

4.8.1 Environmental Setting

4.8.1.1 *Background Information*

Gases that trap heat in the atmosphere, GHGs, 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. Sources of GHGs are generally as follows:

- 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. The climate and several naturally occurring resources 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/or 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; 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

Under the California Global Warming Solutions Act, also 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.

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 express the 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 $MMTCO_2e$.

Senate Bill 375

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 emissions reduction targets for passenger vehicles in the San Francisco 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 2040. Plan Bay Area 2040 establishes a course for reducing per capita GHG emissions through the promotion of compact, high-density, mixed-use neighborhoods near transit, particularly within identified Priority Development Areas (PDAs).

Regional and Local

2017 Clean Air Plan

To protect the climate, the 2017 CAP (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.

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. The jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing GHG impacts developed by BAAQMD within the CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

City of Santa Clara General Plan

General Plan policies applicable to GHG emissions from the project include the following.

Policies	Description
5.3.1-P10	Provide opportunities for increased landscaping and trees in the community, including requirements for new development to provide street trees and a minimum 2:1 on- or off-site

	replacement for trees removed as part of the proposal to help increase the urban forest and minimize the heat island effect.
5.3.1-P14	Encourage Transportation Demand Management strategies and the provision of bicycle and pedestrian amenities in all new development greater than 25 housing units or more than 10,000 non-residential square feet, and for City employees, in order to decrease use of the single-occupant automobile and reduce vehicle miles traveled, consistent with the Climate Action Plan.
5.8.5-P1	Require new development and City employees to implement transportation demand management programs that can include site-design measures, including preferred carpool and vanpool parking, enhanced pedestrian access, bicycle storage and recreational facilities.
5.10.3-P1	Promote the use of renewable energy resources, conservation, and recycling programs.

City of Santa Clara Climate Action Plan

The City of Santa Clara has a Climate Action Plan (CAP),[47] adopted in December 2013, that established goals and measures to reduce GHG emissions by 23 percent below 2008 levels by 2020, which is enough to surpass the state goal. However, the CAP does not have a Compliance Checklist or a specific metric ton GHG threshold for project-level construction or operation, and does not provide a framework for evaluating projects completed after 2020. Therefore, the thresholds of BAAQMD's CEQA Air Quality Guidelines are used.

The City's current Climate Action Plan does not address the requirements of SB 32 (2030 reduced emissions target for projects constructed post-2020, such as the proposed project).

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 project site is currently developed with two single-family residences. GHG emissions from the project site are generated through daily vehicle trips to and from the project site and lighting, heating, and cooling of the residences.

4.8.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐

[47] City of Santa Clara, 2013. City of Santa Clara Climate Action Plan. December. Accessed August 8, 2021: https://www.santaclaraca.gov/home/showdocument?id=10170.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
2) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?	☐	☐	☒	☐

Impact GHG-1:	The project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. **(Less than Significant Impact)**

Project Construction

GHG emissions associated with construction were computed to be 72.5 MT of CO_2e.[48] Neither the City nor BAAQMD have an adopted threshold of significance for construction related GHG emissions, though BAAQMD recommends quantifying emissions and disclosing that GHG emissions would occur during construction. BAAQMD also encourages the incorporation of best management practices to reduce GHG emissions during construction where feasible and applicable.

Project Operation

Based on Table 3-1 of the BAAQMD CEQA Guidelines, the operational screening level size for single-family residences is 56 dwelling units for projects subject to the 2020 GHG targets. Given that the horizon for the 2020 threshold has passed, the screening level was adjusted to 2030 statewide GHG reduction targets which are 40 percent below those identified for 2020. Therefore, the screening level size for 2030 GHG targets would be 34 dwelling units.[49]At eight proposed single-family residences, the project would fall below this screening threshold. Therefore, project operation would not generate a significant amount of GHG emissions. **(Less than Significant Impact)**

Impact GHG-2:	The project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. **(Less than Significant Impact)**

The proposed project would not conflict or otherwise interfere with the statewide GHG reduction measures identified in CARB's Scoping Plan nor would the project conflict with SB 100 goals. Specifically, the proposed buildings would be constructed in conformance with CALGreen and the Title 24 Building Code, which requires high-efficiency water fixtures, water-efficient irrigation systems, and compliance with current energy efficacy standards. Therefore, the proposed project would result in a less than significant impact. **(Less than Significant Impact)**

[48] Illingworth & Rodkin, Inc. *171-175 Monroe Street Single-Family Homes Construction Community Risk Assessment.* September 1, 2021. Attachment 2: CalEEMod Modeling Inputs and Outputs.
[49] 56 dwelling units x 0.6 (40 percent reduction) = 33.6 dwelling units.

4.9 HAZARDS AND HAZARDOUS MATERIALS

4.9.1 Environmental Setting

4.9.1.1 *Regulatory Framework*

Overview

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.[50]

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.[51]

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).[52]

[50] United States Environmental Protection Agency. "Superfund: CERCLA Overview." Accessed July 30, 2021. https://www.epa.gov/superfund/superfund-cercla-overview.
[51] United States Environmental Protection Agency. "Summary of the Resource Conservation and Recovery Act." Accessed July 30, 2021. https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act.
[52] California Environmental Protection Agency. "Cortese List Data Resources." Accessed July 30, 2021. https://calepa.ca.gov/sitecleanup/corteselist/.

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.

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 Santa Clara Fire Department (SCFD) Community Risk Reduction Division 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 phased out use of friable asbestos products between 1973 and 1978. 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.

CCR Title 8, Section 1532.1

The United States Consumer Product Safety Commission banned the use of lead-based paint in 1978. Removal of older structures with lead-based paint 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 lead-based paint is peeling, flaking, or blistered, it is required to be removed prior to demolition.

Regional and Local

Norman Y. Mineta San José International Airport Comprehensive Land Use Plan

The Norman Y. Mineta San José International Airport is located approximately 1.4 miles northeast of the project site. The project site is not located within the Airport Influence Area (AIA) of the Norman Y. Mineta San José International Airport, as defined by the Comprehensive Land Use Plan (CLUP).

Santa Clara General Plan

General Plan policies related to hazards and hazardous materials that are applicable to the project are listed below.

Policies	Description
5.10.5-P23	Require appropriate clean-up and remediation of contaminated sites.

Santa Clara Emergency Operations Plan

In June 2016, the City of Santa Clara adopted an Emergency Operations Plan (EOP) to address the planned response of the City of Santa Clara to emergency situations associated with natural disasters and technological incidents, as well as chemical, biological, radiological, nuclear and explosive emergencies. The EOP establishes the emergency organization, assign tasks, specifies policies and general procedures, and provides for coordination of planning efforts for emergency events such as earthquake, flooding, dam failure, and hazardous materials responses.

4.9.1.2 *Existing Conditions*

The existing single-family residences at 171 and 175 Monroe Street were constructed circa 1940 and 1916, respectively. The history of the project site prior to the development of these residences is unknown, however, it is likely that the project site was previously part of a ranch given the history of the region. The project site is not on or adjacent to any Cortese List sites.[53]

Airports

The Norman Y. Mineta San José International Airport is located approximately 1.4 miles northeast of the project site. Based on the CLUP, the project site is not located within the AIA. The proposed project is not located within a CLUP-defined safety zone. The project site is located outside the 60 dBA CNEL noise contour. The project is not located in the vicinity of a private airstrip.[54]

Wildfire Hazards

The project site is located in a central urban area of Santa Clara which is not located in a Very High Fire Severity zone according to Cal Fire Resource Assessment Program map.[55]

[53] Ibid.
[54] Santa Clara County Airport Land Use Commission. Comprehensive Land Use Plan Santa Clara County for the Norman Y. Mineta San José International Airport. November 16, 2016.
[55] Cal Fire. *Very High Fire Severity Zones in LRA*. Accessed July 30, 2021. https://osfm.fire.ca.gov/media/5935/san_jose.pdf.

4.9.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐
4) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
6) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
7) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☒	☐

Impact HAZ-1: The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. **(Less than Significant Impact)**

Operation of the proposed single-family residences would likely include the use and storage of cleaning supplies and maintenance chemicals in small quantities on-site. The quantities of cleaning supplies and maintenance chemicals used on-site would be comparable to the operations of adjacent residential uses and would not pose a risk to adjacent land uses. **(Less Than Significant Impact)**

Impact HAZ-2:	The project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. **(Less than Significant Impact)**

Based on the estimated age of the existing on-site buildings, ACMs and LBP may be present in some building materials. Building demolition could result in the release of these materials to the environment. The project will, however, be required to comply with local, state, and federal laws, which require an ACM and LBP building survey be completed by a qualified professional to determine the presence of ACMs and/or LBP on the residence proposed for demolition.

Conditions of Approval

- In conformance with state and local laws, a visual inspection/pre-demolition survey, and possible sampling, shall be conducted prior to the demolition of on-site buildings to determine the presence of asbestos-containing materials and/or lead-based paint.
- Prior to demolition activities, all building materials containing lead-based paint shall be removed in accordance with Cal/OSHA Lead in Construction Standard, Title 8, California Code of Regulations 1532.1, including employee training, employee air monitoring, and dust control. Hazardous waste determination for lead concentration for any debris or soil containing lead-based paint or coatings shall be conducted to determine proper disposal methods. Any debris or soil containing lead-based paint or coatings would be disposed of at landfills that meet acceptance criteria for the waste/hazardous waste being disposed.
- All potentially friable ACMs shall be removed in accordance with National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to any building demolition or renovation that may disturb the materials. All demolition activities will be undertaken in accordance with Cal/OSHA standards contained in Title 8 of CCR, Section 1529, to protect workers from exposure to asbestos.
- Friable, finely divided, and powdered wastes containing more than one percent asbestos are classified as a hazardous waste in California. A registered asbestos abatement contractor shall be retained to remove and dispose of ACMs identified in the asbestos survey performed for the site in accordance with Federal, State, and local regulations.
- Materials containing more than one percent asbestos are also subject to BAAQMD regulations. Removal of materials containing more than one percent asbestos shall be completed in accordance with BAAQMD requirements.

Conformance with the conditions of approval described above would ensure project construction would not create a significant hazard to the public or the environment from accident conditions involving the release of hazardous materials (i.e., asbestos and lead) into the environment. **(Less than Significant Impact)**

Impact HAZ-3:	As mitigated, the project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. **(Less than Significant Impact with Mitigation Incorporated)**

The nearest school is Washington Elementary School, located approximately 600 feet east of the project site. As discussed in Impact HAZ-1, project operation would involve the storage and use of limited quantities of common residential cleaning and maintenance chemicals. Construction emissions are addressed in Section 4.3 Air Quality and were found to be less than significant with implementation of MM AIR-3.1. The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste in proximity to any school. **(Less than Significant Impact with Mitigation Incorporated)**

Impact HAZ-4:	The project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment. **(No Impact)**

As previously stated, the project site is not located on or adjacent to any Cortese List sites. **(No Impact)**

Impact HAZ-5:	The project would not be 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. The project would not result in a safety hazard or excessive noise for people residing or working in the project area. **(Less than Significant Impact)**

The project site is located approximately 1.4 miles from the San José Norman Y. Mineta Airport; however, the project site is not located within the AIA. The project site is not within an identified safety zone as defined in the CLUP. Additionally, the project would be located outside of the 65 CNEL Aircraft Noise Contour and would not be exposed to excessive noise. Therefore, the project would not result in a safety hazard or excessive noise for people residing or working in the project area. **(Less than Significant Impact)**

Impact HAZ-6:	The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. **(Less than Significant Impact)**

The project would be constructed in accordance with current building and fire codes and would be required to be maintained in accordance with applicable City policies identified in General Plan to avoid unsafe building conditions. The proposed project would not impair or interfere with the implementation of the City's Emergency Operations Plan or any statewide emergency response or evacuation plans. **(Less than Significant Impact)**

Impact HAZ-7:	The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. **(Less than Significant Impact)**

The project site is located in a central urban area of Santa Clara. This area is not within a very high fire severity zone according to Cal Fire FRAP maps, which means that the residents in the area are not at a high probability of experiencing loss resulting from a wildland fire. Therefore, although the project would be adding residents to the project area, these residents would not be exposed to significant risk of loss, injury, or death involving wildland fires. **(Less than Significant 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 Environmental Protection Agency (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.

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.

Statewide Construction General Permit

The SWRCB has implemented an NPDES General Construction Permit for the State of California (Construction General Permit). For projects disturbing one acre or more of soil, a Notice of Intent (NOI) must be filed with the RWQCB by the project sponsor, and a Storm Water Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional prior to commencement of construction and filed with the RWQCB by the project sponsor. The Construction General Permit includes requirements for training, inspections, record keeping, and, for projects of certain risk levels, monitoring. The general purpose of the requirements is to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges.

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 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 2015 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.[56] Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 10,000 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.

In addition to water quality controls, the MRP requires new development and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation, or other impacts to local rivers, streams, and creeks. Projects may be deemed exempt from these requirements if they do not meet the minimized size threshold, drain into tidally influenced areas or directly into the Bay, or drain into hardened channels, or if they are infill projects in subwatersheds or catchment areas that are greater than or equal to 65 percent impervious.

Water Resources Protection Ordinance and District Well Ordinance

Valley Water operates as the flood control agency for Santa Clara County. Their stewardship also includes creek restoration, pollution prevention efforts, and groundwater recharge. Permits for well construction and destruction work, most exploratory boring for groundwater exploration, and projects within Valley Water property or easements are required under Valley Water's Water Resources Protection Ordinance and District Well Ordinance.

2016 Groundwater Management Plan

This 2016 Groundwater Management Plan (GWMP) describes the 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 District'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

[56] MRP Number CAS612008

natural groundwater recharge and surface water supplies. A small portion of the county's water supply is recycled water.

Local groundwater resources make up the foundation of the county's water supply, but they need to be augmented by the District'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 recharge through the provision of treated surface water, acquisition of supplemental water supplies, and water conservation and recycling.[57]

Dam Safety

Dam failure is the uncontrolled release of impounded water behind a dam. Flooding, earthquakes, blockages, landslides, lack of maintenance, improper operation, poor construction, vandalism, and terrorism can all cause a dam to fail. Because dam failure that results in downstream flooding may affect life and property, dam safety is regulated at both the federal and state level. Dams under the jurisdiction of the California Division of Safety of Dams are identified in California Water Code Sections 6002, 6003, and 6004 and regulations for dams and reservoirs are included in the California Code of Regulations. In accordance with the state's Dam Safety Act, dams are inspected regularly, and detailed evacuation procedures have been prepared for each dam.

As part of its comprehensive dam safety program, Valley Water routinely monitors and studies the condition of each of its 10 dams. Valley Water also has its own Emergency Operations Center and a response team that inspects dams after significant earthquakes. These regulatory inspection programs reduce the potential for dam failure.

Local

City of Santa Clara 2010 – 2035 General Plan

General Plan policies applicable to hydrology and water quality include, but are not limited to, the following listed below.

Policies	Description
5.10.5-P11	Require that new development meet stormwater and water management requirements in conformance with state and regional regulations.
5.10.5-P13	Require that development complies with the Flood Damage Protection Code.
5.10.5-P15	Require new development to minimize paved and impervious surfaces and promote on-site Best Management Practices for infiltration and retention, including grassy swales, pervious pavement, covered retention areas, bioswales, and cisterns, to reduce urban water run-off.
5.10.5-P16	Require new development to implement erosion and sedimentation control measures to maintain an operational drainage system, preserve drainage capacity and protect water quality.
5.10.5-P17	Require that grading and other construction activities comply with the Association of Bay Area Governments' Manual of Standards for Erosion and Sediment Control Measures and with the California Stormwater Quality Association, Stormwater Best Management Practice Handbook for Construction.

[57] Valley Water. *2016 Groundwater Management Plan, Santa Clara and Llagas Subbasins*. November 2016.

Policies	Description
5.10.5-P18	Implement the Santa Clara Valley Nonpoint Source Pollution Control Program (SCVNSPC), Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) and the Urban Runoff Management Plan (URMP).
5.10.5-P20	Maintain, upgrade and replace storm drains throughout the City to reduce potential flooding.
5.10.5-P21	Require that storm drain infrastructure is adequate to serve all new development and is in place prior to occupancy.

City Code

Chapter 13.20, Storms Drains and Discharges, of the City Code is enacted for the protection of health, life, resources and property through prevention and control of unauthorized discharges into watercourses. The primary goal of this chapter is the cleanup of stormwater pollution from urban runoff that flows to creeks and channels, eventually discharging into the San Francisco Bay. The City Code also includes Flood Damage Prevention Code (Chapter 15.45) and requirements for grading and excavation permits and erosion control (Chapter 15.15).

4.10.1.2 *Existing Conditions*

Groundwater

The underground basin over which the City of Santa Clara is located comprises the largest of three inter-connected groundwater basins in Santa Clara County. Hydrologically, the Santa Clara Valley groundwater basin is separated into two zones: the "forebay" and "pressure" zones. Geological conditions in the forebay zone allow precipitation, stream flow, and water diverted into percolation ponds to recharge the deeper aquifers. The pressure zone includes areas of the valley where impervious and generally continuous clay strata overlie the major groundwater aquifers. The City of Santa Clara lies entirely within the pressure zone.

Flooding

According to the Federal Emergency Management Agency's (FEMA) current Flood Insurance Rate Map (FIRM), the project site is designated as Zone X.[58] Flood Zone X is defined as an area within a 500-year floodplain (0.2 percent annual chance of flood).

Dam Inundation, Seiche, Tsunami Hazards

According to the Association of Bay Area Government (ABAG) dam failure inundation hazard maps, large portions of the Santa Clara Valley are located in the Lexington Reservoir dam failure inundation hazard zone, including the project site.[59] The project site is located over ten miles from the Lexington reservoir. There are no landlocked bodies of water near the project site that could

[58] FEMA. *FIRM Map No. 06085C0229H.* Effective May 18, 2009.
[59] Valley Water. *Inundation Map of Hypothetical Fair Weather Failure of Lenihan Dam.* Accessed July 23, 2021. Lexington_inundation_FW_Domino_1000.pdf (valleywater.org)

affect the project site in the event of a seiche. The project site is not within a tsunami evacuation zone.[60]

Drainage

Stormwater not absorbed by the project site flows into curb inlets along Monroe Street and is directed into the existing storm drain line in Manchester Drive. The project site currently consists of approximately 7,880 square feet (46 percent) of impervious surface area and approximately 9,333 square feet (54 percent) of pervious surface area.

4.10.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
2) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
– 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?	☐	☐	☒	☐
4) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐

[60] ABAG. "Tsunami Inundation Map for Coastal Evacuation". Accessed July 23, 2021. 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:				
5) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Impact HYD-1: The project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. **(Less than Significant Impact)**

Construction Impacts

Construction of the proposed project, including demolition of the existing buildings and grading activities, would disturb soils within the project site. As a result, surface runoff after rain events may discharge a greater quantity of sediments to the stormwater system, which ultimately outfalls to the San Francisco Bay. The following measures would be required by the City as conditions of project approval to reduce potential construction-related water quality impacts:

Conditions of Approval

- Burlap bags filled with drain rock shall be installed around storm drains to route sediment and other debris away from the drains;
- Earthmoving or other dust-producing activities would be suspended during period of high winds;
- All exposed or disturbed soil surfaces would be watered at least twice daily to control dust as necessary;
- Stockpiles of soil or other materials that can be blown by the wind would be watered or covered;
- All trucks hauling soil, sand, and other loose materials shall be covered;
- All paved access roads, parking areas, staging areas and residential streets adjacent to the construction sites would be swept daily (with water sweepers); and
- Vegetation in disturbed areas would be replanted as quickly as possible; and
- Other erosion and sediment control measures as deemed necessary by the project's qualified SWPPP Designer (QSD).

In addition, the project will be required to comply with the NPDES General permit for construction activities and submit a SWPPP and NOI to the State Water Resources Control Board to control the discharge of stormwater pollutants including sediments associated with construction activities. With the implementation of the above measures, and compliance with all permit conditions, construction related water quality impacts would be reduced to a less than significant level.

Post-Construction Impacts

To reduce post-construction water quality impacts, the project is required to comply with the MRP. The project proposes to use pervious, self-treating materials for the driveway and parking areas. The project would also include landscaping throughout the project site which would absorb stormwater. The project would result in approximately 9,984 square feet (58 percent) of pervious surface area and approximately 7,229 square feet (42 percent) of impervious surface area. The project would result in a net increase of approximately 651 square feet (four percent) of pervious surface area on-site. Thus, more stormwater would be retained on-site. Therefore, the proposed project, in compliance with existing regulations, including the NPDES and SWPPP guidance, would not result in significant impacts to water quality **(Less than Significant Impact)**

Impact HYD-2:	The project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. **(Less than Significant Impact)**

Given the developed nature of the project site, the site is not currently a substantial groundwater recharge area. The project would not adversely affect any groundwater recharge zones designated in Valley Water's 2016 Groundwater Management Plan. The project would result in approximately 58 percent pervious surface area, allowing for greater contribution for groundwater recharge on-site than existing conditions. Given that the project does not propose any below-grade levels, no dewatering would be required during project construction that would result in groundwater loss. Therefore, the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. **(Less than Significant Impact)**

Impact HYD-3:	The project would not 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. **(Less than Significant Impact)**

The project site is approximately 1.8 miles from Saratoga Creek, the nearest stream or river. The project would not alter the course of Saratoga Creek or any other streams or rivers. The project would result in an increase of impervious surfaces on-site, however, the project would be required to company with the MRP NPDES Permit. Through the use of pervious, self-treating driveways and parking areas and the inclusion of landscaping throughout the project site, the project would not result in a substantial increase in erosion or surface runoff. The project would not result in flooding on – or off-site, exceed the capacity of stormwater drainage system, provide substantial additional sources of polluted runoff, or impede or redirect flood flows. **(Less than Significant Impact)**

Impact HYD-4:	The project would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. **(Less than Significant Impact)**

As described above, the project site is located in Flood Zone X, with a 0.2 percent annual chance of flood. Due to the project site's distance from large bodies of water, there is no risk of tsunami or seiche related inundation at the project site. For these reasons, development of the project would not result in pollutant release risks due to project site inundation due to flood, tsunami, or seiche events. **(Less than Significant Impact)**

Impact HYD-5:	The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **(Less than Significant Impact)**

The proposed project would implement the conditions of project approval identified under Impact HYD-1, NPDES General Construction Permit requirements, and the SCVNSPC, SCVURPPP and the URMP. As described under Impact HYD-2, the project would not impact groundwater supplies or impede aquifer recharge. For these reasons, the proposed project would not conflict with, or obstruct implementation of, any water quality control plan or sustainable groundwater management plan. **(Less than Significant Impact)**

4.11 LAND USE AND PLANNING

4.11.1 Environmental Setting

4.11.1.1 *Regulatory Framework*

Local

Santa Clara General Plan

The following land-use related General Plan policies are applicable to the proposed project.

Policies	Description
5.3.1-P9	Require new development provide adequate public services and facilities, infrastructure, and amenities to serve the new employment or residential growth.
5.3.2-P1	Encourage the annual construction of the housing units necessary to meet the City's regional housing needs assessment by reducing constraints to housing finance and development.
5.3.2-P6	Provide adequate choices for housing tenure, type and location, including higher density, and affordability for low- and moderate-income and special needs household.
5.4.1-P9	Residential development should include front doors, windows, stoops, porches, and bay windows or balconies along street frontages.
5.5.2-P12	Screen loading and trash areas to preclude visibility from off-site and public streets.

City of Santa Clara Zoning Code

The City's Zoning Code regulates land uses within the boundaries of Santa Clara. The overall goals of the Zoning Code are to promote the city's growth in an orderly manner and to promote and protect the public health, safety, peace, comfort, and general welfare in conformance with the General Plan. For each of the zone districts in the city, the Code identifies land uses that are permitted, conditionally permitted, and not permitted. It also establishes standards such as minimum lot size, maximum building height, and the minimum distance buildings must be set back from the street. Provisions for parking, landscaping, lighting, and other rules that guide the development of projects in the city are also included.

4.11.1.2 *Existing Conditions*

The project site has a General Plan land use designation of Medium Density Residential and is zoned R1-6L (Single-Family Residential). The Medium Density Residential land use designation is intended for residential development at densities ranging from 20 to 36 units per gross acre. The R1-6L zoning is intended to stabilize and protect the residential characteristics of the district and to promote and encourage a suitable single-family residential environment.

4.11.2 Impact Discussion

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

Impact LU-1: The project would not physically divide an established community. **(Less than Significant Impact)**

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 would redevelop two residential parcels that are surrounded by a residential neighborhood, and other compatible uses such as a school and cemetery, with eight new single-family houses. Development of the project site would be consistent with the surrounding area. In addition, the project would not result in the construction of dividing infrastructure such as highways, expressways, or major arterial streets. For these reasons, the proposed project would not physically divide an established community. **(Less than Significant Impact)**

Impact LU-2: The project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. **(Less than Significant Impact)**

The project would have a density of approximately 20 dwelling units per acre, consistent with the General Plan's Medium Density Residential land use designation. The project proposes to rezone the project site from R1-6L to PD (Planned Development). The current R1-6L zoning would restrict the project to two stories per residence and 25 feet in maximum height. The current zoning would also require minimum lot widths of 60 feet, front yards, rear yards, and driveways no less than 20 feet long, side yards no less than five feet wide, and would limit maximum building coverage to 40 percent of the area of any lot. As proposed, the project would not meet these requirements.

The PD rezoning would modify the allowed building height, setbacks, and building coverage on the project site as long as the project is found generally consistent with the surrounding neighborhood. As discussed under Impact LU-1, the project would generally be consistent with the surrounding residential neighborhood. Therefore, with the proposed rezoning, the project would not conflict with the General Plan, zoning, or other land use plans, policies, or regulations. **(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 General Plan Environmental Impact Report (EIR) states that no significant mineral resources are present within the City's boundaries.

4.12.2 Impact Discussion

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

Impact MIN-1:	The project would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state. **(No Impact)**

There are no significant mineral resources within the City of Santa Clara. Therefore, the project would not result in the loss of availability of a known mineral resource. **(No Impact)**

Impact MIN-2:	The project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. **(No Impact)**

There are no significant mineral resources within the City of Santa Clara. Therefore, the project would not result in the loss of availability of a locally important mineral resource recovery site. **(No Impact)**

4.13 NOISE

The following discussion is based, in part, on a Construction Noise and Vibration Assessment prepared for the project by Illingworth & Rodkin, Inc., dated September 2021. A copy of this report is included in Appendix C of 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}, DNL, or CNEL.[61] 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.

[61] L_{eq} is a measurement of average energy level intensity of noise over a given period of time. Day-Night Level (DNL) 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 DNL are typically within two dBA of the peak-hour L_{eq}.

4.13.1.2 *Regulatory Framework*

Federal

Federal Transit Administration Vibration Limits

The Federal Transit Administration (FTA) has developed vibration impact assessment criteria for evaluating vibration impacts associated with transit projects. The FTA has proposed vibration impact criteria based on maximum overall levels for a single event. The impact criteria for groundborne vibration are shown in Table 4.13-1 below. These criteria can be applied to development projects in jurisdictions that lack vibration impact standards.

Table 4.13-1: Groundborne Vibration Impact Criteria

Land Use Category	Groundborne Vibration Impact Levels (VdB inch/sec)		
	Frequent Event	Occasional Events	Infrequent Events
Category 1: Buildings where vibration would interfere with interior operations	65	65	65
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime use	75	78	83

Source: Federal Transit Administration. *Transit Noise and Vibration Assessment Manual.* September 2018.

State and Local

California Building Standards Code

The CBC 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 DNL noise contour for a freeway or expressway, railroad, or industrial source.

City of Santa Clara 2010 – 2035 General Plan

The City of Santa Clara's General Plan identifies noise and land use compatibility standards for various land uses and establishes policies to control noise within the community. Table 8.14-1 from the General Plan shows acceptable noise levels for various land uses. Residential land uses are considered compatible in noise environments of 55 dBA CNEL or less. The guidelines state that where the exterior noise levels are greater than 55 dBA CNEL and less than 70 dBA CNEL at residential uses, the design of the project should include measures to reduce interior noise to acceptable levels. Commercial land uses are considered compatible in noise environments of 65 dBA

CNEL or less. The guidelines state that where the exterior noise levels are greater than 65 dBA CNEL and less than 75 dBA CNEL at commercial uses, the design of the project should include measures to reduce interior noise to acceptable levels.

General Plan policies applicable to noise include, but are not limited to, the following listed below.

Policies	Description
5.10.6-P1	Review all land use and development proposals for consistency with the General Plan compatibility standards and acceptable noise exposure levels defined on Table 5.10-1.
5.10.6-P2	Incorporate noise attenuation measures for all projects that have noise exposure levels greater than General Plan "normally acceptable" levels, as defined on Table 5.10-1.
5.10.6-P3	New development should include noise control techniques to reduce noise to acceptable levels, including site layout (setbacks, separation and shielding), building treatments (mechanical ventilation system, sound-rated windows, solid core doors and baffling) and structural measures (earthen berms and sound walls).
5.10.6-P4	Encourage the control of noise at the source through site design, building design, landscaping, hours of operation and other techniques.
5.10.6-P5	Require noise-generating uses near residential neighborhoods to include solid walls and heavy landscaping along common property lines, and to place compressors and mechanical equipment in sound-proof enclosures.

Santa Clara City Code.

The Santa Clara City code (Section 9.10.230) prohibits construction activities permitted within 300 feet of residentially zoned property except within the hours of 7:00 a.m. and 6:00 p.m. on weekdays and 9:00 a.m. and 6:00 p.m. on Saturdays. No construction is permitted on Sundays or holidays. Section 9.10.070 exempts construction activities which occur during allowed hours from the noise limits specified in the City Code (Exceptions 9.10.070 (e)).

4.13.1.3 *Existing Conditions*

The primary existing noise source at the project site is vehicle traffic along Monroe Street. According to the General Plan, vehicle traffic noise is between 60 to 65 dBA CNEL directly adjacent to the roadway and is less than 60 dBA CNEL within the project site.[62] Other existing noise sources in the project vicinity would include the surrounding residences, the adjacent park, and airplanes passing overhead. As previously discussed, the project site is located outside of the 65 CNEL Aircraft Noise Contour of the San José Norman Y. Mineta Airport.

[62] City of Santa Clara. *2010 – 2035 General Plan.* Figure 5.10-4.

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:				
1) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
2) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☐
3) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

Impact NOI-1: The project would not result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. **(Less than Significant Impact)**

Construction Noise Impacts

Section 9.10.230 of the City Code limits construction activities within 300 feet of residentially zoned property to the hours of 7:00 a.m. and 6:00 p.m. on weekdays and 9:00 a.m. and 6:00 p.m. on Saturdays. No construction is permitted on Sundays or holidays. Section 9.10.070 of the City Code exempts construction activities which occur during allowed hours from the City Code noise limits.

Construction activities generate considerable amounts of noise, especially during earth-moving activities when heavy equipment is used. Construction activities for individual projects are typically carried out in phases. During each phase of construction, there would be a different mix of equipment operating, and noise levels would vary by phase and vary within phases, based on the amount of equipment in operation and the location at which the equipment is operating.

Project construction noise levels were calculated to range from 78 to 84 dBA L_{max} and from 77 to 84 dBA L_{eq} at 50 feet, assuming all equipment on-site would be operated simultaneously. Construction-generated noise levels drop off at a rate of about six dBA per doubling of the distance between the source and receptor. Shielding by buildings or terrain can provide an additional five to 10 dBA noise reduction at distant receptors. The nearest existing residences are located at distances ranging 65 to 70 feet north and south, from the center of the project site. At the closest residence (65 feet away), maximum noise levels generated by project construction would typically range from about 76 to 82

dBA L_{max}, and hourly average noise levels would typically range from about 75 to 82 dBA L_{eq} for daytime construction.

Implementation of the following construction best management practices, required as a Condition of Approval, would regulate the hours of construction, reduce construction noise levels from the site, and minimize disruption and annoyance at existing noise-sensitive receptors in the project vicinity.

Conditions of Approval

- Construction will be limited to the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday and 9:00 a.m. to 6:00 p.m. on Saturdays. Any work outside of these hours by the construction contractors should require a special permit from the City Engineer.
- The contractor shall use "new technology" power construction equipment with state-of-the-art noise shielding and muffling devices. All internal combustion engines used on the project site shall be equipped with adequate mufflers and shall be in good mechanical condition to minimize noise created by faulty or poorly maintained engines or other components.
- Staging areas and stationary noise-generating equipment shall be located as far as possible from noise-sensitive receptors, such as residential uses (a minimum of 200 feet).
- Ensure that generators, compressors, and pumps are housed in acoustical enclosures.
- Substitute nail guns for manual hammering and electrically powered tools for noisier pneumatic tools, where feasible.
- A "noise disturbance coordinator" shall be designated to respond to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaints (e.g., beginning work too early, bad muffler, etc.) and institute reasonable measures warranted to correct the problem. A telephone number for the disturbance coordinator would be conspicuously posted at the construction site.

Compliance with these conditions would reduce the impacts of construction noise on surrounding residential and commercial uses. Therefore, the proposed project would result in a less than significant construction noise impact.

Operational Noise Impacts

Project operation would result in a net increase of ambient noise at the project site. New operational noise sources would primarily result from new vehicle trips to and from the proposed residences and the heating, ventilation, and air conditioning (HVAC) systems of each proposed single-family residence. The project would not result in a substantial number of net new vehicle trips (see Section 4.17 Transportation) and the vehicles traveling to and from the project site would primarily be light-duty vehicles. The proposed single-family residences would generate similar noise levels as the existing adjacent residences to the north and south of the project site. Therefore, the project would be consistent with the existing noise environment and would not create a substantial permanent noise increase. **(Less than Significant Impact)**

Impact NOI-2:	As mitigated, the project would not result in generation of excessive groundborne vibration or groundborne noise levels. **(Less than Significant Impact with Mitigation Incorporated)**

The construction of the project may generate perceptible vibration when heavy equipment or impact tools (e.g., jackhammers, hoe rams) are used. Construction activities would include demolition, site preparation work, foundation work, and new building framing and finishing. Pile driving equipment, which can cause excessive vibration, is not proposed to be used for the project.

The City of Santa Clara does not specify a construction vibration limit. For structural damage, the California Department of Transportation (Caltrans) recommends a vibration limit of 0.5 in/sec PPV for new residential and modern commercial/industrial structures, 0.3 in/sec PPV for older residential structures, and a limit of 0.25 in/sec PPV for historic and some older buildings, and the City has consistently followed the Caltrans threshold in other environmental documents. The nearest vibration-sensitive historic structure is located about 1,000 feet northwest of the project site (the Berryessa Adobe, located at 373 Jefferson Street), which is unlikely to be affected by project generated vibration due to distance. Therefore, the 0.3 in/sec PPV vibration limit was applied to the project.

Vibration levels would vary depending on soil conditions, construction methods, and equipment used. Table 4.13-2 presents typical vibration levels that would be expected from construction equipment at 25 feet and summarizes the expected vibration levels at residences bordering the project site, the closest being 12 feet away from the border of the project site.

Table 4.13-2: Construction Vibration Levels at Nearby Buildings

Equipment		PPV (in/sec)	
		Source Level (25 feet)	**North/South Residences (12 feet)**
Clam Shovel Drop		0.202	**0.453**
Hydromill (slurry wall)	In soil	0.008	0.018
	In rock	0.017	0.038
Vibratory Roller		0.210	**0.471**
Hoe Ram		0.089	0.200
Large bulldozer		0.089	0.200
Caisson drilling		0.089	0.200
Loaded trucks		0.076	0.170
Jackhammers		0.035	0.078
Small bulldozer		0.003	0.007

As shown in Table 4.13-2, project construction would exceed the 0.3 in/sec PPV structural damage threshold at the closest surrounding residences when clam shovels are dropped and vibratory rollers are used. This would be considered a significant impact.

Mitigation Measure: The project will be required to implement the following mitigation measure to reduce construction vibration levels emanating from the project site.

MM NOI-2.1: The project shall implement the following measures:

- The use of heavy vibration-generating construction equipment within 20 feet of adjacent residential building shall be prohibited.
- A smaller vibratory roller, such as the Caterpillar model CP433E vibratory compactor, shall be used when compacting materials within 20 feet of adjacent residential buildings. Only the static compaction mode shall be used when compacting materials within 15 feet of residential buildings.
- The dropping of heavy equipment shall be avoided, and alternative methods shall be used for breaking up existing pavement, such as a pavement grinder, instead of dropping heavy objects, within 20 feet of adjacent residential buildings.
- A person shall be designated responsible for registering and investigating claims of excessive vibration. The contact information of such person shall be clearly posted on the construction site.

Implementation of MM NOI-2.1 would reduce vibration levels at the surrounding residences below the 0.3 in/sec PPV structural damage threshold. Neither cosmetic, minor, or major damage would occur beyond 25 feet. At these locations and in other surrounding areas where vibration would not be expected to cause structural damage, vibration levels may still be perceptible. However, as with any type of construction, this is anticipated and would not be considered significant, given the intermittent and short duration of the phases that have the highest potential of producing vibration. By use of administrative controls, such as notifying neighbors of scheduled construction activities and scheduling construction activities with the highest potential to produce perceptible vibration during hours with the least potential to affect nearby residences, the impact of perceptible vibration can be kept to a minimum. Therefore, construction of the proposed project would not result in the generation of excessive groundborne vibration or groundborne noise levels. **(Less than Significant Impact with Mitigation Incorporated)**

Impact NOI-3:	The project would not be located within the vicinity of a private airstrip or an airport land use plan. The project would be within two miles of a public airport or public use airport. The project would not expose people residing or working in the project area to excessive noise levels. **(Less than Significant Impact)**

The project site is located approximately 1.4 miles from the San José Norman Y. Mineta Airport; however, the project site is not located within the AIA. The project would be located outside of the

65 CNEL Aircraft Noise Contour and would not be exposed to excessive noise. Therefore, the project would not people residing or working in the project area to excessive noise levels. **(Less than Significant Impact)**

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.[63] The City of Santa Clara Housing Element and related land use policies were last updated in 2014.

Regional and Local

Plan Bay Area 2040

Plan Bay Area 2040 is a long-range transportation, land-use, and housing plan intended support a growing economy, provide more housing and transportation choices, and reduce transportation-related pollution and GHG emissions in the Bay Area. Plan Bay Area 2040 promotes compact, mixed-use residential and commercial neighborhoods near transit, particularly within identified Priority Development Areas (PDAs).[64]

ABAG allocates regional housing needs to each city and county within the nine-county San Francisco Bay Area, based on statewide goals. ABAG also develops forecasts for population, households, and economic activity in the Bay Area. ABAG, MTC, and local jurisdiction planning staff created the Regional Forecast of Jobs, Population, and Housing, which is an integrated land use and transportation plan through the year 2040 (upon which Plan Bay Area 2040 is based).

4.14.1.2 *Existing Conditions*

According to a May 2020 estimate by the California Department of Finance, the City of Santa Clara has a total population of 130,746 persons.[65] There are estimated to be a total of 127,550 housing units

[63] California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements" Accessed July 15, 2021. http://hcd.ca.gov/community-development/housing-element/index.shtml.
[64] Association of Bay Area Governments and Metropolitan Transportation Commission. "Project Mapper." http://projectmapper.planbayarea.org/. Accessed July 15, 2021.
[65] California Department of Finance. *E-5 Population and Housing Estimates for Cities, Counties, and the State 2011-2020 with 2010 Census Benchmark.* Accessed on July 15, 2021. http://dof.ca.gov/Forecasting/Demographics/Estimates/E-5/.

in the City.[66] According to ABAG projections, the City's population is expected to grow to a total of 159,500 persons by 2040.[67]

4.14.2 Impact Discussion

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

Impact POP-1: The project would not 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). **(Less than Significant Impact)**

The project proposes to construct six net new housing units. Assuming the City's average of 2.6 persons per household[68], the project would result in approximately 16 new residents.[69] This would be an incremental increase in the overall population of the City of Santa Clara and would be consistent with the City's planned growth. For these reasons, the proposed project would not result in substantial unplanned population growth. **(Less than Significant Impact)**

Impact POP-2: The project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. **(Less than Significant Impact)**

The project would demolish two existing single-family residences on-site in order to construct the eight proposed residences. The project would not be displacing a substantial number of existing people and would be constructing a net increase of six housing units. The project would not necessitate the construction of replacement housing elsewhere. **(Less than Significant Impact)**

[66] Ibid.
[67] Association of Bay Area Governments. "Projections 2040." Accessed July 15, 2021. Available at: http://projections.planbayarea.org/.
[68] California Department of Finance. *E-5 Population and Housing Estimates for Cities, Counties, and the State 2011-2020 with 2010 Census Benchmark.* Accessed on July 15, 2021. http://dof.ca.gov/Forecasting/Demographics/Estimates/E-5/.
[69] Six net new units x 2.6 persons/unit = 15.6 new 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) was approved by the California legislature to set aside parkland and/or payment of fees due in lieu of parkland dedication to help mitigate the impacts from new residential developments. This legislation was initiated in response to California's increased rate of urbanization and the need to preserve open space and provide parks and recreation facilities for California's growing communities. 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 at the discretion of the City.

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.

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 Santa Clara 2010 – 2035 General Plan

The City of Santa Clara 2010-2035 General Plan includes policies and programs to provide public services throughout the City. Applicable General Plan policies include, but are not limited to, the following listed below.

Policies	Description
Parks, Open Space and Recreation	
5.4.3-P3	Provide pedestrian-oriented ground floor uses and a network of parks and public spaces to serve both residential and non-residential development.
5.9.1-P2	Develop new parks to serve the needs of the surrounding community based on the criteria for mini (less than one acre, appropriate for all areas), neighborhood (1-15 acres, appropriate for medium- and high-density residential areas serving individual neighborhoods), and community (over 15 acres, appropriate for medium- and high-density residential areas serving the City as a whole) parks.
5.9.1-P5	Encourage public visibility for all parks, trails and open spaces.
5.9.1-P14	Encourage publicly accessible open space in new development.
5.9.1-P15	Provide opportunities for private maintenance of publicly accessible open space and trails.
5.9.1-P17	Foster site design for new development so that building height and massing do not overshadow new parks and plazas.
5.9.1-P18	Promote open space and recreational facilities in large-scale developments in order to meet a portion of the demand for parks generated by new development.
5.9.1-P20	Promote the continuation of parks per population ratio of 2.4 per 1,000 residents and explore the potential to increase the ratio to 3.0, based on the Parks and Recreation Needs Assessment (Parks Master Plan), referenced in Plan Prerequisite 5.1.1-P24.
5.9.3-P1	Encourage design techniques that promote public and property safety in new development and public spaces.
5.9.3-P3	Maintain a City-wide average three-minute response time for 90 percent of police emergency service calls.
5.9.3-P4	Maintain a City-wide average three-minute response time for fire emergency service calls.

City of Santa Clara City Code Chapter 17.35

The purpose of City code Chapter 17.35 is to help mitigate the impacts of new housing development growth on existing parkland and recreational facilities subject to the provisions of the State of California Quimby Act (Quimby) and/or the California Mitigation Fee Act (MFA). Chapter 17.35 requires new residential developments to provide developed park and recreational land and/or pay a fee in lieu of parkland dedication, at the City's discretion. The City is meeting the parkland dedication standard of 3 acres per 1,000 residents per the Quimby provisions of the City Code and 2.6 acres per 1,000 residents per the MFA provisions of the City Code with regard to neighborhood parks.

4.15.1.2 *Existing Conditions*

Fire Protection Services

Fire protection services are provided by the SCFD. The SCFD comprises 180 personnel supplemented by over 60 volunteer/reserve firefighters.[70] Currently, the SCFD has 10 fire stations. The nearest fire station is Station No. 1, located at 777 Benton Street, approximately one mile northeast of the project site.

Police Protection Services

Police protection services are provided by the Santa Clara Police Department (SCPD). The SCPD is divided into four divisions: Services, Field Operations, Investigations, and Special Operations, and has approximately 159 sworn officers and 80 civilians.[71] There are currently two police stations, the headquarters located at 601 El Camino Real and a substation located at 3992 Rivermark Parkway. The distance between the project site and the police headquarters is approximately 1.3 miles. The distance between the project site and substation is approximately five miles.

Schools

The project site is located within the service area of the Santa Clara Unified School District (SCUSD). Students in the project area are assigned to Westwood Elementary School, located at 435 Saratoga Avenue, approximately 1.4 miles southwest of the project site; Buchser Middle School located at 1111 Bellomy Street, approximately 0.6 miles northeast of the project site; and Santa Clara High School, located at 3000 Benton Street, approximately 2.6 miles northwest of the project site.[72]

Parks

The Santa Clara Parks and Recreation Department (Department) provides parks and recreational services in the City. The department is responsible for maintaining and programming the various parks and recreation facilities and works cooperatively with public agencies in coordinating all recreational activities within the City. Overall, as of August 2021, the Department maintains and operates Central Park, a 45.04-acre community park (45.04 acres improved and Central Park North 34.93 acres unimproved, resulting in 79.97 acres), 30 neighborhood parks (125.429 acres improved and 5.220 acres unimproved resulting in 130.649 acres), 13 mini parks (2.59 acres improved and 3.189 acres unimproved resulting in 5.779 acres), public open space (16.13 acres improved and 40.08 acres unimproved resulting in 56.21 acres), recreational facilities (23.898 acres improved and excluding the Santa Clara Golf and Tennis Club/BMX track), recreational trails (7.59 acres improved and 0.20 acres unimproved resulting in 7.79 acres), and joint use facilities (48.588 acres) throughout the City totaling approximately 269.265 improved acres and 83.619 unimproved acres. Community parks are over fifteen acres, neighborhood parks are one to fifteen acres and mini parks are typically less than one acre in size. The nearest neighborhood park is Larry J. Marsalli Park which is more than a 10-minute walk from the project site.

[70] City of Santa Clara, Fire Department. *History of the Fire Department*. Accessed July 22, 2021. https://www.santaclaraca.gov/our-city/departments-a-f/fire-department/about-us/history
[71] City of Santa Clara, Police Department. *Fact Sheet.* Accessed July 22, 2021. https://www.santaclaraca.gov/our-city/departments-g-z/police-department/about-us/fact-sheet.
[72] SCUSD. "School Locator". Accessed July 22, 2021. https://locator.decisioninsite.com/?StudyID=203915

Libraries and Community Centers

The Santa Clara City Library has three branches within the City. The nearest library is the Mission Branch Library, located at 1098 Lexington Street, approximately 0.6 miles north of the project site.

The City of Santa Clara's Community Recreation Center, located in Central Park, is the hub of the City's recreation programs. The Community Recreation Center is approximately 2.7 miles west of the project site. In addition, the City currently has a gymnastics center, dog parks, golf and tennis club, a senior center, a teen center, a youth activity center and a skate park.

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, 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:				
1) Fire Protection?	☐	☐	☒	☐
2) Police Protection?	☐	☐	☒	☐
3) Schools?	☐	☐	☒	☐
4) Parks?	☐	☐	☒	☐
5) Other Public Facilities?	☐	☐	☒	☐

Impact PS-1: The project would not 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. **(Less than Significant Impact)**

The General Plan EIR concluded that the existing fire station facilities have capacity to absorb additional fire personnel without the need to expand or construct new facilities.[73] As described above in Population and Housing, the proposed project would result in a net increase of approximately 16 new residents. This would represent an incremental increase in the demand for fire protection services. However, the project site is currently within the service area of SCFD and would be served by existing staff and facilities without requiring the construction of new or altered facilities. In addition, the project would be constructed in accordance with current fire codes, including those specifying emergency vehicle access and reduction of fire hazards. Therefore, the proposed project

[73] City of Santa Clara. *2010-2035 General Plan Integrated Final Environmental Impact Report. SCH# 2008092005*. January 2011. Pages 206 to 207.

would result in a less than significant impact on fire protection services. **(Less than Significant Impact)**

Impact PS-2:	The project would not 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. **(Less than Significant Impact)**

As described in Impact PS-1, the project would result in a minimal population increase and resultant increase in demand for public services, including police protection. The General Plan FEIR concluded that, if additional police officers are needed, they could be housed in the existing facilities. There would be no need for the construction of new or expanded facilities.[74] The project would be adequately served by existing police protection staff and facilities. Therefore, the proposed project would result in a less than significant impact on police protection services. **(Less than Significant Impact)**

Impact PS-3:	The project would not 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. **(Less than Significant Impact)**

The project site is located within the service area of the SCUSD. The City recognizes in their General Plan that the planned increase in City residents will eventually require the construction of additional service facilities.[75] The SCUSD currently has four closed school sites that could be employed to serve students generated by new residential development.[76]

According to a Development School Fee Justification Study prepared for SCUSD, an average of 0.2282 students are generated for each detached single-family residence developed.[77] Therefore, the project would generate a total of approximately two net new students[78] within the range of elementary to high school level. The addition of two students would be incremental and would not result in a substantial adverse impact to school facilities, nor would it require the construction of new facilities. Additionally, the proposed project would be required to pay school impact fees as a required measure for the City.

[74] City of Santa Clara. *2010-2035 General Plan Integrated Final Environmental Impact Report. SCH# 2008092005.* January 2011. Page 207.
[75] City of Santa Clara. *2010-2035 General Plan*. December 2014.
[76] City of Santa Clara. *2010-2035 General Plan Integrated FEIR*. January 2011. Page 208
[77] Cooperative Strategies. *Residential and Commercial/Industrial Development School Fee Justification Study.* February 26, 2020.
[78] Six net new single-family residences x 0.2282 students/single-family residence = 1.4 net new students

Condition of Approval: The project shall be required to pay a development fee to the Facility Development and Planning Office. The Building Department will fill out the SCUSD form, which calculates the fee to be paid by the project based on the current residential rate of $4.08 per square-foot.

Therefore, given that the project would pay the applicable development fee towards the SCUSD and would generate approximately two net new students, the project would not result in a substantial adverse physical impact on schools. **(Less than Significant Impact)**

Impact PS-4:	The project would not 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. **(Less than Significant Impact)**

As described above, the project would result in a minimal population increase and resultant increase in demand for public services. It is assumed that some future residents of the project site would make use of local park facilities. The increased population associated with the proposed project would contribute to increased use of existing parks near the project site that could lead to physical deterioration of park facilities and overcrowding. The proposed project would be required to pay a fee in-lieu of parkland dedication to help reduce the impacts of the new resident demand on existing parkland and recreational facilities. Therefore, the proposed project would have a less than significant impact. **(Less than Significant Impact)**

Impact PS-5:	The project would not 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. **(Less than Significant Impact)**

The addition of approximately 16 net new residents on-site would result in an incremental increase in demand for other public facilities, such as libraries and community centers. Given the size of the project, this incremental increase in demand for other public facilities would not result in substantial deterioration of existing facilities. Therefore, the project would not require the provision of new or physically altered public facilities. **(Less than Significant Impact)**

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) was approved by the California legislature to set aside parkland and/or payment of fees due in lieu of parkland dedication to help mitigate the impacts from new residential developments. This legislation was initiated in response to California's increased rate of urbanization and the need to preserve open space and provide parks and recreation facilities for California's growing communities. 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 at the discretion of the City.

Local

City of Santa Clara 2010 – 2035 General Plan

The City of Santa Clara 2010-2035 General Plan includes policies and programs to provide public services throughout the City. Applicable General Plan policies include, but are not limited to, the following listed below.

Policies	Description
5.1.1-P20	Prior to 2023, identify the location for new parkland and/or recreational facilities to serve employment centers and pursue funding to develop these facilities by 2035.
5.9.1-P2	Develop new parks to serve the needs of the surrounding community based on the criteria for mini (less than one acre, appropriate for all areas), neighborhood (1-15 acres, appropriate for medium- and high-density residential areas serving individual neighborhoods), and community (over 15 acres, appropriate for medium- and high-density residential areas serving the City as a whole) parks.
5.9.1-P5	Encourage public visibility for all parks, trails and open spaces.
5.9.1-P14	Encourage publicly accessible open space in new development.
5.9.1-P15	Provide opportunities for private maintenance of publicly accessible open space and trails.
5.9.1-P17	Foster site design for new development so that building height and massing do not overshadow new parks and plazas.
5.9.1-P18	Promote open space and recreational facilities in large-scale developments in order to meet a portion of the demand for parks generated by new development.
5.9.1-P20	Promote the continuation of parks per population ratio of 2.4 per 1,000 residents and explore the potential to increase the ratio to 3.0, based on the Parks and Recreation Needs Assessment (Parks Master Plan), referenced in Plan Prerequisite 5.1.1-P24.

City of Santa Clara City Code Chapter 17.35

Santa Clara City Code Chapter 17.35 requires new residential developments to provide developed park and recreational land and/or pay a fee in-lieu of parkland dedication, at the discretion of the City, to help mitigate the impacts of new housing development growth on existing parkland and recreational facilities, pursuant to the State of California Quimby Act and/or the Mitigation Fee Act.

4.16.1.2 *Existing Conditions*

The Santa Clara Parks and Recreation Department (Department) provides parks and recreational services in the City. The department is responsible for maintaining and programming the various parks and recreation facilities and works cooperatively with public agencies in coordinating all recreational activities within the City. Overall, as of August 2021, the Department maintains and operates Central Park, a 45.04-acre community park (45.04 acres improved and Central Park North 34.93 acres unimproved, resulting in 79.97 acres), 30 neighborhood parks (125.429 acres improved and 5.220 acres unimproved resulting in 130.649 acres), 13 mini parks (2.59 acres improved and 3.189 acres unimproved resulting in 5.779 acres), public open space (16.13 acres improved and 40.08 acres unimproved resulting in 56.21 acres), recreational facilities (23.898 acres improved and excluding the Santa Clara Golf and Tennis Club/BMX track), recreational trails (7.59 acres improved and 0.20 acres unimproved resulting in 7.79 acres), and joint use facilities (48.588 acres) throughout the City totaling approximately 269.265 improved acres and 83.619 unimproved acres. Community parks are over fifteen acres, neighborhood parks are one to fifteen acres and mini parks are typically less than one acre in size. The nearest neighborhood park is Larry J. Marsalli Park which is more than a 10-minute walk from the project site.

4.16.2 **Impact Discussion**

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

Impact REC-1: The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. **(Less than Significant Impact)**

As described above, the project would result in a net increase of approximately 16 new residents on-site. It is assumed that some future residents of the project site would make use of local park

facilities. The increased population associated with the proposed project would contribute to increased use of existing parks near the project site that could lead to physical deterioration of park facilities and overcrowding. The proposed project would be required to pay a fee in-lieu of parkland dedication to help reduce the impacts of the new resident demand on existing parkland and recreational facilities. Therefore, the proposed project would have a less than significant impact. **(Less than Significant Impact)**

Impact REC-2:	The project does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. **(Less than Significant Impact)**

The proposed project would incrementally increase the population on the project site. The additional residents would increase the use of recreational facilities near the project site, however the increase in use would not be substantial enough to require the creation of new parks and recreation facilities. Therefore, the proposed project would not have an adverse physical effect on the environment resulting from the construction or expansion of recreation facilities. **(Less than Significant Impact)**

4.17 TRANSPORTATION

4.17.1 Environmental Setting

4.17.1.1 *Regulatory Framework*

State

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 2040 in July 2017, which includes a Regional Transportation Plan to guide regional transportation investment for revenues from federal, state, regional and local sources through 2040.

Senate Bill 743

SB 743 establishes criteria for determining the significance of transportation impacts using a vehicle miles traveled (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 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

Congestion Management Program

The Santa Clara Valley Transportation Authority (VTA) oversees the Congestion Management Program (CMP), which is aimed at reducing regional traffic congestion. The relevant state legislation requires that urbanized counties in California prepare a CMP in order to obtain each county's share of gas tax revenues. State legislation requires that each CMP define traffic LOS standards, transit service standards, a trip reduction and transportation demand management plan, a land use impact analysis program, and a capital improvement element. VTA has review responsibility for proposed development projects that are expected to affect CMP-designated intersections.

City of Santa Clara VMT Policy

The Santa Clara City Council adopted a VMT policy in compliance with SB 743 on June 23, 2020. The policy sets thresholds of significance for various land uses, using the countywide average VMT

as the environmental baseline. To determine whether a project will have a significant transportation impact, project VMT is compared to the appropriate threshold. For residential land uses, the adopted threshold is 15 percent below the existing countywide VMT per capita.

In addition to establishing the environmental baseline and thresholds of significance, the VMT policy establishes screening criteria for certain projects that are presumed to have a less than significant VMT impact. Projects which meet the screening criteria would not be required to quantify VMT and compare it to the City's adopted threshold. Projects which generate less than 110 daily vehicle trips or less would be screened out from a quantitative VMT analysis and would be presumed to have a less than significant VMT impact. Transit supportive projects which are located within ½-mile of an existing major transit stop or an existing transit stop along a High-Quality Transit Corridor would also be presumed to be less than significant, provided that a minimum density of 35 units/acre is met for residential projects, no excess parking is provided, and no affordable dwelling units are replaced.

All proposed projects are required to undergo environmental review as part of the approval process. This includes an analysis of CEQA impacts (VMT) and non CEQA operational measures of intersection efficiency (LOS). The City's VMT policy also establishes LOS as an operational measure of intersection efficiency, which is not defined as transportation environmental impact per CEQA.

City of Santa Clara Bicycle Plan

The City of Santa Clara Final Bicycle Plan Update (2018) provides a bikeway planning and design tool, which contains the policy vision, design guidance, and specific recommendations to guide public and private investments in active transportation bicycle facilities and related programs.

4.17.1.2 *Existing Conditions*

The project site is located along Monroe Street between Manchester Drive and Rip Miller Way. Regional access to the project site is provided via Interstate 880 (I-880), I-280, and SR 82, also known as El Camino Real. Local access to the project site is provided from the regional roadways via Monroe Street, North Bascom Avenue, The Alameda, and Winchester Boulevard.

Pedestrian access is provided to the project site via existing sidewalks along both sides of Monroe Street. Monroe Street also contains Class II bicycle lanes[79]. Transit services in the project vicinity are provided by VTA bus route 60 along Monroe Street and bus route 59 along Washington Street. The nearest bus stops are at the corner of Bellomy Steet and Monroe Street and Washington Street and Poplar Street, approximately 0.2 and 0.4 miles from the project site, respectively. The nearest train station is the Santa Clara Caltrain Station, located at 1001 Railroad Avenue, approximately 1.4 miles northeast of the project site.

[79] Class II bicycle lanes are striped preferential lanes on the roadway for one-way bicycle travel. City of Santa Clara. *Bicycle Plan Update 2018.* June 2019. Page 11.

4.17.2 Impact Discussion

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

Impact TRN-1: The project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities. **(Less than Significant Impact)**

Circulation System

In accordance with the CMP, a Traffic Impact Analysis (TIA) is required for all development projects in the County that generate 100 or more net new automobile trips during either the AM or PM peak hour period. The project proposes to construct eight single-family residences, a net of six residences compared to existing conditions. According to the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 10th Edition, the AM peak hour rate for single family housing (Land Use Code 210) is 0.74 trips per unit and the PM peak hour rate is 0.99 trips per unit. Therefore, the project would generate approximately five net new AM peak hour trips and approximately six net new PM peak hour trips. The project would not exceed 100 net new vehicle trips during the AM or PM peak hours. Therefore, a TIA is not required for the project, the project would be consistent with the CMP, and would not substantially affect the circulation system.

Transit Facilities

The project would increase the population on site by approximately 16 people. This could increase the use of public transportation in the surrounding area. The additional transit users would not interfere with the normal operations of transit services and would not exceed the capacity of the existing transit operations. Therefore, the proposed project would have a less than significant impact on transit services.

Bicycle Lanes

The project would not remove existing bicycle facilities and would not interfere with existing plans, policies, or ordinances corresponding to bicycle facilities. Therefore, the proposed project would not impact existing bicycle facilities, such as local bike lanes.

Pedestrian Facilities

The project would not remove or otherwise alter existing pedestrian facilities and would not interfere with existing plans, policies, or ordinances corresponding to pedestrian facilities. Therefore, the project would not impact existing pedestrian facilities. **(Less than Significant Impact)**

Impact TRN-2:	The project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). **(Less than Significant Impact)**

The project proposes to construct six net new single-family residences. According to the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 10th Edition, the daily rate for vehicle trip generation for single family housing (Land Use Code 210) is 9.44 trips per unit. Therefore, the project would generate approximately 57 net new daily vehicle trips.[80] The project would generate less than 110 daily vehicle trips and thus, can be screened out from a quantitative VMT analysis and would have a less than significant VMT impact, pursuant to the City's VMT policy. **(Less than Significant Impact)**

Impact TRN-3:	The project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). **(Less than Significant Impact)**

The proposed project would not alter the geometric design of the roadways surrounding the project and would not substantially change circulation of vehicles on the project site. Additionally, the proposed project would comply with design requirements as prescribed by the City of Santa Clara. Therefore, the proposed project would not substantially increase hazards due to geometric design features on-site and would not introduce incompatible uses. **(Less than Significant Impact)**

Impact TRN-4:	The project would not result in inadequate emergency access. **(Less than Significant Impact)**

The proposed project would comply with the regulations of the City of Santa Clara emergency services to ensure emergency access to the project site. Therefore, the proposed project would provide adequate emergency access to the site and would result in no impacts. **(Less than Significant Impact)**

[80] Six net new residences x 9.44 trips/residence/day = 56.64

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 tribal cultural resource, consultation is required until the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource 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.

4.18.1.2 *Existing Conditions*

There are no known tribal cultural resources on-site, as confirmed by a NAHC Sacred Lands File Search conducted for the project in February 2022. Given the developed nature of the project site, it is unlikely that there are any undiscovered tribal cultural resources present. On November 5, 2021, City staff received a letter in November 2021 from Tamien Nation, a local Native American tribe, requesting consultation on the project under AB 52. City staff responded to Tamien Nation on April 13, 2022 with a letter and several attachments related to the project's impact on cultural and tribal cultural resources. The Tamien Nation did not request any further information within the 30-day window that closed on May 11, 2022.

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

Impact TCR-1: As mitigated, the project would not 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). **(Less than Significant Impact with Mitigation Incorporated)**

The project site does not contain any tribal cultural resources listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k). Additionally, the project would be required to implement MM CUL-2.1, MM CUL-2.2, and MM CUL-2.3, and MM CUL-3.1 to ensure that any unrecorded resources found on-site are handled properly. Therefore, the project would not cause a substantial adverse change in the significance of tribal cultural resources 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). **(Less than Significant Impact with Mitigation Incorporated)**

Impact TCR-2:	As mitigated, the project would not 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. **(Less than Significant Impact with Mitigation Incorporated)**

The City of Santa Clara has not identified tribal cultural resources on the project site. Additionally, the project would implement MM CUL-2.1, MM CUL-2.2, MM CUL-2.3, and MM CUL-3.1 to ensure that resources are handled properly. Therefore, the proposed project would not cause substantial adverse change in the significance of a tribal cultural resource as determined by the City. **(Less than Significant Impact with Mitigation Incorporated)**

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 Santa Clara adopted its most recent UWMP in June 2021.

Assembly Bill 939

The California Integrated Waste Management Act of 1989, or AB 939, established the Integrated Waste Management Board, 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), beginning January 1, 2000, and divert at least 75 percent by 2010. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures.

Assembly Bill 341

AB 341 sets forth the requirements of the statewide mandatory commercial recycling program. Businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units in California are required to recycle. AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

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.

California Green Building Standards Code

In January 2010, the State of California adopted the California Green Building Standards Code, establishing mandatory green building standards for all buildings in California. The code covers five categories: planning and design, energy 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 50 percent of nonhazardous construction and demolition debris; and

Providing readily accessible areas for recycling by occupants.

Local

Santa Clara General Plan

General Plan Policies applicable to utilities and service systems that are relevant to the project include the following:

Policies	Description
5.10.1-P6	Require adequate wastewater treatment and sewer conveyance capacity for all new development.
5.3.1-P9	Require that new development provide adequate public services and facilities, infrastructure, and amenities to serve the new employment or residential growth.
5.3.1-P27	Encourage screening of above-ground utility equipment to minimize visual impacts.
5.3.1-P28	Encourage undergrounding of new utility lines and utility equipment throughout the City.
5.10.5-P21	Require that storm drain infrastructure is adequate to serve all new development and is in place prior to occupancy.

4.19.1.2 *Existing Conditions*

Water Supply

The City of Santa Clara has four sources of water. These sources include two treated water sources from Valley Water and the San Francisco Public Utilities Commission, groundwater pumped from the Santa Clara sub-basin through the City's owned and operated groundwater wells, and recycled water purchased from South Bay Water Recycling.[81]

The water system consists of approximately 335 miles of water mains, 21 active water wells, seven storage tanks with 28.8 million gallons of water storage capacity, and three booster pump stations.[82] Drinking water is provided in the form of groundwater sourced from an underground aquifer (accessed by the City's wells) and by imported water from two wholesale water importers: Valley Water (imported from the Sacramento-San Joaquin Delta) and the San Francisco Public Utilities Commission (imported from the Sierra Nevada). About 41 percent of the City's water comes from imported water supplies. The remaining 59 percent is pumped from the City's active water wells.[83]

[81] South Bay Water Recycling provides advanced tertiary treated water from the RWF. The City's recycled water program delivers recycled water throughout the City for landscaping, parks, public services and businesses.
[82] City of Santa Clara. 2015 Urban Water Management Plan, City of Santa Clara Water Utility. Adopted November 22, 2016.
[83] Ibid.

Recycled water serves as a fourth source of water supply and comprises approximately 16 percent of the City's overall water supply.[84] Recycled water is supplied by South Bay Water Recycling, which provides advanced recycled water from the San José-Santa Clara Regional Wastewater Facility.

According to the 2020 UWMP, the average water demand of 60 gallons per capita per day (gpcd) for residential users has remained consistent since the adoption of 2015 UWMP. Therefore, existing water demand at the project site is approximately 312 gallons per day (gpd). [85]

Wastewater Services

Sanitary Sewer lines that serve the site are maintained by the City of Santa Clara Sewer Utility. Wastewater from the City of Santa Clara is treated at the Regional Wastewater Facility (RWF), which is owned jointly by the Cities of San José and Santa Clara and is operated by the City of San José's Department of Environmental Services. The facility is one of the largest advanced wastewater treatment facilities in California and serves over 1,400,000 people in San José, Santa Clara, Milpitas, Campbell, Cupertino, Los Gatos, Saratoga and Monte Sereno.[86] The RWF provides primary, secondary, and tertiary treatment of wastewater and has the capacity to treat 167 million gallons of wastewater a day.

Approximately 10 percent of the RWF's effluent is recycled for non-potable uses and the remainder flows into San Francisco Bay. The NPDES permit for the RWF includes wastewater discharge requirements. Wastewater for the project site would be approximately 85 percent of the water use on-site, which is equal to approximately 265 gallons per day.[87]

Stormwater Drainage

The City of Santa Clara owns and maintains the municipal storm drainage system which serves the project site. Storm drain inlets along the curb of Monroe Street collect stormwater on-site and connect to an existing 12-inch storm drain line in the street.

Solid Waste

Solid waste collection in the City of Santa Clara is provided by Mission Trail Waste System and is disposed of at Newby Island Landfill through a contract with the City. As of December 2019, Newby Island Landfill has a disposal capacity of 14.6 million cubic yards of remaining capacity.[88] Recycling services are provided through Stevens Creek Disposal and Recycling. The site currently contains two single-family residences and generates approximately 35 pounds of solid waste each day.[89]

---

[84] Ibid.
[85] 2 residences x 2.6 persons per household (see Section 4.14 Population and Housing) x 60 gpcd = 312 gpd
[86] City of San Jose. San Jose-Santa Clara Regional Wastewater Facility. Accessed August 3, 2021. https://www.sanjoseca.gov/your-government/environment/water-utilities/regional-wastewater-facility.
[87] 312 gpd x 0.85 = 265 gpd wastewater
[88] North, Daniel. General Manager, Republic Services. Personal communications. November 14, 2019
[89] Calrecycle. California's 2019 Per Capita Disposal Rate. Accessed August 3, 2021. https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/mostrecent/.
2 residences x 2.6 persons per household x 6.7 lbs. per resident per day = 35 lbs/day

4.19.2 Impact Discussion

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

Impact UTL-1: The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. **(Less than Significant Impact)**

Water

The project would result in a net increase of water demand of approximately 936 gpd.[90] The project proposes to connect to the existing water line in Monroe Street. Any necessary improvements to the existing water system, if there is a need, would be subject to the construction-related conditions of approval and mitigation measures within this Initial Study and would therefore, not cause a significant environmental effect.

[90] Six net new residences x 2.6 persons per household x 60 gpcd = 936 net gpd

Wastewater

The project would result in a net increase of approximately 796 gpd wastewater generated on-site.[91] This is approximately 0.003 percent of the City's total allocation of treatment capacity.[92] The proposed project would not increase the need for wastewater treatment beyond the capacity of the RWF and is consistent with the planned growth accounted for in the City's General Plan. Therefore, the project would have a less than significant impact on the need for new wastewater facilities.

The project would connect to an existing six-inch sewer line in Monroe Street. Any necessary improvements to the existing sewer system, if there is a need for any, would be subject to the construction-related conditions of approval and mitigation measures within this Initial Study and would therefore, not cause a significant environmental effect.

Stormwater Drainage

The project proposes to use pervious, self-treating materials for the driveway and parking areas. The project would also include landscaping throughout the project site which would absorb stormwater. The project would result in approximately 9,985 square feet (58 percent) of pervious surface area and approximately 7,229 square feet (42 percent) of impervious surface area. Given the developed nature of the project site and the fact that the project would result in a majority of pervious surfaces on-site, the proposed project would not result in a substantial increase in stormwater runoff, resulting in a need for new or altered stormwater facilities.

Electric Power, Natural Gas, and Telecommunication Facilities

The project would utilize existing utility connections to connect to the City's electric, natural gas, and telecommunications systems. Although the project would increase the demand on existing facilities in the City, relocation of existing or construction of new facilities would not be needed to serve the project. As a result, the project would have a less than significant impact on these facilities. **(Less than Significant Impact)**

Impact UTL-2:	The project would not have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. **(Less than Significant Impact)**

While the project would increase water use on the project site, the project is within the planned growth established in the General Plan. The General Plan determined that the projected growth would not exceed available water supply based on reasonably foreseeable future events. Therefore, the proposed project would have a less than significant impact on the City's water supplies. **(Less than Significant Impact)**

[91] 936 net gpd x 0.85 = 796 gpd wastewater

[92] Based on the City's allocation of treatment capacity of 23 mgd as identified by the City of Santa Clara 2010-2035 General Plan Final Environmental Impact Report. January 2011.

Impact UTL-3:	The project would not 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. **(Less than Significant Impact)**

As discussed under UTL-1, above, the project would produce approximately 796 gallons of wastewater per day. This is approximately 0.003 percent of the City's total allocation of treatment capacity. The proposed project would not increase the need for wastewater treatment beyond the capacity of the RWF and is accounted for in the City's General Plan. Therefore, the project would have a less than significant impact on the ability for the wastewater provider's existing commitments. **(Less than Significant Impact)**

Impact UTL-4:	The project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. **(Less than Significant Impact)**

Construction

During construction, the project would be required to comply with the City of Santa Clara construction debris diversion ordinance which requires projects over 5,000 square feet to divert 65 percent of construction and demolition debris from landfills. This policy would reduce the waste disposal required during the project construction and limit waste accumulation at local landfills.

Operation

The project is estimated to generate a net increase of approximately 105 pounds of solid waste per day.[93] Santa Clara County's Integrated Waste Management Plan (IWMP) requires each jurisdiction in the County to achieve a landfill diversion requirement of 50 percent per year. The Newby Island Landfill (NISL) has remaining capacity of approximately 14.6 million cubic yards, as of December 2019, with a reasonable compaction rate of 1,850 pounds per cubic yard.[94] Closure of the Landfill is expected to occur in 2041.[95] Implementation of the proposed project would not result in a significant increase in solid waste and recyclable materials generated within the City of Santa Clara and would not require that new landfill facilities be contracted with or constructed to serve the proposed project. **(Less than Significant Impact)**

[93] Calrecycle. California's 2019 Per Capita Disposal Rate. Accessed August 3, 2021. https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/mostrecent/ .
Six net residences x 2.6 persons per household x 6.7 lbs per resident per day = 105 lbs per day
[94] North, Daniel. General Manager, Republic Services. Personal communications. November 14, 2019.
[95] North, Daniel. General Manager, Republic Services. Personal communications. November 21, 2019.

Impact UTL-5:	The project would not be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste. **(Less than Significant Impact)**

Consistent with CALGreen requirements, the proposed project would be required to provide on-site recycling facilities, develop a construction waste management plan, salvage at least 65 percent of nonhazardous construction/demolition debris (by weight), and implement other waste reduction measures. Additionally, the estimated increases in solid waste generation from future development would be avoided through implementation of the Santa Clara County Integrated Waste Management Plan. The Integrated Waste Management Plan, in combination with existing regulations and programs, would ensure that the proposed project would not result in significant impacts on solid waste disposal capacity in excess of state or local standards or in excess of NISL capacity. **(Less than Significant Impact)**

4.20 WILDFIRE

4.20.1 Environmental Setting

4.20.1.1 *Existing Conditions*

The California Department of Forestry and Fire Protection (Cal Fire) is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. Referred to as Fire Hazard Severity Zones (FHSZ), these maps influence how people construct buildings and protect property to reduce risk associated with wildland fires. The project site is not located in a FHSZ.[96]

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:				
1) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
2) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
3) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
4) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

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)**

[96] California Board of Forestry and Fire Protection. *Fire Hazard Severity Zones Maps*. Accessed June 30, 2021. https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

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

Impact MFS-1: As mitigated, the project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. **(Less than Significant Impact with Mitigation Incorporated)**

As discussed in the individual sections, the proposed project would not degrade the quality of the environment with the implementation of identified mitigation measures. As discussed in Section 4.4 Biological Resources, the project would not impact sensitive habitats or species and requires the implementation of mitigation measures for nesting preconstruction bird surveys. There are no historic buildings on-site or in the immediate project vicinity as discussed in Section 4.5 Cultural Resources. However, the project would be required to implement mitigation measures to ensure that the project would avoid adversely affecting any buried archaeological resources that may occur on-site. **(Less Than Significant Impact with Mitigation Incorporated)**

Impact MFS-2:	As mitigated, the project does not have impacts that are individually limited, but cumulatively considerable. **(Less than Significant Impact with Mitigation Incorporated)**

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."

The project would not result in wildfire hazards and would have no impact on agricultural resources or mineral resources. Impacts discussed in Geology and Soils and Land Use, would all be less than significant and would be limited to the project site. Therefore, the project has no potential to combine with other projects to result in cumulative impacts to those resources.

Because criteria air pollutant and GHG emissions would contribute to regional and global emissions of such pollutants, the identified thresholds developed by BAAQMD and used by the City of Santa Clara were developed such that a project-level impact would also be a cumulatively considerable impact. The project would not result in a significant emissions of criteria air pollutants or GHG emissions and, therefore, would not make a substantial contribution to cumulative air quality or GHG emissions impacts. The discussion in Section 4.3 Air Quality provides analysis of the cumulative health risk effects of the project's TAC emissions during construction and concluded that those effects would be less than significant.

Cumulative developments near the project would be subject to similar hydrological and urban runoff conditions. All projects occurring within the City of Santa Clara would be required to implement the same Conditions of Approval and measures related to construction water quality as the proposed project (including preparation of a SWPPP if disturbance is greater than one acre). In addition, all current and probable future projects that would disturb more than one acre of soil or replace/add more at least 10,000 square feet of impervious surfaces would be required to meet applicable site design and runoff reduction measures. For these reasons, the cumulative projects, including the proposed project, would not result in significant cumulative hydrology or water quality impacts.

Construction noise and vibration would be temporary and would be kept to a less than significant level by the implementation of construction BMPs and MM NOI-2.1. Other nearby projects, would be required to implement similar construction noise BMPs and therefore, would not generate construction noise that would result in a cumulatively significant impact. Operational noise from the project would be compatible with the surrounding residences and would not have potential to contribute to a significant cumulative operational noise impact.

The project would generate less than 110 new daily vehicle trips and is screened out from a VMT analysis per the City's VMT Policy. The project, therefore, would be consistent with applicable policies regarding transportation and circulation and would not result in a cumulatively considerable impact. The project would comply with current building and fire codes to ensure adequate emergency

access, as would all other projects in the vicinity. Therefore, the project would not result in a cumulatively significant impact to emergency access or other transportation issues. **(Less than Significant Cumulative Impact with Mitigation Incorporated)**

Impact MFS-3:	As mitigated, the project does not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. **(Less than Significant Impact with Mitigation Incorporated)**

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 people would be significantly affected. This factor relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals. While changes to the environment that could indirectly affect human beings would be represented by all of the designated CEQA issue areas, those that could directly affect human beings include construction TACs, ACMS and LBP, and noise. However, implementation of mitigation measures and General Plan policies would reduce these impacts to a less than significant level. No other direct or indirect adverse effects on human beings have been identified. **(Less Than Significant Impact with Mitigation Incorporated)**

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:

ABAG. "Tsunami Inundation Map for Coastal Evacuation". Accessed July 23, 2021. https://abag.ca.gov/our-work/resilience/data-research/tsunami-additional-hazards

Association of Bay Area Governments and Metropolitan Transportation Commission. "Project Mapper." http://projectmapper.planbayarea.org/. Accessed July 15, 2021.

Association of Bay Area Governments. "Projections 2040." Accessed July 15, 2021. Available at: http://projections.planbayarea.org/.

BAAQMD. *Final 2017 Clean Air Plan.* April 19, 2017. http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans.

Cal Fire. *Very High Fire Severity Zones in LRA*. Accessed July 30, 2021. https://osfm.fire.ca.gov/media/5935/san_jose.pdf.

California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed September 1, 2021. https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health.

California Air Resources Board. "The Advanced Clean Cars Program." Accessed August 3,2021. https://www.arb.ca.gov/msprog/acc/acc.htm.

California Board of Forestry and Fire Protection. *Fire Hazard Severity Zones Maps*. Accessed June 30, 2021. https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/

California Building Standards Commission. "California Building Standards Code." Accessed August 3, 2021. https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo.

California Department of Conservation Website. Accessed July 23, 2021. Available at http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps.

California Department of Conservation. "CGS Information Warehouse: Regulatory Maps." Accessed July 23, 2021. http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps.

California Department of Conservation. "Farmland Mapping and Monitoring Program." Accessed June 30, 2021. http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx.

California Department of Conservation. "Williamson Act." http://www.conservation.ca.gov/dlrp/lca.

California Department of Conservation. California Important Farmland Finder. Accessed June 30, 2021. https://maps.conservation.ca.gov/DLRP/CIFF/

California Department of Finance. *E-5 Population and Housing Estimates for Cities, Counties, and the State 2011-2020 with 2010 Census Benchmark.* Accessed on July 15, 2021. http://dof.ca.gov/Forecasting/Demographics/Estimates/E-5/.

California Department of Forestry and Fire Protection. "Fire and Resource Assessment Program." Accessed June 30, 2021. http://frap.fire.ca.gov/.

California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements" Accessed July 15, 2021. http://hcd.ca.gov/community-development/housing-element/index.shtml.

California Department of Tax and Fee Administration. "Net Taxable Gasoline Gallons." Accessed August 3, 2021. https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=VehicleTaxableFuelDist.

California Department of Transportation. "Scenic Highways." Accessed December 10, 2020. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

California Energy Commission. "2019 Building Energy Efficiency Standards." Accessed August 3, 2021. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency.

California Energy Commission. "Natural Gas Consumption by County." Accessed August 3, 2021. http://ecdms.energy.ca.gov/gasbycounty.aspx.

California Energy Commission. *2019 Integrated Energy Policy Report*. 2019.

California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed August 3, 2021. http://ecdms.energy.ca.gov/elecbycounty.aspx.

California Environmental Protection Agency. "Cortese List Data Resources." Accessed July 30, 2021. https://calepa.ca.gov/sitecleanup/corteselist/.

California Gas and Electric Utilities. 2020 *California Gas Report.* Accessed August 3, 2021. https://www.socalgas.com/sites/default/files/2020-10/2020_California_Gas_Report_Joint_Utility_Biennial_Comprehensive_Filing.pdf.

California Office of Historic Preservation. "CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6." Accessed August 31, 2020. http://www.ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf.

Calrecycle. California's 2019 Per Capita Disposal Rate. Accessed August 3, 2021. https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/mostrecent/.

City of San Jose. San Jose-Santa Clara Regional Wastewater Facility. Accessed August 3, 2021. https://www.sanjoseca.gov/your-government/environment/water-utilities/regional-wastewater-facility.

City of Santa Clara Parks and Recreation. "War Memorial Playground". Accessed July 22, 2021. https://www.santaclaraca.gov/Home/Components/ServiceDirectory/ServiceDirectory/288/2654

City of Santa Clara Parks and Recreation. "Washington Park Baseball Field". Accessed July 22, 2021. https://www.santaclaraca.gov/Home/Components/ServiceDirectory/ServiceDirectory/287/2654

City of Santa Clara Parks and Recreation. "Washington Park Baseball Field". Accessed July 22, 2021. https://www.santaclaraca.gov/Home/Components/ServiceDirectory/ServiceDirectory/287/2654

City of Santa Clara, 2013. City of Santa Clara Climate Action Plan. December. Accessed August 8, 2021: https://www.santaclaraca.gov/home/showdocument?id=10170.

City of Santa Clara, Fire Department. *History of the Fire Department*. Accessed July 22, 2021. https://www.santaclaraca.gov/our-city/departments-a-f/fire-department/about-us/history

City of Santa Clara, Police Department. *Fact Sheet.* Accessed July 22, 2021. https://www.santaclaraca.gov/our-city/departments-g-z/police-department/about-us/fact-sheet.

City of Santa Clara. 2010. *City of Santa Clara 2010-2035 General Plan*.

City of Santa Clara. *2010-2035 General Plan Integrated Final Environmental Impact Report.* SCH# 2008092005. January 2011.

City of Santa Clara. *2015 Urban Water Management Plan, City of Santa Clara Water Utility*. Adopted November 22, 2016.

Cooperative Strategies. *Residential and Commercial/Industrial Development School Fee Justification Study.* February 26, 2020.

County of Santa Clara. Williamson Act Properties Geodatabase. Accessed June 30, 2021. https://sccplanning.maps.arcgis.com/apps/webappviewer/index.html?id=1f39e32b4c0644b0915354c3e59778ce

FEMA. *FIRM Map No. 06085C0229H.* Effective May 18, 2009.

Holman & Associates. *CEQA Archaeological Literature Search for 906-950 Monroe Street.* September 11, 2020.

Illingworth & Rodkin, Inc. *171-175 Monroe Street Construction Noise & Vibration Assessment.* September 1, 2021.

Illingworth & Rodkin, Inc. *171-175 Monroe Street Single-Family Homes Construction Community Risk Assessment.* September 1, 2021.

North, Daniel. General Manager, Republic Services. Personal communications. November 14, 2019

Office of Planning and Research. "Changes to CEQA for Transit Oriented Development – FAQ." October 14, 2014. Accessed December 10, 2020. http://www.opr.ca.gov/ceqa/updates/sb-743/transit-oriented.html.

Public Law 110–140—December 19, 2007. *Energy Independence & Security Act of 2007.* Accessed August 3, 2021. http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf.

Santa Clara County Airport Land Use Commission. Comprehensive Land Use Plan Santa Clara County for the Norman Y. Mineta San José International Airport. November 16, 2016.

Santa Clara County, *Santa Clara County Geologic Hazard Zones*. *Map 19.* Accessed July 23, 2021. https://www.sccgov.org/sites/dpd/DocsForms/Documents/GEO_GeohazardATLAS.pdf.

Santa Clara County. *Santa Clara County Geologic Hazard Zones*. *Map 19.* Accessed July 23, 2021. Available at https://www.sccgov.org/sites/dpd/DocsForms/Documents/GEO_GeohazardATLAS.pdf.

SCUSD. "School Locator". Accessed July 22, 2021. https://locator.decisioninsite.com/?StudyID=203915

Silicon Valley Power. "Did you Know." Accessed August 3, 2021. https://www.siliconvalleypower.com/svp-and-community/about-svp/faqs.

United States Department of Energy. *Energy Independence & Security Act of 2007.* Accessed August 3, 2021. http://www.afdc.energy.gov/laws/eisa.

United States Department of the Interior. "Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take." Accessed July 30, 2021. https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf.

United States Energy Information Administration. "State Profile and Energy Estimates, 2019." Accessed August 3, 2021. https://www.eia.gov/state/?sid=CA#tabs-2.

United States Energy Information Administration. "State Profile and Energy Estimates, 2019." Accessed August 3, 2021. https://www.eia.gov/state/?sid=CA#tabs-2.

United States Environmental Protection Agency. "Summary of the Resource Conservation and Recovery Act." Accessed July 30, 2021. https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act.

United States Environmental Protection Agency. "Superfund: CERCLA Overview." Accessed July 30, 2021. https://www.epa.gov/superfund/superfund-cercla-overview.

United States Environmental Protection Agency. "The 2020 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." January 2021. https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1010U68.pdf

United States Geological Survey. "UCERF3: A New Earthquake Forecast for California's Complex Fault System." Accessed July 23, 2021. https://pubs.usgs.gov/fs/2015/3009/pdf/fs2015-3009.pdf.

Urban Programmers. *California Department of Parks and Recreation Primary Record for 171 Monroe Street, Santa Clara.* March 1, 2017.

Urban Programmers. *California Department of Parks and Recreation Primary Record for 175 Monroe Street, Santa Clara.* March 3, 2017.

Valley Water. *2016 Groundwater Management Plan, Santa Clara and Llagas Subbasins*. November 2016.

Valley Water. *Inundation Map of Hypothetical Fair Weather Failure of Lenihan Dam.* Accessed July 23, 2021. Lexington_inundation_FW_Domino_1000.pdf (valleywater.org)

SECTION 6.0 LEAD AGENCY AND CONSULTANTS

6.1 LEAD AGENCY

City of Santa Clara
Community Development Department
Nimisha Agrawal, Associate Planner

6.2 CONSULTANTS

David J. Powers & Associates, Inc.
Environmental Consultants and Planners
Shannon George, Vice President and Principal Project Manager
Connor Tutino, Associate Project Manager
Ryan Osako, Graphic Artist

Illingworth & Rodkin, Inc.
Air Quality and Noise Consultants
Michael Thill, Principal
Casey Divine, Senior Air Quality Consultant
Zachary Palm, Air Quality Consultant
Adwait Ambaskar, Staff Noise Consultant

Urban Programmers
Historical Architect
Bonnie Bamburg, President

SECTION 7.0 ACRONYMS AND ABBREVIATIONS

ABAG	Association of Bay Area Governments
ACM	Asbestos-containing material
AIA	Airport Influence Area
ALUCP	Airport Land Use Compatibility Plan
BAAQMD	Bay Area Air Quality Management District
Bgs	Below ground surface
BMPs	Best Management Practices
Btu	British thermal units
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 Program
CalEEMod	California Emissions Estimator Model
CalTrans	California Department of Transportation
CAP	Clean Air Plan
CARB	California Air Resources Board
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFCs	Chlorofluorocarbons
CGS	California Geological Survey
CH_4	Methane
CMP	Congestion Management Plan
CN	Neighborhood Commercial
CNEL	Community Noise Equivalent Level
CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent

CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
DPF	Diesel particulate filter
DPM	Diesel particulate matter
DSOD	Division of Safety of Dams
DTSC	Department of Toxic Substances Control
DU	Dwelling unit
EIR	Environmental Impact Report
EO	Executive Order
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zones
FID	Facility Inventory Database
FIRM	Flood Insurance Rate Maps
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GHGs	Greenhouse gases
Gpcd	Gallons per capita per day
Gpd	Gallons per day
GSA	Groundwater Sustainability Agency
GWP	Global warming potential
HFCs	Hydrofluorocarbons
HI	Hazard Index
HSWA	Federal Hazardous and Solid Waste Amendments
HVAC	Heating, ventilation, and air conditioning
I-580	Interstate 580
I-880	Interstate 880
In./sec	Inches/second
ITE	Institute of Transportation Engineers
IWMP	Integrated Waste Management Plan
LBP	Lead-based paint

LID	Low-impact development
LOS	Level of service
LTA	Local Transportation Analysis
MBTA	Migratory Bird Treaty Act
MEI	Maximally exposed individual
Mgd	Million gallons per day
MGY	Million gallons per year
MLD	Most likely descendant
$MMTCO_2e$	Million metric tons of CO_2E
MND	Mitigated Negative Declaration
Mpg	Miles per gallon
Mph	Miles per hour
MRP	Municipal Regional Stormwater NPDES Permit
MT	Metric ton
MTC	Metropolitan Transportation Commission
N_2O	Nitrous oxide
NAHC	Native American Heritage Commission
NCP	National Contingency Plan
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NOD	Notice of Determination
NOI	Notice of Intent
NO_x	Nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O_3	Ground-level ozone
OITC	Outdoor-Indoor Transmission Class
OPR	Office of Planning and Research
PCBs	Polychlorinated biphenyls
PD	Planned Development
PDAs	Priority Development Areas
PFCs	Perfluorocarbons

PM	Particulate matter
PPV	Peak particle velocity
R1-6L	Single Family Residential
RCRA	Resource Conservation and Recovery Act
RHNA	Regional Housing Need Allocation
ROG	Reactive organic gases
RWF	Regional Wastewater Facility
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCFD	Santa Clara Fire Department
SCPD	Santa Clara Police Department
SCS	Sustainable Communities Strategy
SCUSD	Santa Clara Unified School District
Sf	Square feet
SF_6	Sulfur hexafluoride
SFPUC	San Francisco Public Utilities Commission
SHMA	Seismic Hazards Mapping Act
SMARA	Surface Mining and Reclamation Act
SMGB	State Mining and Geology Board
SO_x	Sulfur oxide
SR	State Route
STC	Sound Transmission Class
SVP	Silicon Valley Power
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic air contaminant
TCRs	Tribal Cultural Resources
TSCA	Toxic Substances Control Act
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
UWMP	Urban water management plan
VMT	Vehicle miles traveled