Initial Study/Mitigated Negative Declaration

2303 Gianera Street Tentative Subdivision

File #: PLN23-00577

prepared by

CITY OF SANTA CLARA CALIFORNIA
1852
THE MISSION CITY

In Consultation with

DAVID J. POWERS & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS & PLANNERS

October 2024

2303 Gianera Street Tentative Subdivision Project
Draft MITIGATED NEGATIVE DECLARATION (MND)

Pursuant to the California Environmental Quality Act (CEQA) Division 13, Public Resources Code

City of Santa Clara
1500 Warburton Avenue
Santa Clara, CA 95050
(408) 615-2467

The City of Santa Clara (City), serving as Lead Agency under CEQA, is completing the required environmental review for the 2303 Gianera Street Tentative Subdivision project pursuant to CEQA Guidelines (California Code of Regulations Section 15000 et. seq.) and the regulations and policies of the City of Santa Clara, California. The attached Initial Study provides the necessary information to inform the City decision-makers, other responsible agencies, and the public of the nature of the project and its potential effect on the environment. The Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementing the proposed project.

Project Information and Description

Project Name: 2303 Gianera Street Tentative Subdivision Project

File Number: PLN23-00577

Project Location and Description : The 0.39-acre project site is located at 2303 Gianera Street in the City of Santa Clara, at the northeast corner of the Gianera Street and Cheeney Street intersection. The project site is bounded by property owned by San Francisco Public Utilities Commission (SFPUC) to the north, Gianera Street to the south, and existing residences to the east and west.

The project would demolish the existing single-family house, one accessory structure, a shed, and associated improvements to subdivide the project site to construct a total of eight, three-story, townhouse units. One of the eight proposed units would be deemed affordable at a Moderate Rate Income. Each unit would contain a two-car garage and rear yard. Each rear yard would have six-foot privacy fences. The townhouses would have a maximum height of 30 feet. The eight townhouse units would be grouped in four buildings (two units in each building) and be oriented perpendicular to Gianera Street. A new private driveway bisecting the site would provide access to the buildings. The project site has a General Plan designation of Low Density Residential and is zoned as Low Density Residential. The project proposes to rezone the site to Planned Development (PD). A General Plan Amendment is not required for the project. Additional project description details can be found in Section 3.0 of the Initial Study.

Assessor's Parcel Number: 104-06-037

Determination

A Mitigated Negative Declaration (MND) is proposed by the City of Santa Clara for the project. The Initial Study and supporting documents have been prepared to determine if the project would result in potentially significant or significant impacts on the environment. The Initial Study concludes, based on substantial evidence in the record, that with the implementation of mitigation measures, all project impacts would be less than significant. The mitigation measures are identified in Table 1 below. Based on the Initial Study and the whole record, it has been determined that the proposed action, with the incorporation of the mitigation measures described below, would not have a significant effect on the environment. The Draft MND, Draft Initial Study, and supporting technical reports that constitute the record of proceedings upon which this determination is made are available for public review on the City's website at www.santaclaraca.gov/CEQA and at the Central Park Library at 2635 Homestead Road. Before the MND is adopted, the City will prepare written responses to any public comments, and revise the Draft MND, if necessary, based on any concerns raised during the public review period. All written comments will be included as part of the Final MND.

Signature

Daniel Sobczak, Associate Planner City of Santa Clara	Date

TABLE 1 – SUMMARY OF PROJECT IMPACTS AND MITIGATION

Impacts	Mitigation Measures	Level of Impact
Air Quality		
Impact AIR-3: Construction of the proposed project would exceed BAAQMD single-source thresholds for incremental cancer risk and PM2.5 concentration.	**MM AQ-3.1:** The project shall implement a feasible plan to reduce DPM emissions by 55 percent such that increased cancer risk and annual PM2.5 concentrations from construction would be reduced below TAC significance levels. The 55-percent reduction can be achieved in one of the following ways: 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 interim emission standards for PM (PM_{10} and $PM_{2.5}$). 2. 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 emission standards for Tier 3 engines and include particulate matter emissions control equivalent to CARB Level 3 verifiable diesel emission control devices that altogether achieve a 55 percent reduction in particulate matter exhaust in comparison to uncontrolled equipment; alternatively (or in combination). 3. A combination of some of the following measures to achieve a reduction in construction diesel particulate matter emissions by 55 percent or greater: - Implementation of No. 1 above to use Tier 4 interim engines or alternatively fueled equipment, - Installation of electric power lines during early construction phases to avoid use of diesel generators and compressors, - Use of electrically-powered equipment, - Forklifts and aerial lifts used for exterior and interior building construction shall be electric or propane/natural gas powered, - Change in construction build-out plans to lengthen phases, and - Implementation of different building techniques that result in less diesel equipment usage.	Less than Significant Impact with Mitigation Incorporated

Impacts	Mitigation Measures	Level of Impact
Biological Resources		
Impact BIO-1: Construction activities associated with the proposed project could result in the loss of fertile eggs, nesting raptors or other migratory birds, or nest abandonment, which would constitute a significant impact under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code Sections 3503, 3503.5, and 3800.	**MM BIO-1.1:** The project applicant shall schedule demolition and construction activities to avoid the nesting season, if feasible. The nesting season for most birds, including most raptors in the San Francisco Bay area, extends from February 1st through August 31st (inclusive). If demolition and construction cannot be scheduled between September 1st and January 31st (inclusive), pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests shall be disturbed during project implementation. This survey shall be completed no more than 14 days prior to the initiation of construction activities during the early part of the breeding season (February 1st through April 30th inclusive) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May 1st through August 31st inclusive). During this survey, the ornithologist shall inspect all trees and other possible nesting habitats immediately adjacent to the construction areas for nests. If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist shall determine the extent of a construction free buffer zone to be established around the nest, to ensure that raptor or migratory bird nests shall not be disturbed during project construction. Prior to any tree removal, or approval of any grading or demolition permits (whichever occurs first), the ornithologist shall submit a report indicating the results of the survey and any designated buffer zones to the satisfaction of the Community Development Director or Director's designee.	Less than Significant Impact with Mitigation Incorporated

Impacts	Mitigation Measures	Level of Impact
Cultural Resources		
Impact CUL-1: Construction of the proposed project could result in impacts to as yet unidentified buried archaeological resources.	**MM CUL-1.1:** A qualified archaeologist shall provide sensitivity training to construction crew prior to the initial ground-breaking activities. **MM CUL-1.2:** 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 stop, the Community Development Director shall be notified, and a qualified archeologist shall be retained by the project applicant. The archaeologist shall examine the find and make appropriate recommendations prior to issuance of building permits. Recommendations could include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery during monitoring would be submitted to the Community Development Director.	Less than Significant Impact with Mitigation Incorporated
Impact CUL-2: Construction activities on-site could result in the exposure or destruction of as yet undiscovered human remains.	**MM CUL-2.1:** 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 by the project applicant/contractor. The Santa Clara County Coroner shall be notified by the project applicant, and the Coroner 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 shall make recommendations regarding proper burial, which shall be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines.	Less than Significant Impact with Mitigation Incorporated

Impacts	Mitigation Measures	Level of Impact
Geology and Soils		
Impact GEO-1: Buildings constructed on-site could experience settlement in the event of strong ground shaking as a result of an earthquake.	**MM GEO-1.1:** Consistent with General Plan Policy 5.10.5-P6, the project shall be built using standard engineering and seismic safety design techniques. Building design and construction at the site shall be completed in conformance with the recommendations of the February 2023 geotechnical investigation prepared by Silicon Valley Soil Engineering for the project. 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 to confirm the findings of the report and consistency of the project plans with the recommendations. The building shall meet the requirements of applicable Building and Fire Codes, including the latest California Building Code, as adopted or updated by the City. The project shall be designed to withstand potential geologic hazards identified on the site, including shrink swell capacity of soils, 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.	Less than Significant Impact with Mitigation Incorporated
Noise		
Impact NOI-1.1: Construction noise levels would potentially exceed the exterior threshold of 80 dBA L_{eq} at residential land uses to the east and west.	**MM NOI-1.1:** A qualified acoustical consultant shall prepare a construction noise control plan to be submitted to the City for review and approval prior to issuance of a demolition and/or grading permit, including, but not limited to, the following available controls: • Ensure that excavating, grading and filling activities, and other construction activities (including the loading and unloading of materials and truck movements) within 300 feet of residentially zoned property, are limited to the hours of 7:00 a.m. to 6:00 p.m. on weekdays and between the hours of 9:00 a.m. and 6:00 p.m. on Saturdays. No construction is permitted on Sundays or holidays. • Construct a solid plywood fence along the eastern and western property lines, where feasible, to shield the adjoining residential receptors from construction work. A temporary eight-foot-tall noise barrier would be tall enough to block direct line-of-sight with ground-level receptors.	Less than Significant Impact with Mitigation Incorporated

Impacts	Mitigation Measures	Level of Impact
	• Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment. • Unnecessary idling of internal combustion engines shall be strictly prohibited. • Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors as feasible. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used to reduce noise levels at the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors. • Construction staging areas shall be established at locations that would create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction. • Locate material stockpiles, as well as maintenance/equipment staging and parking areas, as far as feasible from residential receptors. • Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site. • The contractor shall prepare a detailed construction schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance. • Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., bad muffler, etc.) and require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.	
Impact NOI-1.2: The operation of mechanical equipment would potentially	**MM NOI-1.2:** The applicant shall have a qualified acoustical consultant prepare a detailed acoustical study during final design to evaluate the potential noise generated by mechanical equipment and demonstrate the necessary noise	Less than Significant Impact with

Impacts	Mitigation Measures	Level of Impact
exceed the City's nighttime threshold at residential receptors to the east and west of the project.	control to meet the City's 50 dBA nighttime noise threshold at the receiving property lines. Noise control features, such as selection of quiet units, sound attenuators, enclosures, and barriers shall be identified and evaluated to demonstrate that mechanical equipment noise shall not exceed 50 dBA at the receiving property lines. The noise control features identified by the study shall be incorporated into the project prior to issuance of a building permit.	Mitigation Incorporated
Impact NOI-2: Construction vibration levels would exceed the 0.03 in/sec PPV threshold at the residences east and west of the site.	**MM NOI-2.1:** The project applicant or the applicant's contractor shall implement the following measures during construction to reduce construction vibration generated by the project: • Avoid using vibratory rollers and clam shovel drops within 25 feet of the adjacent buildings to the east and west. • Select demolition methods that do not involve large impact tools such as hoe-rams within 25 feet of the adjoining residences to the east and west. Portable jackhammers, saws, or grinders shall be used to minimize impacts to the ground. • Avoid dropping heavy equipment and use alternative methods for breaking up existing pavement, such as a pavement grinder, instead of dropping heavy objects, within 25 feet of the adjacent buildings to the east and west. • Smaller equipment (less than 18,000 pounds) shall be used near the property lines adjacent to buildings to minimize vibration levels. For example, a smaller vibratory roller similar to a Caterpillar model CP433E vibratory compactor could be used when compacting materials within 25 feet of the adjacent buildings. • Hoe rams, large bulldozers, drill rigs, loaded trucks, and other similar equipment shall not be used within 25 feet of adjacent buildings to the east and west.	Less than Significant Impact with Mitigation Incorporated

Table of Contents

Figures

Photos

Tables

Appendices

All appendices are incorporated herein by 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 2303 Gianera Street Tentative Subdivision in compliance with the California Environmental Quality Act (CEQA), CEQA Guidelines (California Code of Regulations §15000 et. seq.), and regulations and policies of the City of Santa Clara, California.

The project proposes to demolish the existing structures on site and build eight townhouse units. 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

The 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:

Daniel Sobczak
1500 Warburton Avenue
Santa Clara, CA 95050
dsobczak@Santaclaraca.gov
City of Santa Clara

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

2303 Gianera Street Tentative Subdivision (File #: PLN23-00577)

2.2 Lead Agency Contact

Daniel Sobczak, Associate Planner
Community Development Department
1500 Warburton Avenue
Santa Clara, CA 95050
(408) 615-2467
dsobczak@Santaclaraca.gov

2.3 Project Applicant

Carl Wang
Gianeral St Estate, LLC
798 N First St
San José, CA 95112
(650) 675-3193
carl@vcicompanies.com

2.4 Project Location

The 0.39-acre project site (Assessor's Parcel Number [APN] 104-06-037) is located at 2303 Gianera Street in the City of Santa Clara, at the northeast corner of the Gianera Street and Cheeney Street intersection. The project site is currently developed with a single-family house, one accessory structure (detached garage converted into two dwelling units), and a shed. The total square footage of the existing development on-site is approximately 4,400 square feet. The project site is bounded by property owned by San Francisco Public Utilities Commission (SFPUC) to the north, Gianera Street to the south, and existing residences to the east and west.

Levi's Stadium is approximately 745 feet northwest of the site. San Tomas Aquino Creek is approximately 0.24 miles (or 1,580 feet) west of the project site. The Northern Receiving Station is located about 80 feet north of the project site. The Gianera Generating Station, an electrical substation operated by the City of Santa Clara, is located approximately 700 feet northwest of the site.

Maps of the site's regional location and vicinity, as well as an aerial photograph of the project site and surrounding land uses, are shown in Figure 2.4-1, Figure 2.4-2, and Figure 2.4-3 respectively.

REGIONAL MAP | FIGURE 2.4-1

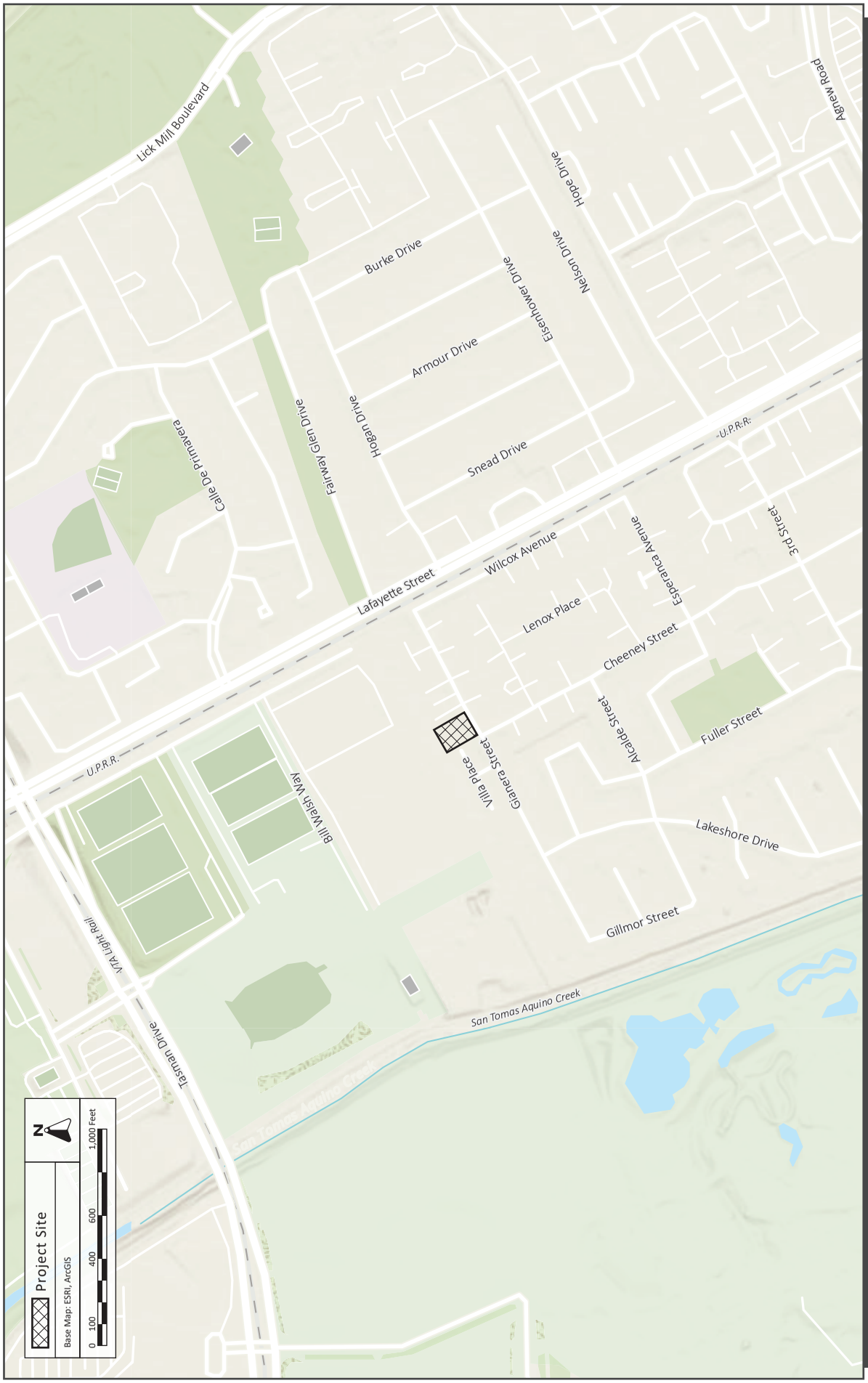


FIGURE 2.4-2

VICINITY MAP

AERIAL PHOTOGRAPH AND SURROUNDING LAND USES | FIGURE 3

2.5 Assessor's Parcel Number

104-06-037

2.6 General Plan Designation and Zoning District

The City of Santa Clara 2010-2035 General Plan (General Plan) designation of the project site is Low Density Residential, and the zoning is Low Density Residential (R2).

Low Density Residential encompasses residential densities of eight to 19 units per gross acre and building types may be attached or detached dwelling units, including low-rise apartments, rowhouses, and townhomes.[1]

The R2 zoning designation fosters the residential character of the district and provides for the construction of single-family, second dwelling units, accessory dwelling units, and two-family dwellings. The site would be rezoned to Planned Development (PD) to accommodate the project, as further discussed in Section 2.0 Project Description.

2.7 Project-Related Approvals, Agreements, and Permits

- Rezoning
- Subdivision Map
- Architectural Review
- Demolition Permit
- Grading Permit(s)
- Building Permit(s)
- Encroachment Permit

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

Section 3.0 Project Description

3.1 Proposed Residential Development

The project would demolish the existing single-family house, one accessory structure, a shed, and associated improvements to subdivide the project site to construct a total of eight, three-story, townhouse units. One of the eight proposed units would be deemed affordable at a Moderate Rate Income.

Each unit would contain a two-car garage and rear yard. Each rear yard would have six-foot privacy fences. The townhouses would have a maximum height of 30 feet. The eight townhouse units would be grouped in four buildings (two units in each building) and be oriented perpendicular to Gianera Street. A new private driveway bisecting the site would provide access to the buildings.

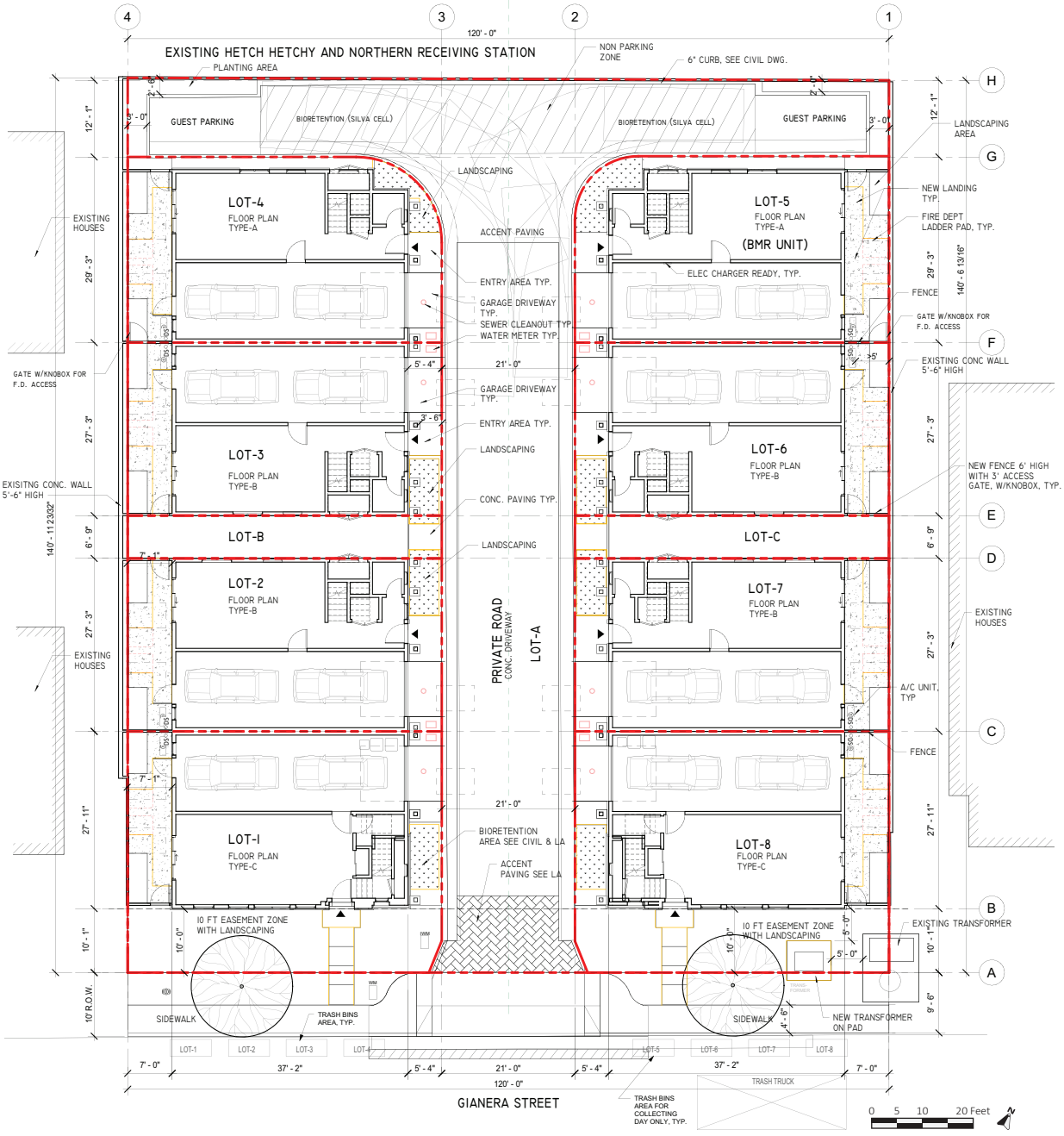
The project site has a General Plan designation of Low Density Residential and is zoned as R2. The project proposes to rezone the site to Planned Development (PD). A General Plan Amendment is not required for the project. A site plan of the project is shown on Figure 3.3-1. The building elevations are shown on Figure 3.3-2 and Figure 3.3-3.

3.2 Parking and Vehicular Access

Access to the project site is currently provided via one full access driveway on Gianera Street, adjacent to the eastern project boundary. Under the proposed project, this existing driveway would be removed, and a new full access driveway and private road would be constructed at the center of the site, providing access to Gianera Street. A total of 18 parking spaces would be provided on-site in the form of two car garages attached to each townhouse and two uncovered guest parking spaces at the rear (i.e., north side) of the site.

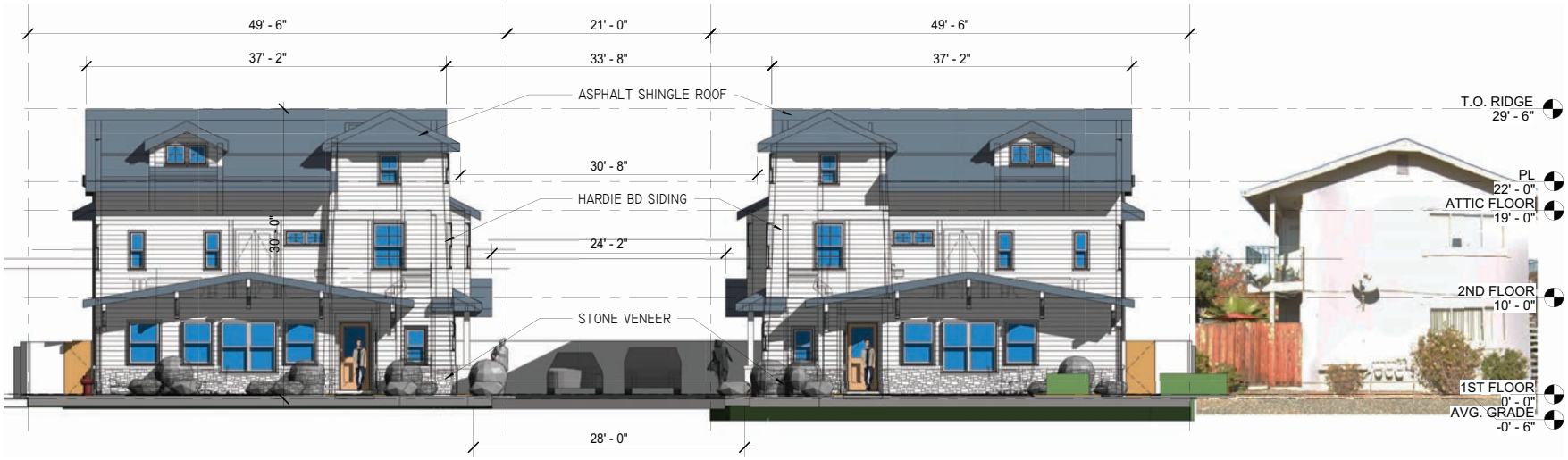
3.3 Landscaping

As proposed, the project would remove all 14 existing trees from the site and plant 10 new trees in the corners of the site and an additional 18 offsite. Additional shrubs and plants would be planted along the Gianera Street site frontage, along the perimeter of the townhouses near each unit's entrance, and at the northwest and northeastern corners of the site.

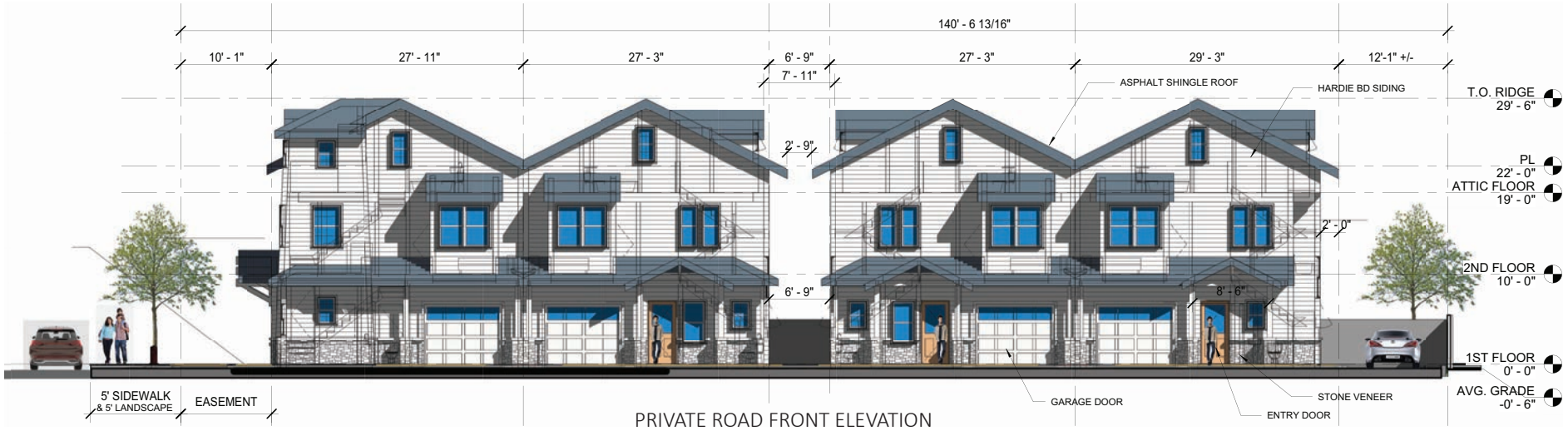


Source: V.C.I. Architecture, April 12, 2024.

SITE PLAN | FIGURE 3.3-1



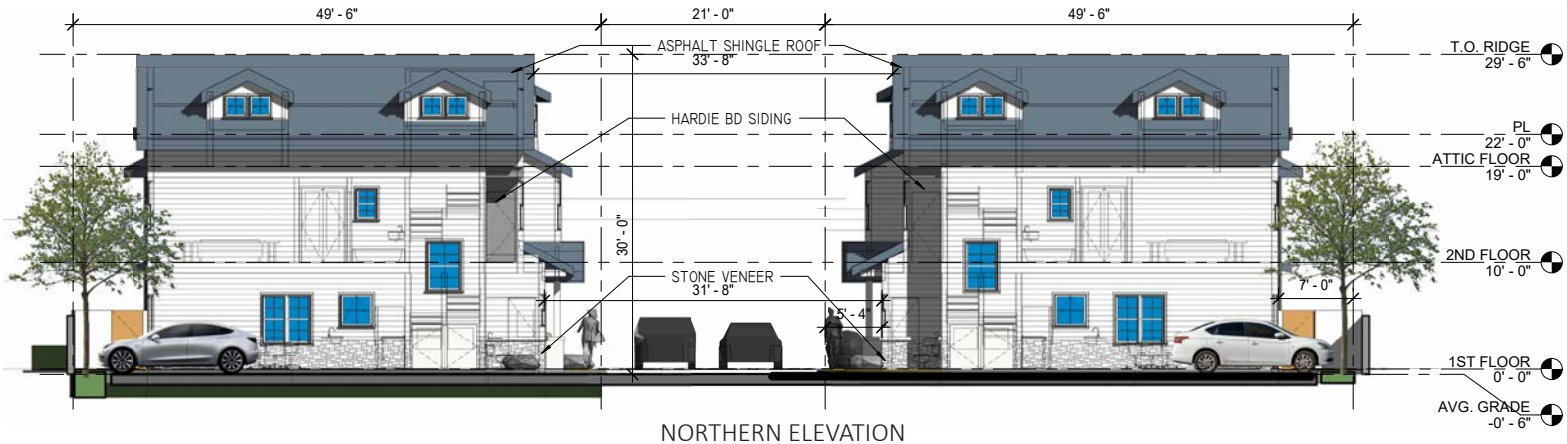
GIANERA STREET ELEVATION



PRIVATE ROAD FRONT ELEVATION

Source: V.C.I. Architecture, April 12, 2024.

BUILDING ELEVATIONS ALONG GIANERA STREET AND PRIVATE ROAD | FIGURE 3.3-2



NORTHERN ELEVATION

REAR YARD ELEVATION

Source: V.C.I. Architecture, April 12, 2024.

BUILDING NORTHERN ELEVATION AND REAR YARD ELEVATION | FIGURE 3.3-3

3.4 Utilities and Right-of-Way Improvements

The project would remove the existing sewer lateral line along with the residence's existing gas and electric meters. The existing water lateral located south of the residence, near the entrance would be abandoned, and the existing fire hydrant located in the southwest corner of the site would be preserved in place with implementation of the project. An additional fire hydrant may be installed along the private road on-site, if determined required by the City at the building permit stage. No development is proposed in the existing electric underground easement on the southwest corner of the site.

The project would install new, six-inch, private water and sewer lines within the private road, which would connect to the existing 12-inch water and sewer lines in Gianera Street. In addition, the project would install a 12-inch storm drain line, which would connect to the existing 10-inch storm drain line in Gianera Street. The existing high voltage power utility box adjacent to the eastern property line on Gianera Street would remain under the project and a new transformer would be installed approximately five feet from the high voltage utility box on the project site.

The project would utilize subsurface infiltration systems and flow-through concrete lined planters with underdrains as stormwater control measures. The project would result in approximately 14,353 square feet of impervious area and 2,541 square feet of pervious area.

A portion of the existing sidewalk that is substandard on Gianera Street would be reconstructed to meet City standards.

3.5 Green Building Measures

The project would be built in accordance with the California Green Building Standards Code (CALGreen), which includes design provisions intended to minimize wasteful energy consumption, and the California Building Code (CBC). The following additional measures are proposed by the project:

- Rooftop solar panels
- Install one, level 2 Electrical Vehicle (EV) ready space and one, level 1 EV ready space for each parking garage
- Install a level 2 EV ready space for each guest parking space

The project also voluntarily proposes to be all electric. Use of natural gas is not proposed.

3.6 Construction

The project proposes to comply with City Code Section 9.10.230 and construct the project Monday to Friday, 8 AM to 6 PM for a period of approximately 11 months. The project would use soil on-site to balance the site. The maximum depth of excavation would be 10 feet. No soil off-haul is required.

Section 4.0 Environmental Setting, Checklist, and Impact Discussion

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

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

The discussion for each environmental subject includes the following subsections:

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

4.1 Aesthetics

4.1.1 Environmental Setting

4.1.1.1 *Regulatory Framework*

State

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 or mixed-use residential project, or employment center project and
- The project is located on an infill site within a transit priority area.[2]

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.

[2] 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 or applicable regional transportation plan." 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: California Legislative Information. "Chapter 2.7. Modernization of Transportation Analysis for Transit-Oriented Infill Projects [21099- 21099.]." Accessed June 6, 2024. https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PRC&division=13.&part=&chapter=2.7.&article=.

Local

City of Santa Clara 2010-2035 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating environmental impacts resulting from planned development projects within the City. The following General Plan policies related to aesthetics are applicable to the proposed project.

Policies	Description
5.3.1-P1	Preserve the unique character and identity of neighborhoods through community-initiated neighborhood planning and design elements incorporated in new development.
5.3.2-P11	Maintain the existing character and integrity of established neighborhoods through infill development that is in keeping with the scale, mass and setbacks of existing or planned adjacent development.
5.4.1-P9	Residential development should include front doors, windows, stoops, porches, and bay windows or balconies along street frontages.
5.5.2-P1	Require that new development incorporate building articulation and architectural features, including front doors, windows, stoops, porches or bay windows along street frontages, to integrate new development into existing neighborhoods.
5.5.2-P2	Implement design review guidelines for setback, heights, materials, massing, articulation and other standards to support Transition Policies and promote neighborhood compatibility.
5.5.2-P3	Implement site design solutions, such as landscaping and increased building setbacks, to provide a buffer between non-residential and residential uses.
5.5.2-P5	Require that new development provide an appropriate transition to surrounding neighborhoods.
5.5.2-P6	Adjust new building height, scale and massing along the site perimeter abutting planned lower intensity uses.
5.5.2-P7	For buildings of three stories or greater, increase the setback of upper stories where they abut lower intensity residential uses.
5.5.2-P9	Improve pedestrian amenities, including sidewalks and bicycle paths, to promote neighborhood compatibility.
5.5.2-P12	Screen loading and trash areas to preclude visibility from off-site and public streets.

City Code – Architectural Review

An architectural review process has been established for new development/redevelopment by the City Council to encourage the orderly and harmonious appearance of structures and property; maintain the public health, safety and welfare; maintain the property and improvement values throughout the City; and encourage the physical development of the City as intended by the General Plan. Before action is taken on an application for the issuance of a permit for any sign, building, structure, or alteration of the exterior of a structure in any zoning district, plans and drawings of such sign, building or alteration must be submitted to the Community Development Director for approval. Additional details about the architectural review process can be found in City Code Chapter 18.120.020.

4.1.1.2 *Existing Conditions*

Scenic Highways

There are no state-designated scenic highways in the City of Santa Clara. Interstate 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.[3]

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, Interstate 280 from the San Mateo County line to SR 17, and the entire length of SR 152 within the County.

The closest state-designated highway, SR 280, is approximately 10 miles northeast of the project.[4]

Project Site

The 0.39-acre, rectangular shaped project site is located at 2303 Gianera Street in the City of Santa Clara and is currently developed with a single-family residence, one accessory structure, and a shed totaling 4,440 square feet, as well as landscaping, and parking. The single-family residence is located on the southern portion of the site and has an attached two-car garage. It is a one-story, wood frame Ranch-style house, with a stucco and brick façade and recessed entryway. The front yard consists mainly of overgrown grass and shrubs.

The accessory structure and shed are both located on the northern portion of the site, within the backyard. The backyard itself has little landscaping and is mostly paved with concrete. The accessory structure is a wood-frame building that originally was a garage but has now been converted into a two unit dwelling. The shed is comprised of a mix of metal and wood. Refer to photos 1 and 2 for views of the project site.

[3] California Department of Transportation. "Scenic Highways." Accessed June 6, 2024. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

[4] California Department of Transportation. "California State Scenic Highway System Map." Accessed June 6, 2024. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa.

Photo 1: View of the on-site single-family residence from Gianera Street looking north.

Photo 2: View of the driveway on-site looking south towards Gianera Street.

PHOTOS 1 & 2

Surrounding Area

The project site is bounded by a strip of unpaved land owned by SFPUC to the north, Gianera Street and two-story, single-family residences to the south; a two-story, multi-family building to the east, and two-story townhouses to the west. The townhouses and single-family residences surrounding the site are subdivisions with uniform building styles.

Levi's Stadium is approximately 745 feet northwest of the site. The back of the stadium is visible from the site, including views of stairways (see Photo 3). The Northern Receiving Station is located approximately 80 feet north of the project site and its associated metal utility poles are also visible from the site. Refer to photos 3 and 4 for views of the surrounding land uses.

Scenic Views, Resources, and Corridors

The City of Santa Clara Draft 2010-2035 General Plan Integrated Final Environmental Impact Report (General Plan FEIR) lists the Santa Cruz Mountains, Diablo Range, San Tomas Aquino Creek, Saratoga Creek, Calabazas Creek, and the Guadalupe River as "visual resources" within the City.[5] The project site and the surrounding area are relatively flat and, as a result, the site is only visible from the immediate area. Based on the City's General Plan, the project area is not located within a scenic vista or scenic corridor. The Diablo Mountains to the east and the Santa Cruz Mountains to the west are partially visible from the southern portion of the site.

Light and Glare

Sources of light and glare are abundant in the urban environment of the project site and area. Existing sources include but are not limited to streetlights, parking lot lights, security lights, vehicular headlights, internal building lights, and reflective building surfaces and windows.

Location within a Transit Priority Area

This project site is located within a 0.5 mile of a major transit stop on Stars and Stripes Drive. The Santa Clara/Great America light rail station is located approximately 0.5 mile away from the project site at 5099 Stars and Stripes Drive. Therefore, the project site is within a transit priority area as defined in SB 743.

[5] City of Santa Clara. *City of Santa Clara Draft 2010-2035 General Plan Integrated Final Environmental Impact Report (SCH# 2008092005)*. January 2011. Page 127.

Photo 3: View of the fencing along the southern property line with Levi's Stadium and utility lines at the Northern Receiving Station in the background.

Photo 4: View of the neighboring single-family residences on the south side of Gianera Street.

PHOTOS 3 & 4

4.1.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings?[6] If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

a) Would the project result in significant aesthetic impacts?

Development of the proposed project would result in changes to the built environment; however, the project is a residential project located on an infill site within a transit priority area pursuant to SB 743. Therefore, the aesthetics impacts of the project are not significant. **(Less than Significant Impact)**

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

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.

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.

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

[7] 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)).

4.2.1.2 *Existing Conditions*

The project site is classified as Urban and Built-Up Land.[8] The project site does not contain agricultural resources or timberland resources and is not under an existing Williamson Act contract.[9]

4.2.2 Impact Discussion

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

[8] California Department of Conservation. "California Important Farmland Finder." Accessed June 6, 2024. https://maps.conservation.ca.gov/DLRP/CIFF/.

[9] County of Santa Clara. *Williamson Act Properties Geodatabase*. Accessed June 6, 2024. https://sccplanning.maps.arcgis.com/apps/webappviewer/index.html?id=1f39e32b4c0644b0915354c3e59778ce.

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

As discussed above, the project site is designated as "Urban and Built-Up land." Therefore, no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be converted to nonagricultural uses as a result of project implementation. **(No Impact)**

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

The project site is not zoned for agricultural use, nor is it under a Williamson Act contract. Therefore, the proposed project would not conflict with an existing agricultural use or Williamson Act contract. **(No Impact)**

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

The project site is currently located in an urbanized area of the City of Santa Clara and zoned for residential development. Therefore, the project would not conflict with land zoned as forest land, timberland, or timberland zoned Timberland Production. **(No Impact)**

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

As discussed above, the project site is not zoned or used as forest land. The project site is located within an urbanized area and would not result in a loss of forest land or convert forest land to non-forest use. **(No Impact)**

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

The project would not conflict with zoning for agricultural operations or facilitate the unplanned conversion of farmland elsewhere in the City to non-agricultural uses because it will keep the same land use (i.e., residential) as existing conditions. The project site and surrounding properties are not utilized as forest lands and, therefore, would not result in the loss of forest lands in the City. For these reasons, the project would not result in impacts to agricultural or forest resources. **(No Impact)**

4.3 Air Quality

The following discussion is based upon an Air Quality Assessment prepared by Illingworth & Rodkin, Inc. in April 2024. The report is attached as Appendix A to this document.

4.3.1 Environmental Setting

4.3.1.1 *Background Information*

Criteria Pollutants

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

Toxic Air Contaminants

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

DPM is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs. 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).[10] Chemicals in diesel exhaust, such as benzene and formaldehyde, are also TACs identified by the CARB.

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

[10] California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed June 6, 2024. https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health.

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

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

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

Sensitive Receptors

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

4.3.1.2 *Regulatory Framework*

Federal and State

Clean Air Act

At the federal level, the EPA is responsible for overseeing implementation of the Clean Air Act and its subsequent amendments. The federal Clean Air Act requires the EPA to set national ambient air quality standards for the six common criteria pollutants, discussed previously; PM, O_3, CO, SO_2, NO_2, and lead.[11]

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

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

these pollutants to protect public health and the climate. Violations of ambient air quality standards are based on air pollutant monitoring data and are determined for each air pollutant. Attainment status for a pollutant means that a given air district meets the standard set by the EPA and/or CARB.

Diesel Risk Reduction Plan

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

Regional

2017 Clean Air Plan

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

- Protect air quality and health at the regional and local scale by attaining all state and national air quality standards and eliminating disparities among Bay Area communities in cancer health risk from TAC; and
- Protect the climate by reducing Bay Area greenhouse gas (GHG) emissions 40 percent below 1990 levels by 2040 and 80 percent below 1990 levels by 2050.[12]

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. The latest CEQA Air Quality Guidelines are the 2022 CEQA Air Quality Guidelines adopted on April 20, 2023, by the BAAQMD's Board of Directors.

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

Local

City of Santa Clara 2010-2035 General Plan

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

Policies	Description
5.10.2-P6	Require "Best Management Practices" for construction dust abatement.
5.10.5-P34	Implement minimum setbacks of 500 feet from roadways with average daily trips of 100,000 or more and 100 feet from railroad tracks for new residential or other uses with sensitive receptors, unless a project-specific study identifies measures, such as site design, tiered landscaping, air filtration systems, and window design, to reduce exposure, demonstrating that the potential risks can be reduced to acceptable levels.
5.10.5-P35	Establish minimum buffers between odor sources and new residential or other uses with sensitive receptors, consistent with BAAQMD guidelines, unless a project-specific study demonstrates that these risks can be reduced to acceptable levels.

4.3.1.3 *Existing Conditions*

Air quality is determined by the concentration of various pollutants in the atmosphere. The amount of a given pollutant in the atmosphere is determined by the amount of pollutants released within an area, transport of pollutants to and from surrounding areas, local and regional meteorological conditions, and the surrounding topography of the air basin.

As discussed above, CO, O_3, NO_2, and PM_{10} and $PM_{2.5}$ are considered criteria pollutants by the EPA and CARB as they can result in health effects such as respiratory impairment and heart/lung disease symptoms.

The Bay Area is considered non-attainment 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 non-attainment for PM_{10} under the state act, but not the federal act. The Bay Area is considered in attainment or unclassified for all other pollutants.

Emissions at the site are currently generated from vehicles coming to and from the site, electricity usage, and typical residential usages. The closest sensitive receptors include residences to the west and east 65 and 30 feet away from the 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:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

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

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 April 2023 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 for criteria air pollutants and fugitive dust used in this analysis are identified in Table 4.3-2. Table 4.3-3 below lists the BAAQMD health risk and hazards thresholds for single-source and cumulative-sources.

Table 4.3-2: BAAQMD Air Quality Significance Thresholds

Criteria Air Pollutant	Construction Thresholds*	Operation Thresholds	Operation Thresholds
	Average Daily Emissions (pounds/day)	Average Daily Emissions (pounds/day)	Annual Average Emissions (tons/year)
ROG and 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	

Notes: ROG = reactive organic gases; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; $PM_{2.5}$= fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; CO = carbon monoxide

* The Air District recommends that for construction projects that require less than one year to complete, lead agencies should annualize impacts over the scope of actual days that peak impacts would occur rather than over the full year. Additionally, for phased projects that results in concurrent construction and operational emissions. Construction-related exhaust emissions should be combined with operational emissions for all phases where construction and operations overlap.

Source: Bay Area Air Quality Management District. *2022 California Environmental Quality Act Air Quality Guidelines*. April 2023. Pages 3-5 and 3-6.

Table 4.3-3: BAAQMD Health Risks and Hazards Thresholds

Health Risk	Single Source	Combined Cumulative Sources
Cancer Risk	10 per one million	100 per one million
Non-Cancer Hazard Index	1.0	10.0
Annual $PM_{2.5}$ Concentration	0.3 µg/m^3	0.8 µg/m^3 (average)

Notes: µg/m^3 = micrograms per cubic meter; $PM_{2.5}$= fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less

Thresholds are applicable to construction and operational activities.

Source: Bay Area Air Quality Management District. *2022 California Environmental Quality Act Air Quality Guidelines*. April 2023. Pages 3-5 and 3-6.

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

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

Support of Primary 2017 CAP Goals

As discussed in Section 4.3.1.2, the goals of the 2017 CAP include 1) protecting public health by progressing towards attaining air quality standards and eliminating health risk and 2) protecting the climate. If a project exceeds the BAAQMD criteria air pollutants thresholds of significance, its emissions are considered to result in significant adverse air quality impacts to the region's existing air quality conditions. An analysis of the project's construction and operational air pollutant emissions and health risk is provided below. The project's impact on climate is discussed in Section 4.8 Greenhouse Gas Emissions and was concluded to be less than significant.

Construction Period Emissions

Implementation of the proposed project would result in short-term emissions from construction activities associated with development. Emissions commonly associated with construction activities include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty diesel- and gasoline-powered equipment, portable auxiliary equipment, and worker commute trips. During construction, fugitive dust, the dominant source of PM_{10} and $PM_{2.5}$ emissions, is generated when wheels or blades disturb surface materials. Fugitive dust would be temporarily generated, especially during site preparation and grading. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby.

Demolition and construction activities can also generate PM_{10} and $PM_{2.5}$ emissions. Off-road construction equipment is often diesel-powered and can be a substantial source of NO_x emissions, in addition to PM_{10} and $PM_{2.5}$ emissions. Diesel exhaust from construction equipment poses both a health and nuisance impact to nearby receptors.

Average daily construction emissions were estimated for the total duration of the project (222 days) and summarized in Table 4.3-4. As indicated in Table 4.3-4, the predicted daily project construction emissions would be below the BAAQMD significance thresholds. Refer to Appendix A for details about the modeling, data inputs, and assumptions.

Table 4.3-4: Construction Period Emissions

Scenario	ROG	NO_X	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
Construction Emissions Total (Tons) (Year 2025)	0.20	0.31	0.01	0.01
Average Daily Construction Emissions (pounds/day) (222 construction workdays)	1.83	2.76	0.12	0.11
BAAQMD Thresholds (pounds/day)	*54*	*54*	*82*	*54*
Exceed threshold?	No	No	No	No

BAAQMD considers construction emission impacts that are below the thresholds of significance (such as those of the project) less than significant if Best Management Practices (BMPs) are implemented.

Condition of Approval:

The contractor shall implement the following best management practices during construction:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
7. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
8. Publicly visible signs shall be posted with the telephone number and name of the person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's General Air Pollution Complaints number shall also be visible to ensure compliance with applicable regulations.

With the implementation of these BMPs, the project construction period emissions would be reduced to a less than significant level by controlling dust, limiting equipment idling, and properly maintaining equipment.

Operational Period Emissions

Vehicles driven by future residents and their guests would be the primary source of ROG, NO_x, and PM air pollutant emissions. Evaporative emissions from architectural coatings and maintenance products (classified as consumer products) are also typical ROG emission sources from these types of uses. Emissions were calculated assuming 365 days of operation.

Table 4.3-5 summarizes the operational period emissions for the proposed project. As indicated in Table 4.3-5, the predicted daily project construction emissions would be below the BAAQMD significance thresholds. Refer to Appendix A for details about the modeling, data inputs, and assumptions.

Table 4.3-5: Operational Period Emissions

Scenario	ROG	NO_X	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
2026 Project Operational Emissions (tons/year)	0.14	0.02	0.05	0.01
BAAQMD Thresholds (tons/year)	*10*	*10*	*15*	*10*
Exceed threshold?	No	No	No	No
2026 Project Operational Emissions (lbs/day)	0.78	0.12	0.25	0.06
BAAQMD Thresholds (lbs/day)	*54*	*54*	*82*	*54*
Exceed threshold?	No	No	No	No
Notes: assumes 365-day operation				

Health Risk

As discussed under checklist question c), the project would not include stationary sources of TACs and the emissions from project-generated trips would not be substantial to result in significant health risk impacts. Construction of the project would result in significant TAC emissions, however, the project with implementation of mitigation measure MM AQ-3.1 would reduce health risk impacts to a less than significant level by reducing the DPM emissions of construction equipment.

Consistency with 2017 CAP Control Measures

Because the project would not exceed the BAAQMD impact thresholds for criteria air pollutant emissions, 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 continuing progress toward 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.

Based on the above discussion, the project would not conflict with the 2017 CAP. **(Less than Significant Impact)**

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

BAAQMD has established thresholds of significance for criteria air pollutants and their precursors, as listed in Table 4.3-2 above. 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. As discussed in Section 4.3.1.3, the Bay Area is considered a non-attainment area for ground-level O_3 and $PM_{2.5}$ under both the federal and state Clean Air Act. The Bay Area is also considered a non-attainment area for PM_{10} under the state act, but not the federal act. The Bay Area has attained both state and federal ambient air quality standards for CO. As part of an effort to attain and maintain ambient air quality standards.

As discussed under checklist question a), the construction period and operational period criteria air pollutant emissions would not exceed the BAAQMD thresholds of significance with regards to ROG, NO_x, PM_{10}, and $PM_{2.5}$, and the project would implement BAAQMD recommend construction BMPs to controlling dust, limiting equipment idling, and properly maintaining equipment. **(Less than Significant Impact)**

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

Community Risk

Development of the proposed project can increase the health risk of existing sensitive receptors during construction and operation. The primary health risk impact issues associated with construction projects are cancer risks associated with diesel exhaust (i.e., DPM), which is a known TAC, and exposure to high ambient concentrations of dust (i.e., $PM_{2.5}$). While the project would not include stationary sources of air pollutants or TACs, the project would generate vehicle trips consisting of mostly light-duty gasoline-powered vehicles, which would produce TAC and air pollutant emissions.

A community risk assessment for the project was completed to evaluate the health effects to nearby sensitive receptors from construction and operational emissions. Refer to Appendix A for details about community health risk modeling, data inputs, and assumptions. 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. Unlike the increased maximum cancer risk, the annual $PM_{2.5}$ concentration and HI values are not additive but based on the annual maximum values for the entirety of the project. A summary of the project's community risk impacts is provided below.

Construction Period Emissions

The construction maximally exposed individual (MEI) is located at the same receptor on two different floors. The cancer risk MEI is located at a receptor east of the project site on the second floor of a multi-family residence, and the annual $PM_{2.5}$ MEI is located at the same receptor but on the first floor. Without mitigation, construction risk impacts from the proposed project would exceed BAAQMD single-source thresholds for incremental cancer risk and $PM_{2.5}$ concentration per Table 4.3-6. The single source HI threshold is not exceeded before mitigation.

Table 4.3-6: Construction Risk Impacts at the Off-Site MEI

Source	Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Hazard Index
Project Construction: unmitigated	**20.68**	**0.32**	**0.02**
Project Construction: mitigated	4.82	0.28	0.01
BAAQMD Single-Source Threshold	*>10.0*	*>0.3*	*>1.0*
Exceed Threshold? Unmitigated	**Yes**	**Yes**	No
Exceed Threshold? Mitigated	No	No	No
Bold = exceeds the threshold			

Impact AQ-3: Construction of the proposed project would exceed BAAQMD single-source thresholds for incremental cancer risk and $PM_{2.5}$ concentration.

Mitigation Measures:

MM AQ-3.1: The project shall implement a feasible plan to reduce DPM emissions by 55 percent such that increased cancer risk and annual $PM_{2.5}$ concentrations from construction would be reduced below TAC significance levels. The 55-percent reduction can be achieved in one of the following ways:

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 interim emission standards for PM (PM_{10} and $PM_{2.5}$).

2. 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 emission standards for Tier 3 engines and include particulate matter emissions control equivalent to CARB Level 3 verifiable diesel emission control devices that altogether achieve a 55 percent reduction in particulate matter exhaust in comparison to uncontrolled equipment; alternatively (or in combination).
3. A combination of some of the following measures to achieve a reduction in construction diesel particulate matter emissions by 55 percent or greater:
    - Implementation of No. 1 above to use Tier 4 interim engines or alternatively fueled equipment,
    - Installation of electric power lines during early construction phases to avoid use of diesel generators and compressors,
    - Use of electrically-powered equipment,
    - Forklifts and aerial lifts used for exterior and interior building construction shall be electric or propane/natural gas powered,
    - Change in construction build-out plans to lengthen phases, and
    - Implementation of different building techniques that result in less diesel equipment usage.

Modeling was completed to determine the effectiveness of mitigation measure MM AQ-3.1 (restricting the project wide-fleet emissions) at reducing health risk impacts to project MEI. The modeling results show that with the implementation of mitigation measure MM AQ-3.1, the project's significant cancer risk and $PM_{2.5}$ construction impacts would be reduced to a less than significant level (see Table 4.3-6). Refer to Appendix A for additional details about the modeling.

Operation Period Emissions

The proposed project would not include stationary sources of TACs. The primary concern for local traffic-generated TAC impacts are diesel powered vehicles. Given that most project trips would be by light-duty, non-diesel vehicles and the minimal project trips (approximately 58 daily trips),[13] the mobile source emissions from the project would not result in significant health risk impacts.

Cumulative Emissions

Air pollution, by its nature, is largely a cumulative impact. Cumulative health risk assessments look at all substantial sources of TACs located within 1,000 feet of a project site that can affect sensitive receptors. These sources include rail lines, highways, busy surface streets, and stationary sources

[13] Based on Land Use 215 Single Family Attached trip generation rates of 7.20 daily, 0.48 AM peak hour, and 0.57 PM peak hour trips per dwelling unit. Source: Institute of Transportation Engineers. *Trip Generation Manual, 11th Edition*. 2021.

identified by BAAQMD. This distance of 1,000 feet is recommended by BAAQMD because adverse effects are the greatest within this distance. At further distances, health risk diminishes.

A review of the project area indicates existing sources of TACs within approximately 1,000 feet of the project site include: one local roadway (Lafayette Street), one local railway (Union Pacific Railroad), and two stationary sources (the City of Santa Clara Gianera Generating Station, which utilizes fossil fuels to generate electric power, and the City of Santa Clara Gianera Storm Water Pump Station, which has a generator on-site).

Community risk impacts from the cumulative sources to the project MEIs were modeled and the results are summarized in Table 4.3-7, which shows the project would not exceed the BAAQMD cumulative thresholds for cancer risk, annual $PM_{2.5}$ and HI.

Table 4.3-7: Impacts from Combined Sources at Project MEI

Source	Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Hazard Index
Project Construction: unmitigated	20.68	0.32	0.02
Project Construction: mitigated	4.82	0.28	0.01
Lafayette Street	4.20	0.10	0.01
Union Pacific Railroad	4.82	0.01	0.01
City of Santa Clara Gianera Generating Station	0.18	<0.01	<0.01
City of Santa Clara Gianera Storm Station	0.64	<0.01	<0.01
Cumulative Total Unmitigated	30.52	<0.45	<0.06
Cumulative Total Mitigated	14.66	<0.41	<0.05
BAAQMD Cumulative Source Threshold	*100*	*0.8*	*10.0*
Exceed Threshold? Unmitigated	No	No	No
Exceed Threshold? Mitigated	No	No	No

Health Effects from Criteria Air Pollutants

In a 2018 decision (Sierra Club v. County of Fresno), the Supreme Court of California determined that CEQA requires that the potential for the project's emissions to affect human health in the air basin must be disclosed when a project's criteria air pollutant emissions would exceed applicable thresholds and contribute a considerably to a significant cumulative impact. Federal and state ambient air quality standards are health-based standards and exceedances of those standards result in continued unhealthy levels of air pollutants. As stated in the BAAQMD CEQA Air Quality Guidelines, air pollution by its nature is largely a cumulative impact. No single project is sufficient in size to result in non-attainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a

project's individual emissions would be cumulatively considerable. If a project has a less than significant impact for criteria pollutants, it is assumed not to have an adverse health effect. As discussed under checklist questions a) and b), the project's construction and operation emissions would be below the BAAQMD criteria air pollutant emissions thresholds with the implementation of BMPs. For these reasons, the project's criteria air pollutant emissions would not result in a significant health impact. **(Less than Significant Impact)**

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

According to BAAQMD's CEQA Guidelines, an odor source with five or more confirmed complaints per year averaged over three years is considered to have a significant impact. Project construction activities could result in odorous emissions from diesel exhaust associated with construction equipment. However, these emissions would be temporary and diesel exhaust has highly diffusive properties. Hence, odorous exposure of sensitive receptors to these emissions would be limited and the impact is considered less than significant.

BAAQMD has identified a variety of land uses and types of operations that would produce emissions that may lead to odors, including wastewater treatment plants, sanitary landfills, food processing facilities, coffee roasters, composting facilities, and confined animal facility/feed lot/dairy facility. The project proposes a residential use, which does not fall under any of the land uses identified by BAAQMD to cause objectionable odors. Therefore, the impact would be less than significant. **(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 (including General Plan Policy 5.10.5-P34) that address existing air quality conditions affecting a proposed project.

A health risk assessment was completed to determine if existing TAC sources would have a health risk on the new sensitive receptors (residents) that the project would create. The TAC sources near the project site, including Lafayette Street, Union Pacific Railroad, the City of Santa Clara Gianera Generating Station, and the City of Santa Clara Gianera Storm Station, were included in this health risk assessment. Maximum increased cancer risks were calculated for the future residents of the project site using the maximum modeled TAC concentrations.

As shown on Table 4.3-8, the surrounding sources of TAC were determined to not exceed BAAQMD thresholds and would not represent a significant source of health hazard for the new residents of the proposed project.

Table 4.3-8: Community Health Risks at Project Site

Source	Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Hazard Index
Lafayette Street	5.61	0.14	0.02
Union Pacific Railroad	4.39	0.01	0.01
City of Santa Clara Gianera Generating Station	0.28	<0.01	<0.01
City of Santa Clara Gianera Storm Water Pump Station	0.99	<0.01	<0.01
BAAQMD Single Source Threshold	*10*	*0.3*	*1.0*
Exceed Threshold?	No	No	No
Cumulative Total	11.27	<0.17	<0.05
BAAQMD Cumulative Source Threshold	*100*	*0.8*	*10.0*
Exceed Threshold?	No	No	No

4.4 Biological Resources

The following discussion is based, in part, on a Preliminary Arborist Report completed by HortScience in October 2023. A copy of the report is provided in Appendix B of this document.

4.4.1 Environmental Setting

4.4.1.1 *Regulatory Framework*

Federal and State

Endangered Species Act

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

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

Migratory Bird Treaty Act

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

Sensitive Habitat Regulations

Wetland and riparian habitats are considered sensitive habitats under CEQA. They are also afforded protection under applicable federal, state, and local regulations, and are generally subject to regulation by the United States Army Corps of Engineers, Regional Water Quality Control Board (RWQCB), CDFW, and/or the USFWS under provisions of the federal Clean Water Act (e.g., Sections 303, 304, 404) and State of California Porter-Cologne Water Quality Control Act.

Fish and Game Code Section 1602

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

Local

City of Santa Clara 2010-2035 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating environmental impacts resulting from planned development projects within the City. The following General Plan policies related to biological resources are applicable to the proposed project.

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-P3	Require preservation of all City-designated heritage trees listed in the Heritage Tree Appendix 8.10 of the General Plan
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.

City Code Chapter 12.35 Trees and Shrubs

Per Section 12.35.080 of the City Code, the following trees shall not be removed without first obtaining a permit from the City:

(a) Heritage trees in all zoning districts.
(b) All specimen trees with a diameter of twelve (12) inches or more when measured at fifty-four (54) inches above natural grade of the following species on private property:
    (1) Aesculus californica (California buckeye);
    (2) Acer macrophyllum (big leaf maple);
    (3) Cedrus deodara (deodar cedar);
    (4) Cedrus atlantica “Glauca” (blue Atlas cedar);

(5) Cinnamomum camphora (camphor tree);
(6) Platanus racemosa (western sycamore);
(7) Quercus (native oak tree species), including:
(A) Quercus agrifolia (coast live oak);
(B) Quercus lobata (valley oak);
(C) Quercus kelloggii (black oak);
(D) Quercus douglasii (blue oak);
(E) Quercus wislizeni (interior live oak);
(8) Sequoia sempervirens (coast redwood); and
(9) Umbellularia californica (bay laurel or California bay).

(c) Approved development trees.
(d) A private tree which has a trunk with a diameter of thirty-eight (38) inches or more measured at fifty-four (54) inches above natural grade.
(e) A multibranched private tree which has major branches below fifty-four (54) inches above the natural grade with a diameter of thirty-eight (38) inches or more measured just below the first major trunk fork.

Pursuant to Section 12.35.090 of the City Code, an application for a tree removal permit shall be filed with the Community Development Department for the removal of a protected tree. At the discretion of the Department of Community Development, replacement trees will be required as a condition of issuance of a tree removal permit, or as a condition of any discretionary permit for development or redevelopment that involves the removal of a tree at the following replacement ratios:

- Dead tree or unsuitable tree (e.g., eucalyptus, liquidambar, pine, tree of heaven, tulip tree, and palm tree) – 1:1 Replacement ratio, minimum 15-gallon
- Single-family residence – 1:1 Replacement ratio, minimum 15-gallon
- Multifamily/commercial/industrial – 2:1 Replacement ratio (24-inch box), or 4:1 Replacement ratio (15-gallon)

4.4.1.2 *Existing Conditions*

The project site is located in a developed, urban area in the City of Santa Clara. Habitats in developed areas such as the project site and area include predominantly urban-adapted birds and animals. The main biological resources on site are trees. There are no waterways, wetlands, or other sensitive habitats located on or adjacent to the project site. The nearest waterway, San Tomas Aquino Creek, is 0.24 miles approximately miles west of the project site.
Mature trees (both native and non-native) are valuable to the human environment as they reduce the impacts of global climate change through CO_2 absorption, reduce urban heat island effect, provide nesting and foraging habitat for raptors and other migratory birds, and provide visual enhancement. The arborist report assessed a total of 18 trees, four of which were off-site and the remaining 14 trees were on-site. Three of the trees are protected trees under General Plan Policy 5.10.1-P4. Table 4.4-1 identifies the species and size of the trees surveyed.

Table 4.4-1: Trees Surveyed

Tree Number	Species	Diameter (inches)	Protected Tree Per General Plan Policy 5.10-1-P4?	Disposition?
150	Holly oak	6,5	Yes	Remove
151	Holly oak	4	Yes	Remove
152	Loquat	5,5,2	No	Remove
153	Holly oak	3	Yes	Remove
154	Almond	5,4,3,1,1,1	No	Remove
155	Almond	5	No	Remove
156	Carolina cherry Laurel	7	No	Remove
157	Mexican fan palm	21	No	Remove
158	Peach	11,4	No	Remove
159	Monterey cypress	12,7	No	Remove
160	Mexican fan palm	18	No	Remove
161	Apple	3,3,3,2,2,2	No	Remove
162	Japanese privet	4,4,3,3,3,2,2,2	No	Remove
163	Glossy privet	4,3,3,2,2	No	Remove
164	Callery pear	10	No	Remain (Off-site)
165	Victorian box	7	No	Remain (Off-site)
166	Mexican fan palm	16	No	Remain (Off-site)
167	Mexican fan palm	16	No	Remain (Off-site)

4.4.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?	☐	☒	☐	☐

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

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

Special-Status Species

The project site does not contain any habitat that is suitable for a special-status plant and animal species. The site is currently developed with a single-family dwelling in an urbanized area of the City. Consequently, the proposed project would not adversely affect any candidate, sensitive, or special-status species. **(Less than Significant Impact)**

Nesting/Migratory Birds

The trees and shrubs within and bordering the project site could potentially provide nesting habitat for birds, including migratory birds or raptors. Nesting birds are species protected under the provisions of the MBTA and California Fish and Game Code Sections 3503, 3503.5, and 3800. Therefore, project construction activities during the nesting season (February to August) could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment.

Disturbance that results in loss of reproductive effort and/or abandonment is considered a taking by the CDFW and would constitute a significant impact.

Impact BIO-1: Construction activities associated with the proposed project could result in the loss of fertile eggs, nesting raptors or other migratory birds, or nest abandonment, which would constitute a significant impact under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code Sections 3503, 3503.5, and 3800.

Mitigation Measures:

MM BIO-1.1: The project applicant shall schedule demolition and construction activities to avoid the nesting season, if feasible. The nesting season for most birds, including most raptors in the San Francisco Bay area, extends from February 1st through August 31st (inclusive).

If demolition and construction cannot be scheduled between September 1st and January 31st (inclusive), pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests shall be disturbed during project implementation. This survey shall be completed no more than 14 days prior to the initiation of construction activities during the early part of the breeding season (February 1st through April 30th inclusive) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May 1st through August 31st inclusive).

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

Prior to any tree removal, or approval of any grading or demolition permits (whichever occurs first), the ornithologist shall submit a report indicating the results of the survey and any designated buffer zones to the satisfaction of the Community Development Director or Director's designee.

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

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

The nearest waterway is San Tomas Aquino Creek, which is approximately 0.24 miles west of the project site. No riparian habitat or sensitive natural communities exist on or adjacent to the site. For these reasons, the development of the project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community. **(No Impact)**

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

The project site does not contain wetlands, nor are there wetlands adjacent to the site. As a result, the project would not affect any federally protected wetlands. **(No Impact)**

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

The project site is surrounded by residences and utility infrastructure (i.e., SFPUC property and Northern Receiving Station). Migratory movements of animal species are often associated with riparian corridors and there are no sensitive habitats or waterways on or adjacent to the project site. Due to the highly disturbed land surface of the project area, the project site does not provide dispersal habitat for any native resident migratory fish or wildlife species and does not act as a substantial wildlife corridor. For these reasons, the proposed project would have a less than significant impact on migratory fish or wildlife species, wildlife corridors, and wildlife nursery sites. As aforementioned, mitigation measures were identified to mitigate impacts to nesting raptors and other migratory birds during construction. As a result, the project would not substantially interfere with the movement of any native or migratory species, or the use of any nursery sites. **(Less than Significant Impact)**

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

The project would remove all 14 trees on site. While City Code Chapter 12.35 does not consider the trees on-site as protected trees, General Plan Policy 5.10.1-P4 protects all healthy oaks of any size. There are three holly oak trees on-site. According to the arborist report, these holly oak trees are young and in fair condition. In addition, General Plan Policy 5.3.1-P10 requires new development to provide a minimum 2:1 on- or off-site replacement for trees removed as part of the proposal; therefore, the project would be required to plant 28 replacement trees. The project proposes to plant 10 trees on-site and 18 trees off-site. The four trees off-site would be protected during asphalt demolition and project construction by implementing the tree protection measures identified in the arborist report, consistent with City Code Section 12.35.100(d). Therefore, the proposed project would have a less than significant impact on trees. **(Less than Significant Impact)**

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

The project site is not located within an adopted Habitat Conservation Plan, Natural Community Plan, or other approved habitat conservation plan. Therefore, the project would not conflict with any approved local, regional, or state habitat conservation plan. **(Less than Significant Impact)**

4.5 Cultural Resources

The following discussion is based upon a Literature Search prepared by Archaeological/Historical Consultants (A/HC) in May 2024. A copy of the Literature Search, which is a confidential report, is on file at the City of Santa Clara Community Development Department. The analysis is also based on a Historic Resource Evaluation (HRE) prepared by A/HC in May 2024. The HRE is included in Appendix C of this report.

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.[14]

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

[14] California Office of Historic Preservation. "CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6." Accessed June 6, 2024. http://www.ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf.

that existed during the resource's period of significance." The processes of determining integrity are similar for both the CRHR and NRHP and use the same seven variables or aspects to define integrity that are used to evaluate a resource's eligibility for listing. These seven characteristics include 1) location, 2) design, 3) setting, 4) materials, 5) workmanship, 6) feeling, and 7) association.

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

City of Santa Clara 2010-2035 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating environmental impacts resulting from planned development projects within the City. The following General Plan policies related to cultural resources are applicable to the proposed project.

Policies	Description
5.6.3-P1	Require that new development avoid or reduce potential impacts to archaeological, paleontological and cultural resources.
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 Criteria for Local Significance

The City of Santa Clara's Criteria for Local Significance establishes an evaluation framework that helps to determine significance for properties not yet included in the City's Historic Preservation and Resource Inventory. Any building, site, or property in Santa Clara that is 50 years old or older and archaeological significance is potentially eligible.[15]

To be historically or culturally significant, a property must meet at least one of the following criteria:

1. The site, building or property has character, interest, integrity, and reflects the heritage and cultural development of the City, region, state, or nation.
2. The property is associated with a historical event.
3. The property is associated with an important individual or group who contributed in a significant way to the political, social, and/or cultural life of the community.
4. The property is associated with a significant industrial, institutional, commercial, agricultural, or transportation activity.
5. A building's direct association with broad patterns of local area history, including development and settlement patterns, early or important transportation routes or social, political, or economic trends and activities. Included is the recognition of urban street pattern and infrastructure.
6. A notable historical relationship between a site, building, or property's site and its immediate environment, including original native trees, topographical features, outbuildings or agricultural setting.

To be architecturally significant, a property must meet at least one of the following criteria:

1. The property characterizes an architectural style associated with a particular era and/or ethnic group.
2. The property is identified with a particular architect, master builder or craftsman.
3. The property is architecturally unique or innovative.
4. The property has a strong or unique relationship to other areas potentially eligible for preservation because of architectural significance.
5. The property has a visual symbolic meaning or appeal for the community.
6. A building's unique or uncommon building materials, or its historically early or innovative method of construction or assembly.
7. A building's notable or special attributes of an aesthetic or functional nature. These may include massing, proportion, materials, details, fenestration, ornamentation, artwork or functional layout.

[15] City of Santa Clara. City of Santa Clara General Plan – 8.9 Historic Preservation and Resource Inventory. 8.9-18 and 8.9-19.

To be geographically significant, a property must meet at least one of the following criteria:

1. A neighborhood, group, or unique area directly associated with broad patterns of local area history.
2. A building's continuity and compatibility with adjacent buildings and/or visual contribution to a group of similar buildings.
3. An intact, historical landscape or landscape features associated with an existing building.
4. A notable use of landscaping design in conjunction with an existing building.

4.5.1.2 *Existing Conditions*

Subsurface Resources

A records search at the Northwest Information Center of the California Historical Resources Information System was completed, to identify all recorded archaeological sites on and within half a mile of the project site. No resources have been recorded on the site, while one archaeological resource is recorded within the half a mile radius.

Historic-era maps were also reviewed to identify the potential for historic archaeological resources in the project site. A review of historic maps shows no evidence of structures on the project area until 1968. Based on the review of historical land use patterns and available records, the project area has a moderate sensitivity for pre-historic resources and a low sensitivity for historic-era archaeological resources.

Historic Resources

A review of the NRHP, CRHR, and City's Historic Preservation and Resource Inventory shows the buildings on and adjacent to the site are not listed as historic resources.[16,17,18]

The project area has a long history of agricultural use. Into the late 20th century, the property was used for agriculture. In 1950, the SFPUC constructed an underground pipeline facility immediately to the north of the project parcel. The north side of Gianera Street was subdivided after 1968. In the mid-1990s, the area from Gianera Street south to Third Street was developed. The Northern Receiving Station electrical substation, north of the project, was constructed in 2002.

The single-family residence was constructed on-site between 1968 and 1974, with an attached two-car garage added at a later date. Behind the single-family residence is an accessory structure built between 1980 and 1985. The single-family residence was evaluated against the criteria of the NRHP and CRHR, in addition to the City's criteria for local significance. The evaluation concluded the

[16] City of Santa Clara. "Historic Resources." Accessed June 10, 2024. https://www.santaclaraca.gov/our-city/departments-a-f/community-development/planning-division/historic-preservation.
[17] National Park Service. "National Register Database and Research." Accessed June 21, 2024. https://www.nps.gov/subjects/nationalregister/database-research.htm.
[18] California Office of Historic Preservation. "California Historical Resources." Accessed June 21, 2024. https://ohp.parks.ca.gov/ListedResources/?view=name&criteria=Santa+Clara

building did not meet the NRHP, CRHR, and City's eligibility as historic resource because it is not an important example of the development trend in the Santa Clara Valley, not associated with important historical events, not associated with anyone significant locally, regionally, or nationally, and is not architecturally distinguished. Refer to Appendix C for additional details.

4.5.2 Impact Discussion

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

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

The single-family residence and converted-detached garage are not classified as historic resources, nor are they eligible for listing under the CRHR, NRHP, or local register. In addition, the buildings adjacent to the site are not listed as historic resources. For this reason, implementation of the project would not result in significant impacts to historic resources. **(No Impact)**

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

No resources have been previously recorded on-site. As discussed above, the project site has moderate sensitivity for buried Native American archaeological resources and a low sensitivity for historic-era archaeological resources. Therefore, the proposed project would have a potential significant impact on archaeological resources on the project site.

Impact CUL-1: Construction of the proposed project could result in impacts to as yet unidentified buried archaeological resources.

Mitigation Measures:

MM CUL-1.1: A qualified archaeologist shall provide sensitivity training to construction crew prior to the initial ground-breaking activities.

MM CUL-1.2: 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 stop, the Community Development Director shall be notified, and a qualified archeologist shall be retained by the project applicant. The archaeologist shall examine the find and make appropriate recommendations prior to issuance of building permits. Recommendations could include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery during monitoring would be submitted to the Community Development Director.

With implementation of mitigation measures MM CUL-1.1 and CUL-1.2, impacts to unknown buried archaeological resources would be reduced to a less than significant level by completing sensitivity training, stopping work 50 feet around the find, having the find examined by a qualified archaeologist, and implementing recommendations of the qualified archaeologist to preserve the find. **(Less than Significant Impact with Mitigation Incorporated)**

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

The project would not include any substantial excavations (except for trenching for utilities). Nevertheless, construction activities on-site could result in the exposure or destruction of as yet undiscovered human remains.

Impact CUL-2: Construction activities on-site could result in the exposure or destruction of as yet undiscovered human remains.

Mitigation Measure:

MM CUL-2.1: 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 by the project applicant/contractor. The Santa Clara County Coroner shall be notified by the project applicant, and the Coroner 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 shall make recommendations regarding proper

burial, which shall be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines.

With implementation of mitigation measure MM CUL-2.1, impacts to human remains would be less than significant by notifying the Santa Clara County Coroner, which includes the Coroner contacting the NAHC if the remains are believed to be Native American, and following recommendations of the most likely descendants. **(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 and Assembly Bill 1279

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

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

California Building Standards Code

The Energy Efficiency Standards for Residential and 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.[19] Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.[20]

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 II program in 2022 in coordination with the EPA and National Highway Traffic Safety Administration. The program combines the control of smog-causing pollutants and GHG emissions into a single coordinated set of requirements for vehicle model years 2026 through 2035. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel savings.[21]

Regional and Local

City of Santa Clara 2010-2035 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating environmental impacts resulting from planned development projects within the City. The following General Plan policies related to energy are applicable to the proposed project.

Policies	Description
5.10.3-P3	Reduce energy consumption through sustainable construction practices, materials, and recycling.
5.10.3-P10	Work with Silicon Valley Power to implement adequate energy distribution facilities to meet the demand generated by new development.

[19] California Building Standards Commission. "California Building Standards Code." Accessed June 6, 2024. https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo.
[20] California Energy Commission (CEC). "2022 Building Energy Efficiency Standards." Accessed June 6, 2024. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency.
[21] California Air Resources Board. "Advanced Clean Cars II." Accessed June 6, 2024. https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii.

Construction and Demolition Debris Recycling Program

This City of Santa Clara program requires project applicants seeking building and/or demolition permits for projects greater than 5,000 square feet to recycle at least 65 percent of discards.

Santa Clara Reach Code

Reach Codes are local ordinances adopted by the local government that exceed and enhance the current version of state's Energy and Green Building standards codes. By adopting the City Reach Code ordinance, the City of Santa Clara utilized this opportunity to not only meet local climate action goals to reduce greenhouse gas emissions, but also to achieve greater energy savings and accelerate decarbonization through all-electric requirements. The Santa Clara Reach Code includes all-electric building electrification requirements and mandatory measures for Electrical Vehicle Charging that are applicable to all new building permit applications filed with the City. Although the City has suspended enforcement of the all-electric construction requirements in the Reach Code in light of *California Restaurant Association v. City of Berkeley*, the project applicant has voluntarily committed to providing all-electric construction for this project.

4.6.1.2 *Existing Conditions*

Total energy usage in California was approximately 7,359 trillion British thermal units (Btu) in the year 2021, the most recent year for which this data was available.[22] Out of the 50 states, California is ranked second in total energy consumption and 49th in energy consumption per capita. The breakdown by sector was approximately 20 percent (1,473 trillion Btu) for residential uses, 19 percent (1,397 trillion Btu) for commercial uses, 23 percent (1,704 trillion Btu) for industrial uses, and 38 percent (2,785 trillion Btu) for transportation.[23] 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 2022 was consumed primarily by the non-residential sector (75 percent), followed by the residential sector consuming 25 percent. In 2022, a total of approximately 17,101 gigawatt hours (GWh) of electricity was consumed in Santa Clara County.[24]

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

[22] United States Energy Information Administration. "California State Energy Profile." Accessed June 6, 2024. https://www.eia.gov/state/print.php?sid=CA.
[23] Ibid.
[24] California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed June 6, 2024. http://ecdms.energy.ca.gov/elecbycounty.aspx.

Natural Gas

PG&E provides natural gas services within the City of Santa Clara. In 2023, California's natural gas supply came from a combination of in-state production and imported supplies from other western states and Canada.[25] In 2022, residential and commercial customers in California used 33 percent of the state's natural gas, power plants used 0.1 percent, the industrial sector used 32 percent.[26] In 2022, Santa Clara County used approximately 3.6 percent of the state's total consumption of natural gas.[27]

Fuel for Motor Vehicles

In 2023, California produced 112 million barrels of crude oil and in 2019, 11.7 billion gallons of gasoline were sold in California.[28, 29] The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles) in the United States has steadily increased from about 13.1 miles per gallon (mpg) in the mid-1970s to 26.0 mpg in 2022.[30] Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. That standard, which originally mandated a national fuel economy standard of 35 miles per gallon by the year 2020, was updated in April 2022 to require all cars and light duty trucks achieve an overall industry average fuel economy of 49 mpg by model year 2026.[31,32]

Energy Use by Existing Development

The units on-site are unoccupied; therefore, minimal electricity, natural gas, and fuel for motor vehicles are used.

[25] California Gas and Electric Utilities. 2023 *California Gas Report.* Accessed June 6, 2024. https://www.socalgas.com/sites/default/files/Joint_Biennial_California_Gas_Report_2023_Supplement.pdf

[26] United States Energy Information Administration. "Natural Gas Consumption by End Use. 2021." Accessed March 18, 2024. https://www.eia.gov/state/?sid=CA#tabs-2.

[27] California Energy Commission. "Natural Gas Consumption by County." Accessed June 6, 2024. http://ecdms.energy.ca.gov/gasbycounty.aspx.

[28] U.S. Energy Information Administration. "Petroleum & Other Liquids, California Field Production of Crude Oil." February 28, 2023. https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=mcrfpca1&f=a

[29] California Department of Tax and Fee Administration. "Net Taxable Gasoline Gallons." Accessed June 6, 2024. https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=VehicleTaxableFuelDist.

[30] United States Environmental Protection Agency. "The 2023 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." December 2023. https://www.epa.gov/system/files/documents/2023-12/420r23033.pdf

[31] United States Department of Energy. *Energy Independence & Security Act of 2007.* Accessed June 6, 2024. http://www.afdc.energy.gov/laws/eisa.

[32] United States Department of Transportation. USDOT Announces New Vehicle Fuel Economy Standards for Model Year 2024-2026." Accessed June 6, 2024. https://www.nhtsa.gov/press-releases/usdot-announces-new-vehicle-fuel-economy-standards-model-year-2024-2026.

4.6.2 Impact Discussion

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

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

Construction

Project construction would comply with the City's Construction and Demolition Diversion Program, which would reduce waste and energy consumption. The energy consumption and use of materials for the construction process would be minimized and would not be wasteful and inefficient in order to avoid excess monetary costs. For these reasons, the proposed project would not result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction.

Operation

Table 4.6-1 summarizes the energy usage of the proposed development.

Table 4.6-1 Estimated Annual Energy of Proposed Development

Electricity Use (kWh)	Natural Gas Use (kBtu)	Fuel
102,715	0	5,063.84

Source: Energy usage estimated from the Air Quality Assessment CalEEMod output. Fuel consumption based on an annual VMT of 131,660 with an average fuel economy of 26.0 mpg.

Table 4.6-1 shows that, since the proposed development would be all-electric, the proposed project would result in a decrease of 86,141 kBtu of natural gas usage annually compared to the existing use. The proposed project would result in a demand of 102,715 kWh, or a net increase of 89,029 kWh of electricity compared to existing conditions. The proposed project would be built according to California Building Code (CBC), CALGreen, and the City's Reach Code, which include provisions to

minimize wasteful energy consumption. The project would include rooftop solar panels. The project would also include one level 2 EV ready space and one level 1 EV ready space for each parking garage and install a level 2 EV ready space for each guest parking space. For these reasons, implementation of the proposed project would not result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during operation of the project. **(Less than Significant Impact)**

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

As discussed under checklist question a), the project would comply with the City's Reach Code and the most recent CALGreen requirements. Therefore, the project would not conflict with or obstruct state or local plans for renewable energy or energy efficiency. **(Less than Significant Impact)**

4.7 Geology and Soils

The following discussion is based upon a Geotechnical Investigation prepared by Silicon Valley Soil Engineering in February 2023. A copy of the report is attached in Appendix D.

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 CBC 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

City of Santa Clara 2010-2035 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating environmental impacts resulting from planned development projects within the City. The following General Plan policies related to geology are applicable to the proposed project.

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.

City Code

Title 15 of the 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 south, 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.

Topography and Soils

Soils on-site are comprised of stiff silty clay from the surface to the depth of seven feet, stiff sandy silty clay from the depths of seven feet to twelve feet, stiff clayey silt/silty clay from the depths of 12 to 20 feet, and stiff silt clay from the depths of 20 to 50 feet. Per the Geotechnical Investigation, the near-surface soil and the native soil on the site was found to have a highly expansion potential when subjected to fluctuation in moisture.[33] There are no unique geological features on or adjacent to the project site and the topography of the project area is relatively flat.

Seismicity

The project site is located within the San Francisco Bay Area, the most seismically active region in the United States. The project area is not located within the Alquist-Priolo Earthquake Fault Zone[34] nor are there any active faults present on-site. The closest active fault near the project site is the Silver Creek Fault, which is about 1.8 miles away from the site.

Liquefaction

Liquefaction occurs when water-saturated soils lose structural integrity due to seismic activity. Soils that are most susceptible to liquefaction are loose to moderately dense, saturated granular soils with poor drainage. Per the California Department of Conservation liquefaction zone map, the project site is located within a liquefaction zone. [35] While the project site is located within a liquefaction zone, the potential for liquefaction on-site is minimal because there is no liquefiable soil underlying the site.[36]

[33] Silicon Valley Soil Engineering. *2303 Gianera Street Geotechnical Investigation*. February 2023. Page 8.
[34] United States Geologic Survey. "Alquist-Priolo Faults." Accessed June 6, 2024. https://earthquake.usgs.gov/education/geologicmaps/apfaults.php.
[35] United States Department of Conservation. "CGS Seismic Hazards Program: Liquefaction Zones." Accessed June 6, 2024. https://gis.data.ca.gov/datasets/b70a766a60ad4c0688babdd47497dbad_0/explore?location=37.351970%2C-121.989118%2C18.63.
[36] Silicon Valley Soil Engineering. *2303 Gianera Street Geotechnical Investigation*. February 2023. Page 7.

Lateral Spreading

Lateral spreading is a type of ground failure related to liquefaction. It consists of the horizontal displacement of flat-lying alluvial material toward an open area, such as a steep bank of a stream channel. The project site is not adjacent to an open area. San Tomas Aquino Creek is located approximately 0.24 miles west of the project site. Based on these characteristics, the potential for lateral spreading on-site is low.

Landslides

Landslides occur when the stability of a slope changes from a stable to an unstable condition. Since the project area is relatively flat, the potential for landslides on-site is low.

Groundwater

Groundwater in the vicinity of the site has been encountered at 22 feet below the ground surface (bgs).[37] Groundwater levels fluctuate seasonally depending on variables including variations in rainfall, irrigation, and groundwater pumping.

Paleontological Resources

The project site is underlain by deposits from the Holocene age. Holocene geologic units are not generally considered paleontological sensitive because remains dated less than 10,000 years are not usually considered fossils. Recent sediments, however, may overlie older Pleistocene sediments with high potential to contain paleontological resources. These older sediments, often found at depths greater than 10 feet below the ground surface, have yielded the fossil remains of plants and extinct terrestrial Pleistocene vertebrates.

4.7.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				

[37] Silicon Valley Soil Engineering. *2303 Gianera Street Geotechnical Investigation*. February 2023. Page 3.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
- Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42)?	☐	☐	☒	☐
- Strong seismic ground shaking?	☐	☒	☐	☐
- Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
- Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?	☐	☒	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☐	☒	☐

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

As aforementioned, the project site is located within a seismically active region. The site could experience intense ground shaking in the event of a large earthquake. When subjected to fluctuations in moisture, the near-surface soil and the native surface soil at the site has been found to have a high expansion potential. The potential for lateral spreading during a seismic event would be low because the site is 0.24 miles east of the San Tomas Aquino Creek. The potential for liquefaction and landslides would also be low.

Consistent with state guidelines, a site-specific Geotechnical Investigation (see Appendix D) was prepared for the project and includes specific recommendations regarding site preparation and grading, water wells, foundation design, concrete slab-on-grade construction, retaining walls, excavation, drainage, on-site utility trenching, pavement design, and general construction. As discussed below, the project would implement all recommendations in the Geotechnical Investigation.

Impact GEO-1: Buildings constructed on-site could experience settlement in the event of strong ground shaking as a result of an earthquake.

Mitigation Measure:

MM GEO-1.1: Consistent with General Plan Policy 5.10.5-P6, the project shall be built using standard engineering and seismic safety design techniques. Building design and construction at the site shall be completed in conformance with the recommendations of the February 2023 geotechnical investigation prepared by Silicon Valley Soil Engineering for the project. 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 to confirm the findings of the report and consistency of the project plans with the recommendations. The building shall meet the requirements of applicable Building and Fire Codes, including the latest California Building Code, as adopted or updated by the City. The project shall be designed to withstand potential geologic hazards identified on the site, including shrink swell capacity of soils, 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.

The proposed project would be built in conformance with the recommendations of the site-specific Geotechnical Investigation (refer to Appendix D), and therefore, would not expose people or structures to substantial adverse effects due to ground shaking because the buildings would be

designed to withstand potential geologic hazards identified on the site. With implementation of the mitigation measure MM GEO-1.1, the project would not exacerbate existing geological hazards on-site such that it would impact or worsen off-site geological and soil conditions. **(Less than Significant Impact with Mitigation Incorporated)**

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

Project construction activities could expose disturbed areas and cause erosion during windy or rainfall events, leading to a loss of soil from the site and potential impacts on the City's storm drain system. However, as discussed in Section 4.10, Hydrology and Water Quality, the project would be required to control erosion and sedimentation using BMPs as required under the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System permit (MRP). The project would incorporate Low Impact Development (LID) stormwater treatment measures in accordance with the Municipal Regional Permit, which would reduce the rate and volume of runoff from the site. Adherence to these measures would ensure that substantial erosion does not occur during construction and post-construction periods. **(Less than Significant Impact)**

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

As discussed above, while the project site is located in a liquefaction zone, soil sampling determined on-site soils were not liquefiable. There are no other identified geologic conditions (i.e., lateral spreading, subsidence, or collapse) affecting the project site. **(Less than Significant Impact)**

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

The surface soil has a high expansion potential. The site-specific Geotechnical Investigation contains recommendations to reduce expansion potential. The project would be required to implement the recommendations identified in the site-specific Geotechnical Investigation per mitigation measure MM GEO-1.1 to reduce expansion potential to a less than significant level. Therefore, the project would not create substantial direct or indirect risks to life or property. **(Less than Significant Impact with Mitigation Incorporated)**

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

The site would not need to support septic tanks or alternative wastewater disposal systems. The project site is located within an urbanized area where sewers are available, and the project would connect to the existing sewer system to dispose of wastewater from the project site. **(No Impact)**

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

As described above, older sediments (greater than 10 feet bgs) have the potential to yield fossil remains. The project does not propose substantial excavation, except for trenching for utilities which would not be greater than 10 feet bgs. Therefore, the project would have a less than significant impact on paleontological resources. **(Less than Significant Impact)**

4.8 Greenhouse Gas Emissions

The following discussion is based upon a City of Santa Clara 2022 Climate Action Plan Compliance Checklist completed by the applicant in March 2024. The checklist is attached in Appendix **E** of this document.

4.8.1 Environmental Setting

4.8.1.1 *Background Information*

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

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

An expanding body of scientific research supports the theory that global climate change is currently causing changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. Atmospheric concentrations of CO_2 have increased by 50 percent since the Industrial Revolution and continue to increase at a rate of two parts per million each year, which will result in increased global temperatures.[38] The climate within California is adversely affected by the global warming trend. Increased precipitation and sea level rise will increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and loss of plant and animal species could also occur. Potential effects of global

[38] CARB. *2022 Scoping Plan for Achieving Carbon Neutrality*. December 2022. Page 3.

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 and State Bill 32

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

In 2016, SB 32 was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying Executive Order B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December of 2017 to accelerate 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 $MMTCO_2e$.

2022 Scoping Plan

On December 15, 2022, CARB approved the 2022 Scoping Plan. The 2022 Scoping Plan provides a sector-by-sector guide on how to reduce man-made (i.e., anthropogenic) GHG emissions by 85 percent below 1990 levels and achieve carbon neutrality by 2045 over a 25-year horizon.[39] The primary focus of the 2022 Scoping Plan is to reduce the usage of fossil fuels by electricizing the transportation sector, procuring electricity from renewable resources, phasing out natural gas in land use developments, and building transit-oriented communities that encourage multi-modal transportation. If implemented successfully, the 2022 Scoping Plan would not only reduce GHG emissions but also reduce smog-forming air pollution (NO_x) by 71 percent and reduce fossil fuel demand by 94 percent. The 2022 Scoping Plan also details natural carbon capture and storage process along with mechanical carbon capture programs to address the remaining 15 of anthropogenic GHG emissions that will remain post-2045. To meet these goals, CARB also includes a revised goal of reducing state GHG emissions 48 percent below 1990 levels by 2030.

[39] CARB. *2022 Scoping Plan for Achieving Carbon Neutrality*. December 2022. Page 5.

Senate Bill 375 and Plan Bay Area 2050

SB 375, known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. SB 375 builds upon AB 32 by requiring CARB to develop regional GHG reduction targets for automobile and light truck sectors for 2020 and 2035. The per capita GHG emissions reduction targets for passenger vehicles in the Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035.

Consistent with the requirements of SB 375, the Metropolitan Transportation Commission (MTC) partnered with the Association of Bay Area Governments (ABAG), BAAQMD, and the Bay Conservation and Development Commission to prepare the region's Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan process. The SCS is referred to as Plan Bay Area 2050.

Plan Bay Area 2050 is a long-range plan for the nine-county San Francisco Bay Area that provides strategies that increase the availability of affordable housing, support a more equitable and efficient economy, improve the transportation network, and enhance the region's environmental resilience. Plan Bay Area 2050 promotes the development of a variety of housing types and densities within identified priority development areas (PDAs). PDAs are areas generally near existing job centers or frequent transit that are locally identified for housing and job growth.[40]

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

SB 100

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

[40] Association of Bay Area Governments and Metropolitan Transportation Commission. *Plan Bay Area 2050*. October 21, 2021. Page 20.

Executive Order B-55-18 and Assembly Bill 1279

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

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

Advanced Clean Cars II Regulation

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

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

The CALGreen Code is part of the California Building Standards Code under Title 24, Part 11.[41] The CALGreen Code encourages sustainable construction standards that incorporate planning/design, energy efficiency, water efficiency resource efficiency, and environmental quality. These green building standard codes are mandatory statewide and are applicable to residential and non-residential developments. For example, CALGreen consists of a set of mandatory EV charging infrastructure standards for new development, as well as two more voluntary standards known as Tier 1 and Tier 2. The 2022 CALGreen standards require deployment of additional EV chargers in various building types, including multi-family residential, hotel, and non-residential land uses. They include requirements for both EV capable parking spaces and the installation of EV supply equipment for multi-family residential and nonresidential buildings. The 2022 CALGreen standards also include requirements for both EV readiness and the actual installation of EV chargers.

[41] California Department of General Services. "CALGreen." Accessed June 12, 2024. https://www.dgs.ca.gov/BSC/CALGreen.

CALGreen also requires new construction and demolition projects to have a diversion of at least 65 percent of the construction waste generated. The most recent CALGreen Code (2022 CALGreen Code) became effective January 1, 2023.

The California Building Energy Efficiency Standards (California Energy Code) is under Title 24, Part 6 and is overseen by the CEC. This code includes design requirements to conserve energy in new residential and non-residential developments. This Energy Code is enforced and verified by cities during the planning and building permit process. The 2022 Energy Code replaced the 2019 Energy Code as of January 1, 2023. Major changes include electric-ready single-family and multi-family residence and solar photovoltaic systems and energy storage systems for residential and commercial developments. [42,43,44]

Regional and Local

2017 Clean Air Plan

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

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

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

Santa Clara Reach Code

In September 2022, the City of Santa Clara adopted reach codes that require all new developments with permit applications filed on or after September 15, 2022, to be all electric buildings (Chapter 15.36 Energy Code). New developments must also comply with the building energy efficiency mandatory measures for solar photovoltaic systems pursuant with the reach codes. Additionally, all residential and non-residential developments must comply with the CALGreen mandatory measures

[42] California Energy Commission. "2022 Building Energy Efficiency Standards What's New for Single-Family Residential." Revised July 15, 2022. Accessed June 6, 2024. https://www.energy.ca.gov/sites/default/files/2022-08/2022_Single-family_Whats_New_Summary_ADA.pdf.
[43] California Energy Commission. "2022 Building Energy Efficiency Standards What's New for Multifamily." Revised August 4, 2022. Accessed June 6, 2024. https://www.energy.ca.gov/sites/default/files/2022-08/2022_Multifamily_Whats_new_Summary_ADA.pdf.
[44] California Energy Commission. "2022 Building Energy Efficiency Standards What's New for Nonresidential." Revised August 4, 2022. Accessed June 6, 2024. https://www.energy.ca.gov/sites/default/files/2022-08/2022_Nonresidential_Whats_New_Summary_ADA.pdf.

for EV charging. Although the City has suspended enforcement of the all-electric construction requirements in the Reach Code in light of California Restaurant Association v. City of Berkeley, the project applicant has voluntarily committed to providing all-electric construction for this project.

City of Santa Clara 2010-2035 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating environmental impacts resulting from planned development projects within the City. The following General Plan policies related to GHGs are applicable to the proposed project.

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.
5.8.5-P1	Require new development and City employees to implement TDM programs that can include site-design measures, including preferred carpool and vanpool parking, enhanced pedestrian access, bicycle storage and recreational facilities.
5.8.1-P4	Expand transportation options and improve alternate modes that reduce GHG emissions.

Santa Clara Climate Action Plan 2022

The City of Santa Clara Climate Action Plan 2022 (2022 CAP) is designed to meet the statewide GHG reduction targets for 2030 set by SB 32. As a Qualified Climate Action Plan, the 2022 CAP allows for tiering and streamlining of GHG analyses under CEQA. The 2022 CAP identifies existing City policies and regulations as well as new measures to be implemented by development projects in the areas of building/energy use, transportation and land use, materials and consumption, natural resources and water resources, and community resilience and wellbeing. Projects that comply with the policies and strategies outlined in the 2022 CAP would have a less than significant GHG impact.

Construction and Demolition Debris Recycling Program

This City of Santa Clara program requires project applicants seeking building and/or demolition permits for projects greater than 5,000 square feet to recycle at least 65 percent of discards.

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.

GHG emissions are currently generated by daily traffic trips to and from the project site, as well as electricity required for lighting, heating, and cooling of the existing buildings.

4.8.2 Impact Discussion

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

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

Construction Emissions

Construction-related GHG emissions vary depending on the level of activity, length of the construction period, specific construction operations, types of equipment, and number of personnel. The project would be constructed for a period of approximately 11 months. The proposed project would result in a temporary increase in GHG emissions associated with construction activities including operation of construction equipment and emissions from construction workers' personal vehicles traveling to and from the site.

Neither the City nor BAAQMD have an adopted threshold of significance for construction-related GHG emissions. BAAQMD encourages the incorporation of BMPs to reduce GHG emissions during construction where feasible and applicable.

In conformance with CALGreen and the City's Construction and Demolition Debris Recycling Program, the project would track and divert at least 65 percent of discards generated during project demolition and construction in order to reduce the amount of construction waste going to the landfill. In addition, the project would be required to comply with the Conditions of Approval listed under checklist question a) in Section 4.3 Air Quality, which include minimizing idling times of construction equipment to five minutes or less. Because project construction would be a temporary condition and would not result in a permanent increase in local or regional emissions that would interfere with the implementation of AB 32 or SB 32, and the fact that the project would implement BMPs, the increase in project construction emissions would be less than significant. **(Less than Significant Impact)**

Operational Emissions

Per CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the Lead Agency and must be based to the extent possible on scientific and factual data. The City's 2022 Climate Action Plan is a GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b), therefore, threshold B of the BAAQMD threshold of significance for projects is used. The project is part of planned growth from the build out of the General Plan FEIR and would comply with all applicable 2022 CAP actions (see discussion under checklist question b). Therefore, the project would result in a less than significant operational GHG emissions impact. **(Less than Significant Impact)**

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

2017 Clean Air Plan

As discussed in Section 3.3 Air Quality, the project would not conflict with the 2017 CAP because it would not exceed the BAAQMD impact thresholds for criteria air pollutant emissions during construction and operation; would implement construction BMPs to control dust, limit equipment idling, and properly maintaining equipment; and would implement mitigation measure MM AQ-3.1 during construction to reduce health risk impacts below the BAAQMD impact thresholds for health risk and hazards. For these reasons, the project would not inhibit BAAQMD or partner agencies from continuing progress toward attaining state and federal air quality standards and eliminating health-risk disparities from exposure to air pollution among Bay Area communities. Therefore, the proposed project would not conflict with or obstruct implementation of the 2017 CAP. **(Less than Significant Impact)**

2022 Climate Action Plan

In June 2022, the City of Santa Clara adopted the updated 2022 CAP. As a Qualified Climate Action Plan, the 2022 CAP allows for tiering and streamlining of GHG analyses under CEQA through the year 2030. Therefore, if a project is consistent with the City's 2022 CAP and is approved prior to January 1, 2031, it is presumed that the project would not have significant GHG emissions under CEQA. The project's conformance with applicable reduction measures for new development in the CAP are summarized below.

The project would comply with the City's Reach Code by constructing all-electric buildings and having one level two EV-ready space and one level one EV-ready space in each garage. The project would be required to be built in accordance with the most recent CALGreen requirements. The project would be compliant with SB 1383 since organic waste would be collected and delivered to a mixed waste processing facility where it would be separated from the garbage and made into compost material. In addition, to comply with Action N-3-5, the on-site irrigation system would be recycled water ready. To reduce stormwater pollution, the project proposes flow-through planters

along the project frontage. The project would reconstruct a portion of the sidewalk along the site frontage to meet current sidewalk standards. The project would also use high albedo concrete pavers. Refer to Appendix E for more detail about the project's conformance with the 2022 CAP Compliance Checklist.

For these reasons, the project would be consistent with the 2022 CAP and result in a less than significant GHG impact. **(Less than Significant Impact)**

4.9 Hazards and Hazardous Materials

4.9.1 Environmental Setting

The information in this section is based upon a Phase I Environmental Site Assessment (ESA) and a Phase II Limited Agricultural Investigation Report prepared by AEI Consultants in April 2024. The reports are included in Appendix F and Appendix G of this document.

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

<u>Federal Aviation Regulations Part 77</u>

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.[45]

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.

[45] United States Environmental Protection Agency. "Superfund: CERCLA Overview." Accessed June 6, 2024. https://www.epa.gov/superfund/superfund-cercla-overview.

The Federal Hazardous and Solid Waste Amendments 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.[46]

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).[47]

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.

Asbestos-Containing Materials

Friable asbestos is any asbestos-containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand, allowing the asbestos particles to become airborne. Common examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Common examples of non-friable ACMs are asphalt roofing shingles, vinyl floor tiles, and transite siding made with cement. The EPA began phasing out use of friable asbestos products in 1973 and issued a ban in 1978 on manufacture, import, processing, and distribution of some asbestos-containing products and new uses of asbestos products.[48] The EPA is currently considering a proposed ban on on-going use of asbestos.[49] 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.

[46] United States Environmental Protection Agency. "Summary of the Resource Conservation and Recovery Act." Accessed June 6,2024. https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act.
[47] California Environmental Protection Agency. "Cortese List Data Resources." Accessed June 6,2024. https://calepa.ca.gov/sitecleanup/corteselist/.
[48] United States Environmental Protection Agency. "EPA Actions to Protect the Public from Exposure to Asbestos." Accessed April 19, 2022. https://www.epa.gov/asbestos/epa-actions-protect-public-exposure-asbestos
[49] Ibid.

CCR Title 8, Section 1532.1

The United States Consumer Product Safety Commission banned the use of lead-based paint (LBP) 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

City of Santa Clara 2010-2035 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating environmental impacts resulting from planned development projects within the City. The following General Plan policies related to hazards and hazardous materials are applicable to the proposed project.

Policies	Description
5.10.5-P22	Regulate development on sites with known or suspected contamination of soil and/or groundwater to ensure that construction workers, the public, future occupants and the environment are adequately protected from hazards associated with contamination, in accordance with applicable regulations.
5.10.5-P23	Require appropriate clean-up and remediation of contaminated sites.
5.10.5-P24	Protect City residents from the risks inherent in the transport, distribution, use and storage of hazardous materials
5.10.5-P26	Survey pre-1980 buildings and abate any lead-based paint and asbestos prior to structural renovation and demolition, in compliance with all applicable regulations.

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*

History of the Project Site

The current single-family residence and garage (which is now converted into two dwelling units) on-site was developed in 1979. Before the development of the single-family residence in 1979, the project site was used as agricultural land from 1939 to 1974. From 1900 to 1938 it is assumed that the site would have been agricultural land, if not developed with a residence. The site was undeveloped from 1889 to 1899. Based on the Phase II prepared for the site, which tested soils on-

site, no concentrations of organochlorine pesticides (OCPs), arsenic, or lead were detected above the appliable Environmental Screening Levels (ESLs) and/or background concentrations.

On-site Sources of Contamination

Based on the Phase I ESA prepared for the site, there are no Recognized Environmental Conditions (RECs) on-site. RECs are defined as the presence of hazardous substances or petroleum projects in, on, or at the subject property due to a release to the environment; the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or the presence of hazardous substances or petroleum projects in, on, or at the subject property under conditions that pose a material threat of a future release to the environment. Two unlabeled, 55-gallon drums were observed behind the accessory structure on the northeast portion of the property. The contents of the drums are unknown but are not considered a REC as no evidence of leaking was observed. The Phase I ESA did not identify any other environmental conditions that warrant further discussion.

Asbestos and Lead-Based Paint

LBP and ACMs can cause hazards during demolition of structures if these materials were used in the original construction of on-site structures. The buildings on-site were constructed before 1980 and, therefore, could contain paint with lead and ceiling and floor tiles containing ACMs.

Off-site Sources of Contamination

A review of the regulatory database shows there are no sites within a one-mile radius that have a potential environmental concern to the project site, or vapor migration from contaminated soil and/or groundwater within a third-mile radius of the project site that would be released to the site.

There is a natural gas pipeline located in Gianera Street, however, no stressed vegetation or olfactory indications of a release were observed in the vicinity of the pipeline and is not expected to represent a potential threat to soil or groundwater conditions on-site.

Other Hazards

The Norman Y. Mineta San José International Airport is located approximately two miles southeast of the project site. The project site is 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), however, it is not located within any of the safety zones or the 65 dB noise contour area.[50] The project site is not in a fire hazard severity zone.[51]

[50] Santa Clara County Airport Land Use Commission. *San José Mineta International Airport. Airport Land Use Compatibility Plan*. March 27, 2024. Figure 8.
[51]Cal Fire Office of the State Fire Marshal. "Fire Hazard Severity Zone Viewer." Accessed June 6,2024. https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/.

4.9.2 Impact Discussion

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

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

Future residential development at the project site would likely include the on-site use and storage of cleaning supplies and maintenance chemicals in small quantities. The small quantities of cleaning supplies and maintenance chemicals used on-site would not pose a risk to adjacent land uses. **(Less than Significant Impact)**

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

As discussed under Section 4.9.1.2, no significant levels of contamination were found in on-site soils and no off-site sources of contamination were identified that could affect the project. As aforementioned, there are two 55-gallon drums on site that are not considered to be a REC and, with the implementation of the below condition of approval, shall be properly removed and disposed.

Condition of Approval:

- All 55-gallon drums on-site shall be properly removed and disposed of by the applicant at the appropriate facility. Removal activities shall be completed under the direction of the Santa Clara Fire Department.

The only identified hazardous materials of concern on-site are ACMs and LBP. The project proposes the demolition of buildings constructed between 1974 and 1979, which likely contain ACMs and LBP. During demolition, asbestos particles could be released and expose construction workers and nearby building occupants to harmful levels of asbestos. If the LBP is still bonded to the building materials, its removal is not required prior to demolition. If the LBP is flaking, pealing, or blistering, it should be removed prior to demolition. Demolition of the existing buildings could expose construction workers or occupants of adjacent buildings to harmful levels of ACMs or lead. The project would be required to implement the following measures consistent with OSHA requirements, as Conditions of Approval, to reduce impacts due to the presence of ACMs and/or LBP.

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 building(s) to determine the presence of ACSMs and/or LBP.
- During demolition activities, all building materials containing LBP shall be removed in accordance with Cal/OSHA Lead in Title 8, California Code of Regulations (CCR), Section 1532.1, including employee training, employee air monitoring, and dust control. Any debris or soil containing LBP or coatings shall be disposed of at landfills that meet acceptance criteria for the type of lead being disposed.
- All potentially friable ACMs shall be removed in accordance with NESHAP guidelines prior to demolition or renovation activities that may disturb ACMs. All demolition activities shall be undertaken in accordance with Cal/OSHA standards contained in Title 8, CCR, Section 1529, to protect workers from asbestos exposure.

- 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 the standards stated above.
- Materials containing more than one-percent asbestos shall also be removed in accordance with BAAQMD requirements and notifications.

With implementation of the identified Conditions of Approval, demolition of the existing residence would result in a less than significant ACM and LBP impact by testing the soil on-site, implementing a SMP if necessary, and testing for ACM and LBP prior to demolishing structures on-site. **(Less than Significant Impact)**

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

There is one school, Kathryn Hughes Elementary School, within one-quarter mile of the project site. However, as discussed under checklist questions a) and b), the project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, nor would it 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 with implementation of the Conditions of Approvals identified under checklist question b). For these reasons, the project would not emit significant hazardous emissions or acutely hazardous materials within one-quarter mile of an existing or proposed school. **(Less than Significant Impact)**

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

The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.[52] **(No Impact)**

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

The Norman Y. Mineta San José International Airport is located approximately two miles southeast of the project site. As mentioned in Section 4.9.1.3, the project site is within the Norman Y. Mineta San José International Airport CLUP-defined AIA but is not within its safety zones or 65-db noise contour area.

[52] California Environmental Protection Agency. "Cortese List Data Resources." Accessed June 6,2024. https://calepa.ca.gov/sitecleanup/corteselist/.

For the project site, any proposed structure that exceeds 312 feet in height above mean sea level (or 298 feet above ground) on-site is required under FAR Part 77 to be submitted to the FAA for review.[53] The proposed townhouse units would have a maximum height of 30 feet to the highest point of the roof. Therefore, the proposed project would not be considered an aircraft hazard. For these reasons, the project would not result in a substantial safety hazard for people residing or working at the project site. **(Less than Significant Impact)**

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

Construction of the project could temporarily impede the circulation of adjacent roadways, but this would not prevent emergency responders from servicing the site or the surrounding areas. Once operational, the project would increase local traffic, but this increase would be minor and would not interfere with the City's emergency response planning. Thus, the impact would be less than significant. **(Less than Significant Impact)**

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

The project is an urbanized portion of the City and is not adjacent to any wildland. The project site is not in a fire hazard severity zone.[54] **(No Impact)**

[53] Santa Clara County Airport Land Use Commission. *San José Mineta International Airport. Airport Land Use Compatibility Plan*. March 27, 2024. Figure 6.
[54]Cal Fire Office of the State Fire Marshal. "Fire Hazard Severity Zone Viewer." Accessed June 6,2024. https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/.

4.10 Hydrology and Water Quality

4.10.1 Environmental Setting

4.10.1.1 *Regulatory Framework*

Federal and State

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

Under Section 303(d) of the federal Clean Water Act, the SWRCB and RWQCBs are required to identify impaired surface water bodies that do not meet water quality standards and develop total maximum daily loads for contaminants of concern. The list of the state's identified impaired surface water bodies, known as the "303(d) list," can be found on the on the SWRCB's website.[55]

National Flood Insurance Program

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

Regional and Local

San Francisco Bay Basin Plan

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

[55] California State Water Resources Control Board. "2020-2022 California Integrated Report (Clean Water Act Section 303(d) List and 305(b) Report)." May 11, 2022. Accessed June 6,2024. https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_integrated_report.html.

by a City's stormwater drainage system. The Basin Plan also describes watershed management programs and water quality attainment strategies.

Municipal Regional Permit Provision C.3

The San Francisco Bay RWQCB re-issued the Municipal Regional Stormwater NPDES Permit (MRP) in May 2022 to regulate stormwater discharges from municipalities and local agencies (co-permittees) in Alameda, Contra Costa, San Mateo, and Santa Clara Counties, and the cities of Fairfield, Suisun City, and Vallejo.[56] Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 5,000 square feet or more of impervious surface area are required to implement site design, source control, and Low Impact Development (LID)-based stormwater treatment controls to treat post-construction stormwater runoff. LID-based treatment controls are intended to maintain or restore the site's natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g., rainwater harvesting for non-potable uses). The MRP also requires that stormwater treatment measures are properly installed, operated, and maintained.

Water Resources Protection Ordinance and District Well Ordinance

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

2021 Groundwater Management Plan

The 2021 Groundwater Management Plan (GWMP) describes Valley Water's comprehensive groundwater management framework, including existing and potential actions to achieve basin sustainability goals and ensure continued sustainable groundwater management. The GWMP covers the Santa Clara and Llagas subbasins, which are located entirely in Santa Clara County. Valley Water manages a diverse water supply portfolio, with sources including groundwater, local surface water, imported water, and recycled water. About half of the county's water supply comes from local sources and the other half comes from imported sources. Imported water includes the Valley Water's State Water Project and Central Valley contract supplies and supplies delivered by the SFPUC to cities in northern Santa Clara County. Local sources include natural groundwater recharge and surface water supplies. A small portion of the county's water supply is recycled water.

Local groundwater resources make up the foundation of the county's water supply, but they need to be augmented by Valley Water's comprehensive water supply management activities to reliably meet the county's needs. These include the managed recharge of imported and local surface water

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

and in-lieu groundwater recharge through the provision of treated surface water and raw water, acquisition of supplemental water supplies, and water conservation and recycling.[57]

Construction Dewatering Waste Discharge Requirements

Each of the RWQCBs regulates construction dewatering discharges to storm drains or surface waters within its Region under the NPDES program and Waste Discharge Requirements.

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.

City of Santa Clara 2010-2035 General Plan

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

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.

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

Policies	Description
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.
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, Storm Drain 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 Floodplain Management Regulations (Chapter 15.45) and requirements for grading and excavation permits and erosion control (Chapter 15.15).

4.10.1.2 *Existing Conditions*

Storm Drainage

The site is currently developed with 10,222 square feet of impervious area and 6,671 square feet of pervious area. Runoff from the site flows to a 10-inch storm drain in Gianera Street.

Groundwater

The depth to groundwater can vary seasonally and can be influenced by underground drainage patterns, regional fluctuation, and other factors. Groundwater was found on the site at approximately 22 bgs.[58] The project site is in the Santa Clara Subbasin but is not in a recharge area.[59]

Flooding

Based on the FEMA flood maps, the project site is located in Zone X which is an area of 0.2 percent chance of flood, or areas of one percent annual chance of flood with average depths of less than one-foot, or with drainage areas less than one square mile, and areas protected by levees from one percent annual chance of flood.[60] This area is not a special flood hazard area.

[58] Silicon Valley Soil Engineering. *2303 Gianera Street Geotechnical Investigation.* February 2023.
[59] Valley Water. "Groundwater Management Plan 2021 for the Santa Clara and Llagas Subbasins." November 2021.
[60] FEMA. "FEMA Flood Map Service Center: Search By Address." Accessed June 6, 2024. FEMA Flood Map Service Center | Search By Address.

Dam Failure

According to Valley Water, the project site is located in a dam failure inundation hazard zone for the following dams: Calero Dam and Reservoir, Almaden Dam and Reservoir, Anderson Dam and Reservoir, Coyote Dam, Guadalupe Dam and Reservoir, and Lexington Dam and Reservoir.[61] Valley Water operates a comprehensive dam safety program to protect the public, which includes periodic special engineering studies, surveillance and monitoring, dam inspections and maintenance, and emergency response and preparedness.[62]

Seiches and Tsunamis

A seiche is the oscillation of water in an enclosed body of water such as a lake or the San Francisco Bay. There are no landlocked bodies of water near enough that would affect the site in the event of a seiche. A tsunami is a sea wave generated by an earthquake, landslide, or other large displacement of water in the ocean. There are no bodies of water near the project site that would affect the site in the event of a tsunami.

4.10.2 Impact Discussion

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

[61] Valley Water. "Local Dams and Reservoirs." Accessed June 6, 2024. https://www.valleywater.org/your-water/local-dams-and-reservoirs.
[62] Valley Water. "Dam Safety Program." Accessed June 19, 2024. https://www.valleywater.org/flooding-safety/dam-safety-program.

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

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

Construction Impacts

The proposed project is required to comply with the BMPs listed below to reduce 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 shall be suspended during period of high winds.
- All exposed or disturbed soil surfaces shall be watered at least twice daily to control dust as necessary.
- Stockpiles of soil or other materials that can be blown by the wind shall 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 shall be swept daily (with water sweepers).

- Establish and maintain effective perimeter controls.
- All construction entrances and exits shall be stabilized to sufficiently control erosion and sediment discharges.
- Vegetation in disturbed areas shall be replanted as quickly as possible.

With the implementation of the Conditions of Approval above, construction of the proposed project would not violate any water quality standards, or waste discharge requirements, or otherwise substantially degrade surface or ground water quality because measures would be implemented during construction to prevent water and wind from carrying soil off of the project site in a manner that could impact water and air quality. **(Less than Significant Impact)**

Post-Construction Impacts

The site is currently developed with 10,222 square feet of impervious area and 6,671 square feet of pervious area. The project would result in 14,353 square feet of impervious area and 2,541 square feet of pervious area, hence the impervious area would be increased by 4,131 square feet (40.4 percent) compared to existing conditions.

Construction of the project would result in the replacement of more than 5,000 square feet of impervious surface area; therefore, the project would be required to comply with the MRP. The MRP requires all post-construction stormwater runoff to be treated by numerically sized LID treatment controls, such as biotreatment facilities. The project specifically proposes using concrete lined flow through planters with an underdrain and subsurface infiltration systems, to treat stormwater.

As aforementioned, the project will include LID features and will comply with all applicable RWQCB BMPs, which would reduce post-construction water quality impacts to a less than significant level by installing treatment controls to treat stormwater runoff. **(Less than Significant Impact)**

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

Groundwater recharge occurs when surface water percolates through the soil to recharge groundwater aquifers. The proposed project would increase on-site impervious surfaces by approximately 4,131 square feet compared to existing conditions. However, the project site is not located within the recharge area of the Santa Clara Subbasin, and the project would construct on-site infiltration systems, in compliance with Provision C.3 of the MRP. Implementation of the project would not require pumping of groundwater underneath the project site, nor would it interfere with any recharge facilities operated by Valley Water. For these reasons, the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. **(Less than Significant Impact)**

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

As discussed under checklist question a) the project would increase the impervious surface area on-site by 4,131 square feet, consequently increasing stormwater runoff from the site compared to existing conditions. However, the project would implement BMPs and comply with the MRP to allow infiltration on-site and reduce erosion and siltation to a less than significant level. On-site stormwater runoff would be directed to the LID treatment areas to allow for infiltration prior to discharge to the storm drain system. The existing storm drain infrastructure in the area has sufficient capacity to accommodate runoff from the site and no off-site flooding would occur as a result of the project.[63] Therefore, the project would not substantially increase erosion or increase the rate or amount of stormwater runoff.

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

The project site is located in Zone X which is an area that is not subject to a 100-year flood hazard. The project would not be subject to inundation by seiche or tsunami due to its location. As discussed above, the project site is in a dam failure inundation hazard zone, however, Valley Water routinely inspects its dams for safety, which reduces the potential for dam failure and inundation. In addition, the project would not store substantial amounts of hazardous materials or other pollutants on-site. Therefore, implementation of the project would not significantly risk release pollutants due to dam, seiche, or tsunami inundation. **(Less than Significant Impact)**

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

As discussed under checklist question a), the project would implement the Conditions of Approval and the MRP that would improve water quality. As aforementioned under checklist question b) the site is not in a groundwater recharge zone. Therefore, the project would not interfere with groundwater recharge or deplete groundwater supplies. For these reasons, implementation of the project would not conflict with, or obstruct implementation of, any water quality control plan or sustainable groundwater management plan. **(Less than Significant Impact)**

[63] Nguyen, Viet. Associate Engineer, City of Santa Clara Department of Public Works. Personal communications. August 30, 2024.

4.11 Land Use and Planning

4.11.1 Environmental Setting

4.11.1.1 *Regulatory Framework*

Local

City of Santa Clara 2010-2035 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating environmental impacts resulting from planned development projects within the City. The following General Plan policies related to land use and planning are applicable to the proposed project.

Policies	Description
5.3.1-P8	Work with property owners to improve or redevelop underutilized and vacant properties.
5.3.1-P29	Encourage design of new development to be compatible with, and sensitive to, nearby existing and planned development, consistent with other applicable General Plan policies.

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 zoning 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*

Existing Land Uses

The 0.39-acre site is currently developed with a one-story single-family dwelling, an accessory dwelling, and shed totaling 4,400 square feet. The site is zoned as R2, Single-Family, and has a General Plan land use designation of Low Density Residential. Low Density Residential has densities of eight to 19 units per gross acre and can include detached or attached dwelling units.[64] It includes a variety of other housing types, such as townhomes.

[64] City of Santa Clara. "Land Use Classifications." Accessed June 6, 2024. Land Use Classifications | City of Santa Clara (santaclaraca.gov).

Surrounding Land Uses

Development in the area consists of a multi-family residential building to the east, townhouses to the west, and single-family residences to the south, and the Northern Receiving Station to the north. Between the project site and the Northern Receiving Station is a strip of undeveloped land owned by the SFPUC with underground utility lines.

4.11.2 Impact Discussion

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

a) Would the project physically divide an established community?

The project would demolish a single-family dwelling and associated improvements on-site to develop eight townhouse units in an existing residential neighborhood. The project does not propose any physical features (i.e., a railway, roadway, highway) that would physically divide the community. For these reasons, the project would not physically divide an established community. **(Less than Significant Impact)**

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

The proposed project is consistent with the existing Low Density Residential General Plan land use designation. The project would, however, require a rezoning to PD.

PD Zoning is meant for developments that are compatible with the community and it allows for most land uses, including residential uses. Under the PD zoning designation, development projects must be designed to provide a similar character to the surrounding neighborhood and allow for integration with the existing architecture and quality of surrounding properties. Moreover, the number of dwelling units proposed for a residential property should not substantially deviate from what the General Plan designation permits for the site. The project proposes a townhouse development adjacent to existing townhouse, single-family, and multi-family developments.

As described throughout this Initial Study, with incorporation of the Conditions of Approval, mitigation measures, regulatory requirements, and mitigation measures, the project would not cause a significant environmental impact due to a conflict with plans, policies or regulations adopted for the purpose of avoiding or mitigating an environmental effect. As a result, the impact is less than significant. **(Less than Significant Impact)**

4.12 Mineral Resources

4.12.1 Environmental Setting

4.12.1.1 *Regulatory Framework*

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 City of Santa Clara is located in an area zoned MRZ-1 by the Department of Conservation, which is classified as an area where no significant mineral deposits are present.[65] The City is not known to support significant resources of any type. No mineral resources are currently being extracted in the City.

4.12.2 Impact Discussion

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

[65] City of Santa Clara. *2010-2035 General Plan Integrated Final Environmental Impact Report* (SCH# 2008092005). January 2011. Page 182.

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

As discussed above, the project site is not comprised of known mineral resources. Therefore, 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)**

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

The project site is not delineated in the General Plan or other land use plan as a locally important mineral resource recovery site. For this reason, the project would not result in the loss of availability of a locally important mineral resource recovery site delineated in any adopted plan. **(No Impact)**

4.13 Noise

The following discussion is based on a Noise and Vibration Assessment prepared by Illingworth & Rodkin, Inc. in August 2024. A copy of this report is included as Appendix H of this document.

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.[66] 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.

[66] 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 DNL/CNEL in any habitable room. Exterior windows must have a minimum Sound Transmission Class of 40 or Outdoor-Indoor Transmission Class 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.

The General Plan includes policies for the purpose of avoiding or mitigating environmental impacts resulting from planned development projects within the City. The following General Plan policies related to noise, and vibration are applicable to the proposed project.

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-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

City Code

Section 9.10.040 of the City Code establishes noise level performance standards for fixed sources of noise. Noise levels at single-family residences, multi-family residences, and at public spaces are limited to 55 dBA during daytime hours (7:00 AM to 10:00 PM) and 50 dBA at night (10:00 PM to 7:00 AM).

Construction activities are not permitted within 300 feet of residentially zoned property except within the hours of 7:00 AM and 6:00 PM on weekdays and 9:00 AM and 6:00 PM on Saturdays. No construction is permitted on Sundays or holidays.

4.13.1.3 *Existing Conditions*

The project site is located within a residential neighborhood with residential land uses to the east, south, and west. To the north of the project site are the SFPUC property, Northern Receiving Station, and Levi's Stadium.

The primary source of noise in the project vicinity is from aircraft associated with the San José Mineta International Airport. Events, such as concerts and football games, held at Levi's Stadium contribute to the ambient noise environment. Noise from traffic on Lafayette Street and the noise from trains on the Union Pacific Railroad (UPRR) tracks also contribute to the noise environment.

Ambient noise monitoring data collected at the Cheeney Street and Lenox Place intersection 300 feet south of the project site is summarized in Table 4.13-2 below. As shown in the table, the noise level in the project area ranges from 56 to 58 on typical weekdays and weekends with no events, and 56 to 63 when there are events at Levi's Stadium.

Table 4.13-2 Summary of Noise Levels Recorded at Cheeney Street and Lenox Place Intersection

Event Scenario	Date (Hours)	Measured Noise Levels with Jets dBA		Measured Noise Levels without Jets dBA	
		L_{eq}	CNEL	L_{eq}	CNEL
Typical Weekdays (No Events)	4/15/2024 to 4/19/2024 (7:00 a.m. to 10:00 p.m.)	51 to 67	64 to 65	47 to 65	56 to 58
Typical Weekdays (No Events)	4/15/2024 to 4/19/2024 (10:00 p.m. to 7:00 a.m.)	42 to 66	64 to 65	42 to 56	56 to 58
Typical Weekends (No Events)	4/20/2024 to 4/21/2024 (7:00 a.m. to 10:00 p.m.)	52 to 66	62 to 63	49 to 62	56 to 57
Typical Weekends (No Events)	4/20/2024 to 4/21/2024 (10:00 p.m. to 7:00 a.m.)	42 to 63	62 to 63	42 to 55	56 to 57
Typical NFL Game (non-game weekdays)	10/6/2023 and 10/9/2023 (7:00 a.m. to 10:00 p.m.)	57 to 65	62 to 65	50 to 61	56 to 59
Typical NFL Game (non-game weekdays)	10/6/2023 and 10/9/2023 (10:00 p.m. to 7:00 a.m.)	42 to 66	62 to 65	45 to 56	56 to 59
Typical NFL Game (non-game weekend)	10/7/2023 (7:00 a.m. to 10:00 p.m.)	54 to 63	63	49 to 56	57
Typical NFL Game (non-game weekend)	10/7/2023 (10:00 p.m. to 7:00 a.m.)	48 to 62	63	47 to 53	57
Typical NFL Game (gameday)	10/8/2023 (7:00 a.m. to 10:00 p.m.)	60 to 66	66	52 to 62	60
Typical NFL Game (gameday)	10/8/2023 (10:00 p.m. to 7:00 a.m.)	48 to 63	66	48 to 55	60
NFL Playoff Game (non-game weekdays)	1/19/2024 and 1/22/2024 (7:00 a.m. to 10:00 p.m.)	56 to 64	63 to 65	49 to 63	59 to 60
NFL Playoff Game (non-game weekdays)	1/19/2024 and 1/22/2024 (10:00 p.m. to 7:00 a.m.)	48 to 66	63 to 65	47 to 56	59 to 60
NFL Playoff Game (non-game weekend)	1/21/2024 (7:00 a.m. to 10:00 p.m.)	58 to 63	63	53 to 57	59

Event Scenario	Date (Hours)	Measured Noise Levels with Jets dBA		Measured Noise Levels without Jets dBA	
		L_{eq}	CNEL	L_{eq}	CNEL
NFL Playoff Game (non-game weekend)	1/21/2024 (10:00 p.m. to 7:00 a.m.)	46 to 62	63	45 to 55	59
NFL Playoff Game (gameday)	1/20/2024 (7:00 a.m. to 10:00 p.m.)	55 to 61	62	54 to 60	59
NFL Playoff Game (gameday)	1/20/2024 (10:00 p.m. to 7:00 a.m.)	48 to 58	62	46 to 53	59
NFC Champ. Game (non-game weekdays)	1/26/2024 and 1/29/2024 (7:00 a.m. to 10:00 p.m.)	54 to 70	65	50 to 68	59 to 60
NFC Champ. Game (non-game weekdays)	1/26/2024 and 1/29/2024 (10:00 p.m. to 7:00 a.m.)	47 to 65	65	47 to 58	59 to 60
NFC Champ. Game (non-game weekend)	1/27/2024 (7:00 a.m. to 10:00 p.m.)	54 to 66	64	48 to 62	58
NFC Champ. Game (non-game weekend)	1/27/2024 (10:00 p.m. to 7:00 a.m.)	49 to 65	64	49 to 53	58
NFC Champ. Game (gameday)	1/28/2024 (7:00 a.m. to 10:00 p.m.)	60 to 65	66	52 to 63	60
NFC Champ. Game (gameday)	1/28/2024 (10:00 p.m. to 7:00 a.m.)	46 to 63	66	46 to 53	60
Soccer match	9/27/2023 (7:00 a.m. to 10:00 p.m.)	56 to 64	64	51 to 61	58
Soccer match	9/27/2023 (10:00 p.m. to 7:00 a.m.)	45 to 64	64	44 to 53	58
Taylor Swift Concerts	7/28/2023 (7:00 a.m. to 10:00 p.m.)	61 to 66	67	55 to 66	63
Taylor Swift Concerts	7/28/2023 (10:00 p.m. to 7:00 a.m.)	45 to 64	67	45 to 59	63
Taylor Swift Concerts	7/29/2023 (7:00 a.m. to 10:00 p.m.)	60 to 64	66	52 to 63	62
Taylor Swift Concerts	7/29/2023 (10:00 p.m. to 7:00 a.m.)	46 to 65	66	46 to 61	62
Ed Sheeran Concert	9/16/2023 (7:00 a.m. to 10:00 p.m.)	60 to 64	64	50 to 60	60

Event Scenario	Date (Hours)	Measured Noise Levels with Jets dBA		Measured Noise Levels without Jets dBA	
		L_{eq}	CNEL	L_{eq}	CNEL
Ed Sheeran Concert	9/16/2023 (10:00 p.m. to 7:00 a.m.)	41 to 63	64	41 to 57	60

Source: Illingworth & Rodkin. *2303 Gianera Street Noise And Vibration Assessment*. May 2, 2024.

4.13.2 Impact Discussion

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

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

Construction Noise

The project would demolish the existing single-family house and accessory structures to subdivide the project site to construct a total of eight, three-story, townhouse units. Construction of the project would last for approximately 11 months. Construction phases would include demolition, site preparation, grading, trenching, building construction, architectural coating, and paving. A varying amount of construction equipment and activities would be required for each construction phase.

Noise impacts would also change based on the location of construction activities and the distance between those activities and surrounding uses.

The Santa Clara City Code limits construction activities within 300 feet of residentially zoned property between 7:00 am to 6:00 pm on weekdays and between 9:00 am and 6:00 pm on Saturdays. Construction is not permitted on Sundays or holidays. The City does not have noise thresholds for temporary construction in its General Plan or City Code. Therefore, for the purposes of this analysis, the City relies upon the noise limits established by the Federal Transit Administration (FTA) to identify potential impacts from temporary construction noise. Based on these standards, during daytime hours, an exterior threshold of 80 dBA L_{eq} would apply at residential land uses, 85 dBA L_{eq} would apply at commercial land uses, and 90 dBA L_{eq} would apply at industrial land uses. The estimated noise levels for each phase of construction based on the equipment for each phase of construction are summarized in Table 4.13-3.

Table 4.13-3 : Hourly Average Construction Noise Levels

Phase of Construction	South Residences (125 feet)	East & West Residences (60 feet)	North Substation (160 feet)
Demolition	79	85	77
Site Preparation	77	83	74
Grading/Excavation	79	86	77
Trenching/Foundations	74	80	72
Building – Exterior	68	74	65
Building – Interior/ Architectural Coating	66	72	64
Paving	79	85	76

Source: Illingworth & Rodkin. 2303 Gianera Street Noise And Vibration Assessment. May 2, 2024.

As shown in Table 4.13-3, construction noise levels would range from 66 to 86 dBA L_{eq} at existing residences and from 64 to 77 dBA L_{eq} at the existing substation. The 90 dBA L_{eq} threshold for industrial uses would not be exceeded at the north substation. However, construction noise levels would potentially exceed the exterior threshold of 80 dBA L_{eq} at residential land uses to the east and west.

Impact NOI-1.1: Construction noise levels would potentially exceed the exterior threshold of 80 dBA L_{eq} at residential land uses to the east and west.

Mitigation Measure:

MM NOI-1.1: A qualified acoustical consultant shall prepare a construction noise control plan to be submitted to the City for review and approval prior to issuance of a demolition and/or grading permit, including, but not limited to, the following available controls:

- Ensure that excavating, grading and filling activities, and other construction activities (including the loading and unloading of materials and truck movements) within 300 feet of residentially zoned property, are limited to the hours of 7:00 a.m. to 6:00 p.m. on weekdays and between the hours of 9:00 a.m. and 6:00 p.m. on Saturdays. No construction is permitted on Sundays or holidays.
- Construct a solid plywood fence along the eastern and western property lines, where feasible, to shield the adjoining residential receptors from construction work. A temporary eight-foot-tall noise barrier would be tall enough to block direct line-of-sight with ground-level receptors.
- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Unnecessary idling of internal combustion engines shall be strictly prohibited.
- Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors as feasible. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used to reduce noise levels at the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors.
- Construction staging areas shall be established at locations that would create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.
- Locate material stockpiles, as well as maintenance/equipment staging and parking areas, as far as feasible from residential receptors.
- Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site.
- The contractor shall prepare a detailed construction schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses

so that construction activities can be scheduled to minimize noise disturbance.

- Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., bad muffler, etc.) and require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.

With implementation of the mitigation measure MM NOI-1.1, the project's impact from construction noise would be reduced to a less than significant level by limiting construction activities to daytime hours, constructing temporary noise barriers around the site, and designating a disturbance coordinator to respond to any complaints from neighboring properties regarding excessive construction noise. **(Less than Significant Impact with Mitigation Incorporated)**

Operational Noise

Traffic Noise

The proposed eight townhouse units would generate minimal daily and peak hour trips. When compared to the existing traffic volumes on Lafayette Street and the existing traffic volume within the residential neighborhood, the project would result in a zero CNEL increase.

Mechanical Equipment Noise

While the site plan for the building does not show heating, ventilation, or air conditioning (HVAC units), these units are typically located on ground level, on the exterior of buildings. The HVAC units are assumed to be three feet tall and located on the corner of each townhome in the backyard. The proposed six-foot privacy fence would provide a minimum decrease of 10 dBA to surrounding receptors from three-foot tall HVAC units. During operation, noise from the HVAC units would range from 53 to 63 dBA at three feet. The maximum amount of noise would come from two HVAC units clustered together given their location outside. The latter scenario would result in a noise level of 66 dBA at three feet. Therefore, mechanical equipment noise levels would be expected to exceed the City's nighttime threshold of 50 dBA at the adjacent residential land uses to the east and west as shown in Table 4.13-4.

Table 4.13-4 : Operational Noise Levels

Receptor	Distance from Nearest HVAC Equipment, feet	Hourly L_{eq}, dBA	CNEL, dBA
South Residences	65	29[a]	36[a]
East Residences	5	52[a]	58[a]
West Residences	5	52[a]	58[a]
North Substation	100	26[a]	32[a]

Source: Illingworth & Rodkin. *2303 Gianera Street Noise And Vibration Assessment*. May 2, 2024.

[a] Minimum attenuation of 10 dBA is applied to these noise levels due to the proposed six-foot privacy fence.

Impact NOI-1.2: The operation of mechanical equipment would potentially exceed the City's nighttime threshold at residential receptors to the east and west of the project.

Mitigation Measure:

MM NOI-1.2: The applicant shall have a qualified acoustical consultant prepare a detailed acoustical study during final design to evaluate the potential noise generated by mechanical equipment and demonstrate the necessary noise control to meet the City's 50 dBA nighttime noise threshold at the receiving property lines. Noise control features, such as selection of quiet units, sound attenuators, enclosures, and barriers shall be identified and evaluated to demonstrate that mechanical equipment noise shall not exceed 50 dBA at the receiving property lines. The noise control features identified by the study shall be incorporated into the project prior to issuance of a building permit.

With implementation of the mitigation measure MM NOI-1.2, the project's impact from mechanical noise equipment would be reduced to a less than significant level by installing sound attenuators, enclosures, and barriers, as appropriate to ensure noise levels would not exceed 50 dBA. **(Less than Significant Impact with Mitigation Incorporated)**

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

The construction of the project may generate vibration when heavy equipment or impact tools (e.g., jackhammers, hoe rams) are used. Construction activities would include grading, foundation work, paving, and new building framing and finishing. Impact or vibratory pile driving activities, which can cause excessive vibration, are not expected for the proposed project.

For structural damage, the California Department of Transportation (Caltrans) recommends a vibration limit of 0.5 in/sec PPV for buildings that are structurally sound and designed to modern

engineering standards, which typically consist of buildings constructed since the 1990s. A conservative vibration limit of 0.3 in/sec PPV is used for buildings that are found to be structurally sound but structural damage is a major concern. A vibration limit of 0.25 in/sec PPV would apply to historical buildings or some older buildings. The 0.3 in/sec PPV would apply to the surrounding residential buildings, as many of the neighborhood's residences were built in the 1990s, and the substation. As discussed in Section 4.5 Cultural Resources, there are no historic buildings within 200 feet of the site.

Jackhammers typically generate vibration levels of 0.035 in/sec PPV and drilling typically generates vibration levels of 0.09 in/sec PPV at a distance of 25 feet. Typical vibration levels that could be expected from construction equipment at 25 feet and estimated vibration levels at existing buildings surrounding the project site are summarized below in Table 4.13-5.

The estimated maximum vibration level expected for structures near the proposed project is 0.575 in/sec PPV, which would exceed the threshold of 0.3 in/sec PPV.

Table 4.13-5 : Construction Vibration Levels

Equipment	South Residences[a] (60 feet)	East & West Residences[a] (10 feet)	North Substation[a] (525 feet)
Clam shovel drop	0.077	**0.553**	0.007
Hydromill (slurry wall) in soil	0.003	0.022	0.000
Hydromill (slurry wall) in rock	0.006	0.047	0.001
Vibratory Roller	0.080	**0.575**	0.007
Hoe Ram	0.034	0.244	0.003
Large bulldozer	0.034	0.244	0.003
Caisson drilling	0.034	0.244	0.003
Loaded trucks	0.029	0.208	0.003
Jackhammer	0.013	0.096	0.001
Small bulldozer	0.001	0.008	0.000

Source: Transit Noise and Vibration Impact Assessment Manual, Federal Transit Administration, Office of Planning and Environment, U.S. Department of Transportation, September 2018, as modified by Illingworth & Rodkin, Inc., April 2024.

[a] All surrounding residences and substation buildings would conservatively be subject to the 0.3 in/sec PPV threshold. Units are measured in in/sec PPV.

Bold = exceeds the threshold

Impact NOI-2: Construction vibration levels would exceed the 0.3 in/sec PPV threshold at the residences east and west of the site.

Mitigation Measure:

MM NOI-2.1: The project applicant or the applicant's contractor shall implement the following measures during construction to reduce construction vibration generated by the project:

- Avoid using vibratory rollers and clam shovel drops within 25 feet of the adjacent buildings to the east and west.
- Select demolition methods that do not involve large impact tools such as hoe-rams within 25 feet of the adjoining residences to the east and west. Portable jackhammers, saws, or grinders shall be used to minimize impacts to the ground.
- Avoid dropping heavy equipment and use alternative methods for breaking up existing pavement, such as a pavement grinder, instead of dropping heavy objects, within 25 feet of the adjacent buildings to the east and west.
- Smaller equipment (less than 18,000 pounds) shall be used near the property lines adjacent to buildings to minimize vibration levels. For example, a smaller vibratory roller similar to a Caterpillar model CP433E vibratory compactor could be used when compacting materials within 25 feet of the adjacent buildings.
- Hoe rams, large bulldozers, drill rigs, loaded trucks, and other similar equipment shall not be used within 25 feet of adjacent buildings to the east and west.

With implementation of mitigation measure MM NOI-2.1, the project would have a less than significant construction vibration impact because equipment would be selected and used to minimize vibration. **(Less than Significant Impact with Mitigation Incorporated)**

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

The project site is located approximately 2.5 miles southeast of the Norman Y. Mineta International Airport and is located outside of the 65 dBA noise contour. The proposed residences would also require forced-air mechanical ventilation systems to be incorporated into the project. See Section 4.13.3 for a further discussion of the conditions of approval required to achieve the interior noise standard. **(Less than Significant Impact)**

4.13.3 Non-CEQA Effects

Per California Building Industry Association v. Bay Area Air Quality Management District, 62 Cal. 4th 369 (BIA v. BAAQMD), effects of the environment on the project are not considered CEQA impacts. The following discussion is included for informational purposes only because the City of Santa Clara has policies (including Policies 5.10.6-P1, 5.10.6-P2, and 5.10.6-P3) that address existing noise conditions affecting a proposed project.

Future Exterior Noise Environment

The proposed townhomes units would have the centers of their backyards set back 45 to 150 feet from the centerline of Gianera Street. Future exterior noise levels would range from 63 to 66 dBA CNEL on typical days and days of soccer matches. On days of NFL games and concerts, future noise levels would range from 67 to 68 dBA CNEL. Future exterior noise levels would not meet the City's exterior threshold of 55 dBA CNEL, and conventional attenuation methods, such as a noise barrier, would not reduce exterior noise levels since the dominant noise source at the project site is aircraft.

Future Interior Noise Environment

Residential units located along Gianera Street would be set back approximately 40 feet from the centerline and would be exposed to future exterior noise levels ranging from 63 to 66 dBA CNEL on typical days and on days with soccer games. The units would be exposed to noise levels of 67 to 68 dBA CNEL on days of NFL games and concerts, and aircraft noise by being located in the 60 dBA CNEL noise contour line. Future interior noise levels in these units would be up to 53 dBA CNEL, assuming the windows are open.

To meet the interior noise requirements set forth by the State of California of 45 dBA CNEL, the project would be required to implement the following Condition of Approval.

Conditions of Approval:

- The project applicant shall prepare final design plans that incorporate building design and acoustical treatments to ensure compliance with State Building Codes and City noise standards. A project-specific acoustical analysis shall be prepared by a qualified acoustical consultant to ensure that the design incorporates controls (i.e., forced-air mechanical ventilation systems) to reduce interior noise levels to 45 dBA CNEL or lower within the residential units. The project applicant shall conform with any special building construction techniques requested by the City's Building Department, which may include sound-rated windows and doors, sound-rated wall constructions, and acoustical caulking.

With implementation of the Conditions of Approval, the project would be consistent with General Plan Policies 5.10.6-P1, 5.10.6-P2, and 5.10.6-P3.

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.[67] The City of Santa Clara Housing Element and related land use policies were last updated in 2024.

Regional and Local

Plan Bay Area 2050

Plan Bay Area 2050 is a long-range plan for the nine-county San Francisco Bay Area that provides strategies that increase the availability of affordable housing, support a more equitable and efficient economy, improve the transportation network, and enhance the region's environmental resilience. Plan Bay Area 2050 promotes the development of a variety of housing types and densities within identified Priority Development Areas (PDAs). PDAs are areas generally near existing job centers or frequent transit that are locally identified for housing and job growth.[68]

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

[67] California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements" Accessed June 6, 2024. http://hcd.ca.gov/community-development/housing-element/index.shtml.

[68] Association of Bay Area Governments and Metropolitan Transportation Commission. *Plan Bay Area 2050*. October 21, 2021. Page 20.

4.14.1.2 *Existing Conditions*

The City of Santa Clara had a population of 132,476 people and 128,213 households with an average of 2.57 persons per household as of January 2023.[69] The City is estimated to have a population of approximately 154,990 people and up to 154,000 jobs with 86,800 employed residents in 2035.[70]

The project site is currently developed with one single-family residence with an accessory building with two units, all of which are currently unoccupied.

4.14.2 Impact Discussion

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

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

The project proposes to increase the number of housing units within the City compared to existing conditions by providing eight townhome units when the site is currently occupied with one single-family residence and an accessory building with two units. While the project would accommodate an increase in the local population, this increase would not be substantial. Using an estimate of 2.57 residents per household, the proposed project would increase the population of the City by approximately 21 people.[71] The City expects an increase of 28,300 new residents in the period

[69] California Department of Finance. "E-5 City/County Population and Housing Estimates." May 2023. Accessed on March 20, 2024. https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2023/.
[70] City of Santa Clara. 2010-2035 General Plan Integrated Final Environmental Impact Report. SCH# 2008092005. January 2011.
[71] California Department of Finance. "E-5 City/County Population and Housing Estimates." May 2023. Accessed on March 20, 2024. https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2023/.

between 2010 and 2035.[72] The growth in population that the project would facilitate would fall within the planned development levels set forth by the City's General Plan as its development is consistent with the General Plan land use designation of the site. No roads would be extended as a component of the project, nor would other infrastructure be developed that would induce population growth beyond the scope of the project. Therefore, the project would not result in a significant population impact by inducing substantial unplanned growth. **(Less than Significant Impact)**

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

The project site is currently unoccupied and does not have any residents. Therefore, the project would not require the construction of replacement housing due to displacement of existing people. In addition, the implementation of the project would result in a net increase of five dwelling units compared to existing conditions. **(Less than Significant Impact)**

[72] City of Santa Clara. *2010-2035 General Plan.* 2014.

4.15 Public Services

4.15.1 Environmental Setting

4.15.1.1 *Regulatory Framework*

State

Government Code Section 66477

The California Legislature enacted the Quimby Act (Government Code Section 66477) to ensure that new residential developments set aside sufficient parkland and open space for recreational purposes. It provides for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two 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 General Plan includes policies for the purpose of avoiding or mitigating environmental impacts resulting from planned development projects within the City. The following General Plan policies related to public services 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.
5.4.3-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-P1	Develop additional parkland in the City so that it is integrated into neighborhoods and meets the standards for size, amenities, and locations to serve residents and employees.
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.
5.9.3-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 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 pursuant to the provisions of the Quimby Act and/or the California Mitigation Fee Act (MFA). Chapter 17.35 requires new residential developments to provide developed park and recreational facilities and/or pay a fee in-lieu of parkland dedication, at the City's discretion.

4.15.1.2 *Existing Conditions*

Fire Protection

Fire protection services are provided by the City of Santa Clara Fire Department (SCFD). The SCFD currently has nine fire stations, with one more planned in 2025. The SCFD has approximately 155 personnel and a Volunteer Reserve Firefighter Program.[73] The SCFD has eight engines, two trucks, one rescue/light unit, one hazardous materials unit, and two command vehicles.[74] Fire Station 8 is the closest to the project site at 2400 Agnew Road, 1.1 miles north of the project site.

[73] City of Santa Clara. "History of the Fire Department." Last Updated December 7, 2021. Accessed June 7, 2024. https://www.santaclaraca.gov/our-city/departments-a-f/fire-department/about-us/history.
[74] Ibid.

Police

The Santa Clara Police Department (SCPD) has 232 full time employees, 153 of those employees being sworn authorized personnel. The average response time for priority one calls for service was two minutes and thirty-five seconds in 2023.[75] The closest police station is 1.1 miles southeast of the project site at 3992 Rivermark Parkway.

Schools

The project site is located within the Santa Clara Unified School District (SCUSD). SCUSD serves over 15,300 kindergarten through 12th grade students and 6,000 students in preschool and adult school.[76] Students in the project area attend Kathryn Hughes Elementary School (0.25 miles north of the site), Dolores Huerta Middle School (1.78 miles away), and Kathleen MacDonald High School (1.8 miles east of the site).[77]

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. The Department maintains and operates Central Park, a 45.04-acre community park, 28neighborhood parks, 15 mini parks, public open space, recreational facilities, recreational trails, and joint use facilities throughout the City totaling approximately 236.935 improved acres and 80.43 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.

There are no neighborhood parks within walking distance (a 10-minute walk) of the site. The nearest neighborhood parks to the site are Lick Mill Park and Fairway Glen Park; however, both parks are more than a 30-minute walk because there are railroad tracks that prevent foot traffic and vehicles from crossing anywhere other than the designated areas for safety.

[75] Santa Clara Police Department. "Fact Sheet." Accessed March 20, 2024. https://www.santaclaraca.gov/our-city/departments-g-z/police-department/about-us/fact-sheet
[76] Santa Clara Unified School District. "About Us." Accessed March 20, 2024. https://www.santaclarausd.org/domain/15
[77] Santa Clara Unified School District. "MySchool Locator." Accessed March 20, 2024. https://locator.decisioninsite.com/?StudyID=217157

4.15.2 Impact Discussion

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

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

The proposed project would be located in a suburban area that is already served by the SCFD. The project would incrementally increase the demand for fire protection services within the SCFD's jurisdiction compared to existing conditions. The proposed project would increase the local population by approximately 21 people, which is not a sufficient population increase to require new or expanded fire stations, personnel, or equipment. The proposed townhouses would be built to applicable fire code standards when construction permits are issued and include smoke detectors and sprinklers. The project would not result in a significant impact to fire protection services and no new facilities would be required to maintain acceptable service ratios, response times, or other performance objectives. **(Less than Significant Impact)**

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

The proposed project would incrementally increase the demand for police services because it would increase the number of residents on-site compared to existing conditions. The project site is, however, located within a suburban area that is already served by the SCPD. The project design would be reviewed by the SCPD to ensure that it incorporates appropriate safety features to minimize criminal activity. No new facilities would be required to provide adequate police services to serve the proposed project. **(Less than Significant Impact)**

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

The project would result in the addition of approximately three new students in the Santa Clara Unified School District (one elementary student, one middle school student, and one high school students).[78] Table 4.15-1 below summarizes the 2020-2021 student enrollment and capacity of the schools that would serve the project site.

Table 4.15-1: School Capacity and Enrollment

School	2020-2021 Capacity[1]	2022-2023 Enrollment[2]
Kathryn Hughes Elementary School	421	293
Dolores Huerta Middle School	1,000	398
Kathleen MacDonald High School	1,600	225

[1] Santa Clara Unified School District. *Residential and Commercial/Industrial Development School Fee Justification Study*. March 28, 2024. Accessed June 20, 2024. https://resources.finalsite.net/images/v1714077505/santaclarausdorg/jiv7lvbzaig9gs5lzr4p/SCUSDLevel1DevelopmentFeeJustificationStudy2024.pdf.

[2] Education Data Partnership. "Ed Data Education Data Partnership CDE/EdSource/FCMAT." Accessed April 12, 2024. http://www.ed-data.org/index.

[78] Based on the SCUSD School Fee Justification Study, single-family detached units generate approximately 0.0970 elementary students, 0.0461 middle school students, and 0.0682 high school students. Source: Santa Clara Unified School District. *Residential and Commercial/Industrial Development School Fee Justification Study*. March 28, 2024. Accessed June 20, 2024. https://resources.finalsite.net/images/v1714077505/santaclarausdorg/jiv7lvbzaig9gs5lzr4p/SCUSDLevel1DevelopmentFeeJustificationStudy2024.pdf.

As shown in the table above, Kathryn Hughes Elementary School, Dolores Huerta Middle School, and Kathleen MacDonald High School have the capacity to accommodate the project-generated students. The proposed project would contribute minimally to the demand placed on the schools' infrastructure, staffing, and resources.

State law (Government Code Section 65996) specifies an acceptable method of offsetting a project's effect under CEQA on the adequacy of school facilities as the payment of a school impact fee prior to issuance of a building permit. The affected school district(s) are responsible for implementing the specific methods for mitigating school effects under the Government Code, including setting the school impact fee amount consistent with state law. The school impact fees and the school districts' methods of implementing measures specified by Government Code Section 65996 would offset project-related increases in student enrollment. Therefore, implementation of the project would not result in substantial adverse physical impacts due to the need for new or expanded schools. **(Less than Significant Impact)**

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

The project would incrementally increase the resident demand on existing City parks and comply with Chapter 17.35 of the City Code by paying fees in lieu of parkland dedication to help mitigate the impacts of the new resident demand on existing parks and recreational facilities. **(Less than Significant Impact)**

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

The existing library facilities serve the City's population of 132,476 residents. The project would result in 21 new residents, which would represent an approximately 0.016 percent increase in the City's current population. The nominal increase in library demand from the proposed development would not result in substantial adverse impacts to existing library or other facilities, and would not require the construction of new facilities. Therefore, the proposed project would result in a less than significant impact on libraries. **(Less than Significant Impact)**

4.16 Recreation

4.16.1 Environmental Setting

4.16.1.1 *Regulatory Framework*

State

Government Code Section 66477

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

Local

City of Santa Clara 2010-2035 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating environmental impacts resulting from planned development projects within the City. The following General Plan policies related to recreation 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.
5.4.3-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-P1	Develop additional parkland in the City so that it is integrated into neighborhoods and meets the standards for size, amenities, and location to serve residents and employees.
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.

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 pursuant to the provisions of the State of California Quimby Act (Quimby) and/or the MFA. Chapter 17.35 requires new residential developments to provide developed park and recreational facilities and/or pay a fee in lieu of parkland dedication, at the City's discretion.

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. The Department maintains and operates Central Park, a 45.04-acre community park, 28 neighborhood parks, 15 mini parks, public open space, recreational facilities, recreational trails, and joint use facilities throughout the City totaling approximately 236.935 improved acres and 80.43 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.

There are no neighborhood parks within walking distance (a 10-minute walk) of the site. The nearest neighborhood parks to the site are Lick Mill Park and Fairway Glen Park; however, both parks are more than a 30-minute walk because there are railroad tracks that prevent foot traffic and vehicles from crossing anywhere other than the designated areas for safety.

4.16.2 Impact Discussion

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

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

As discussed in Section 4.15 Public Services, the project would incrementally increase the resident demand on existing City parks; however, the project would be required to comply with Chapter 17.35 of the City Code by paying fees in lieu of parkland dedication to help mitigate the impacts of the new resident demand on existing parks and recreational facilities. In addition, each unit would include a private backyard which would help offset demand on existing recreational facilities. For these reasons, the project would not result in the substantial physical deterioration of recreational facilities or accelerate the physical deterioration of recreational facilities. **(Less than Significant Impact)**

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

The project does not propose any recreational facilities on- or off-site, the construction of which could result in additional environmental impacts. Therefore, the proposed project would not result in significant impacts. **(Less than Significant Impact)**

4.17 Transportation

4.17.1 Environmental Setting

4.17.1.1 *Regulatory Framework*

State

Senate Bill 743

SB 743 establishes criteria for determining the significance of transportation impacts using a 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 the Governor's Office of Planning and Research (OPR) to implement a VMT policy by July 1, 2020.

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

Regional and Local

Regional Transportation Plan

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

Congestion Management Program

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. For example, projects which generate 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.

All proposed development 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 a transportation environmental impact per CEQA.

City of Santa Clara 2010-2035 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating environmental impacts resulting from planned development projects within the City. The following General Plan policies related to transportation 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.
5.8.2-P9	Require all new development to provide streets and sidewalks that meet City goals and standards, including new development in employment areas.
5.8.3-P9	Require new development to incorporate reduced on-site parking and provide enhanced amenities, such as pedestrian links, benches and lighting, in order to encourage transit use and increase access to transit services.
5.8.4-P6	Require new development to connect individual sites with existing and planned bicycle and pedestrian facilities, as well as with on-site and neighborhood amenities/services, to promote alternate modes of transportation.
5.8.4-P7	Require new development to provide sidewalks, street trees and lighting on both sides of all streets in accordance with City standards, including new developments in employment areas.
5.8.4-P8	Require new development and public facilities to provide improvements, such as sidewalks, landscaping and bicycling facilities, to promote pedestrian and bicycle use.
5.8.5-P3	Encourage all new development to provide on-site bicycle facilities and pedestrian circulation.

Policies	Description
5.10.2-P2	Encourage development patterns that reduce vehicle miles traveled and air pollution.

4.17.1.2 *Existing Conditions*

Roadway Network

The project site is accessed from Gianera Street. Local access to the project site is provided by local roadways including Agnew Road and Cheeney Street. Regional access to the project site is provided by US 101, SR 237, Lafayette Street, and Montague Expressway. Figure 2.4-1 and Figure 2.4-2 show the roadway network serving the site.

Pedestrian Facilities

Sidewalks are present on both sides of Gianera Street, Cheeney Street, and Agnew Road in the vicinity of the project site.

Bicycle Facilities

There are no designated bicycle facilities on Gianera Street and Cheeney Street in the immediate vicinity of the project site; however, Class II bicycle lanes are present on both sides of Agnew Road in the project vicinity.

Transit Facility

The nearest transit facility is the Santa Clara/Great America Amtrak stop, which is 0.45 miles northeast of the project site. The VTA operates bus services in the project area. The nearest bus stop to the site is on Agnew Road, near the intersection with Cheeney Street, approximately 0.53 miles south of the site.

4.17.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities?	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

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

Roadway Systems

The proposed project would generate 58 daily trips, including four AM peak hour trips, and five PM peak hour trips.[79] The number of project trips are minimal and would not result in operational issues to the roadway system. For this reason, no operational LOS analysis is required. Additionally, the project would not alter the roadway circulation network. Therefore, the proposed project would result in less than significant impacts on roadway facilities. **(Less than Significant Impact)**

Pedestrian Facilities

Sidewalks are present in the immediate vicinity of the project site along Gianera Street. A portion of the existing sidewalk on Gianera Street that is substandard would be reconstructed to meet City standards, consistent with General Plan policies 5.8.2-P9, 5.8.4-P7, and 5.8.4-P8. The project also includes on-site pedestrian pathways to facilitate safe pedestrian circulation, consistent with General Plan policy 5.8.5-P3. Therefore, the project would not conflict with a program, plan, ordinance, or policy controlling pedestrian facilities. **(Less than Significant Impact)**

Bicycle Facilities

No existing bicycle facilities would be altered by the proposed project and the proposed project would not conflict with any planned bicycle facilities. Therefore, the project would not interfere with existing plans, policies, or ordinances corresponding to bicycle facilities. **(Less than Significant Impact)**

[79] Based on Land Use 215 Single Family Attached trip generation rates of 7.20 daily, 0.48 AM peak hour, and 0.57 PM peak hour trips per dwelling unit. Source: Institute of Transportation Engineers. *Trip Generation Manual, 11th Edition*. 2021.

Transit Facilities

As aforementioned in Section 4.17.1.2, the Santa Clara/Great America Amtrak stop is the nearest transit facility, located approximately 0.45 miles northeast of the project site. The nearest bus stop is approximately 0.53 miles south of the site on Agnew Road near the Cheeney Street intersection. The proposed project does not include improvements that would conflict with existing (or planned) transit facilities, nor would it conflict with a program, plan, ordinance, or policy addressing transit. **(Less than Significant Impact)**

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

Per the City's VMT policy, projects that generate less than 110 daily vehicle trips or less would be screened out from a quantitative VMT analysis and presumed to have a less than significant VMT impact. The proposed project would not generate more than 110 daily vehicle trips; therefore, the project would result in a less than significant VMT impact and would not conflict with CEQA Guidelines Section 15064.3, subdivision (b)(1). **(Less than Significant Impact)**

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

The project proposes residential uses in an existing residential neighborhood. The project would not include incompatible uses, such as farm equipment on-site. A private street would provide access to the site with a 24-foot-wide driveway, which is consistent with the City's driveway standards in City Code 18.74.050. The City has evaluated the proposed project and determined that it would not increase on-site hazards due to the design of the townhomes, including garages and driveways, and the reconstructed sidewalk. Therefore, the project would result in a less than significant hazards impact. **(Less than Significant Impact)**

d) Would the project result in inadequate emergency access?

Site access would be provided via a driveway on Gianera Street that would meet City design standards, including those for adequate emergency vehicle access. Therefore, the project would not result in inadequate emergency access. **(Less than Significant Impact)**

4.18 Tribal Cultural Resources

4.18.1 Environmental Setting

4.18.1.1 *Regulatory Framework*

State

Assembly Bill 52

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

Under AB 52, TCRs are defined as follows:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are also either:
    - Included or determined to be eligible for inclusion in the CRHR, 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*

In July 2021, the City of Santa Clara received a letter from Tamien Nation requesting to be notified of proposed projects within the City. A Sacred Lands File Search request was submitted to the Native American Heritage Commission (NAHC) for the project area, and the result came back negative on March 22, 2024. The NAHC provided a contact list of Native American tribal contact list and recommended the contacts be consulted to confirm presence of any TCRs. Tamien Nation, along with the tribal contacts provided by the NAHC, were contacted on May 13, 2024, via email and certified US mail, with a follow-up email on May 30, 2024.

No request for consultation was received by the City. Two replies were received. Irenne Zwierlein of the Amah Mutsun Tribal Band of San Juan Bautista replied with a form letter and rate sheet on May 14, 2024, stating that archaeological monitoring should be used if an NWIC or NAHC record search suggested that the project area was archaeologically sensitive. Valentin Lopez of the Amah Mutsun Tribal Band replied on May 31, 2024, by email, stating that the tribe had no comment on the project. No other replies were received during the 30-day response period. Furthermore, no other replies have been received since the circulation of this Initial Study began.

4.18.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	☐	☒	☐	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

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

As discussed above, the project site does not contain any known TCRs 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). As discussed in Section 4.5 Cultural Resources, the project site has moderate sensitivity for archaeological resources. Typically, archaeological monitoring is only required when a site has high sensitivity for archaeological resources.[80] Because the project site does not have high sensitivity for archaeological resources, archaeological monitoring is not warranted. With implementation of mitigation measures CUL-1.1 and CUL-1.2 to have construction crews receive cultural resources training and stopping work in the even resources are encountered, would reduce unknown cultural resources, including TCRs, impacts to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

[80] Shoup, Daniel. Principal and registered professional archaeologist at A/HC. Personal communications. June 2024.

b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?

As mentioned under checklist question a), the project site does not have any known TCRs. However, in the event any archaeological resources are found mitigation measures CUL-1.1 and CUL-1.2 identified in Section 4.5 Cultural Resources would be implemented to preserve and protect the find. Therefore, the proposed project would not cause a substantial adverse change in the significance of a TCR. **(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.

Senate Bill 610

SB 610 amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 requires preparation of a Water Supply Assessment (WSA) containing detailed information regarding water availability to be provided to the decision-makers prior to approval of specified large development projects that also require a General Plan Amendment. This WSA must be included in the administrative record that serves as the evidentiary basis for an approval action by the city or county on such projects. Under SB 610, WSAs must be furnished to local governments for inclusion in any environmental documentation for certain projects subject to CEQA. Pursuant to the California Water Code (Section 10912[a]), projects that require a WSA include any of the following:

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- A proposed hotel or motel, or both, having more than 500 rooms;
- A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- A mixed-use project that includes one or more of the projects identified in this list; or
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

Assembly Bill 939

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

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.

Senate Bill 1383

SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The bill grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that at least 20 percent of currently disposed edible food is recovered for human consumption by 2025. CalRecycle released an analysis titled "Analysis of the Progress Toward the SB 1383 Organic Wase Reduction Goals" in August 2020 (revised November 2020), which recommended maintaining the disposal reduction targets set forth in SB 1383.[81]

California Green Building Standards Code

CALGreen establishes mandatory green building standards for all buildings in California. The code is updated every three years. CALGreen 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 65 percent of nonhazardous construction and demolition debris; and
- Providing readily accessible areas for recycling by occupants.

[81] CalRecycle. Analysis of the Progress Toward the SB 1383 Organic Wase Reduction Goals. Revised November 30, 2020. Accessed June 7, 2024. https://www2.calrecycle.ca.gov/Publications/Details/1693#:~:text=Analysis%20of%20the%20Progress%20Toward,(DRRR%2D2020%2D1693)&text=SB%201383%20establishes%20targets%20to,75%20percent%20reduction%20by%202025.

Regional and Local

Santa Clara County Integrated Waste Management Plan

The waste management agency of each county must develop and adopt, in consultation with the state board, an integrated waste management plan (IWMP). The Santa Clara County IWMP was approved by the CIWMB in 1996 and is reviewed and revised, if necessary, every five years. The jurisdictions in the Santa Clara County IWMP include Campbell, Cupertino, Gilroy, Morgan Hill, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Mountain View, Palo Alto, San Jose, Santa Clara, Saratoga, Sunnyvale and the Unincorporated Areas of Santa Clara County.

City of Santa Clara 2010-2035 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating environmental impacts resulting from planned development projects within the City. The following General Plan policies related to utilities and service systems are applicable to the proposed project.

Policies	Description
5.1.1-P3	Prior to the implementation of Phase III of the General Plan, undertake a comprehensive assessment of water, sanitary sewer conveyance, wastewater treatment, solid waste disposal, storm drain, natural gas, and energy demand and facilities in order to ensure adequate capacity and funding to implement the necessary improvements to support development in the next phase.
5.1.1-P21	Prior to 2023, identify and secure adequate solid waste disposal facilities to serve development in Phase III.
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.
5.10.1-P6	Require adequate wastewater treatment and sewer conveyance capacity for all new development.
5.10.4-P4	Require an adequate water supply and water quality for all new development.
5.10.4-P6	Maximize the use of recycled water for construction, maintenance, irrigation and other applications.
5.10.4-P7	Require installation of native and low-water-consumption plant species when landscaping new development and public spaces to reduce water usage.
5.10.4-P8	Require all new development within a reasonable distance of existing or proposed recycled water distribution systems to connect to the system for landscape irrigation.
5.10.5-P21	Require that storm drain infrastructure is adequate to serve all new development and is in place prior to occupancy.

Santa Clara Reach Code

In September 2022, the City of Santa Clara adopted reach codes that require all new developments with permit applications filed on or after September 15, 2022, to be all electric buildings (Chapter 15.36 Energy Code). New developments must also comply with the building energy efficiency mandatory measures for solar photovoltaic systems pursuant with the reach codes. Additionally, all residential and non-residential developments must comply with the CALGreen mandatory measures for EV charging. Although the City has suspended enforcement of the all-electric construction requirements in the Reach Code in light of *California Restaurant Association v. City of Berkeley*, the project applicant has voluntarily committed to providing all-electric construction for this project.

Construction and Demolition Debris Recycling Program

This City of Santa Clara program requires project applicants seeking building and/or demolition permits for projects greater than 5,000 square feet to recycle at least 65 percent of discards.

4.19.1.2 *Existing Conditions*

Water Supply

The City of Santa Clara has four sources of water; surface water from the SFPUC, treated surface water from Valley Water, groundwater, and recycled water. The City's water demand was approximately 16.3 million gallons per day (mgd) for potable water and 3.1 mgd for recycled water in 2020.[82]

The water supply 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.[83]

An existing 12-inch water main is located in Gianera Street. The project site is unoccupied and, therefore, uses minimal water.

Wastewater Services

Wastewater treatment in Santa Clara is provided by the San José-Santa Clara Regional Wastewater Facility (Facility). The Facility serves approximately 1.4 million residents and over 17,000 businesses across eight cities.[84] It treats an average of 110 mgd of wastewater, with a capacity of up to 167 mgd.[85] Based on this average treatment amount, the Facility has approximately 57 mgd of available treatment capacity. The project site is unoccupied and, therefore, generates minimal wastewater.

[82] City of Santa Clara. *2020 Urban Water Management Plan*. June 22, 2021.
[83] Ibid.
[84] City of San José. "San José-Santa Clara Regional Wastewater Facility." Accessed June 7, 2024. https://www.sanjoseca.gov/your-government/departments-offices/environmental-services/water-utilities/regional-wastewater-facility.
[85] Ibid.

Stormwater Drainage

The City of Santa Clara owns and maintains the municipal storm drainage system, which serves the project site. Stormwater runoff on-site drains to an existing 10-inch storm drain line located in Gianera Street. The site is currently developed with 10,222 square feet of impervious area and 6,671 square feet of pervious area.

Electricity, Natural Gas, and Telecommunications

SVP is the City of Santa Clara's default energy utility, while PG&E provides natural gas services within the City of Santa Clara. Telecommunications is also available in the project area.

Solid Waste

Mission Trail Waste System provides solid waste collection in the City of Santa Clara through a contract. Organic waste, such as food waste, is collected in the garbage container and is delivered to a mixed waste processing facility where it is separated from the garbage and ultimately made into compost material, and yard waste is collected separately.[86] Stevens Creek Disposal and Recycling provides recycling services. Through 2024, the City has a contract with the Newby Island Landfill (NISL), located in San José, to provide disposal capacity. As of May 2023, NISL had approximately 12.4 million cubic yards of remaining capacity.[87] In addition to NISL, other local landfills include the Kirby Canyon Landfill and Guadalupe Landfill. Per the IWMP, the county has adequate disposal capacity at least through 2036.[88] The project site is unoccupied and, therefore, generates minimal solid waste.

4.19.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐

[86] City of Santa Clara. "Mixed Waste Processing." Accessed June 20, 2024. https://www.santaclaraca.gov/our-city/departments-g-z/public-works/environmental-programs/residential-garbage-recycling/mixed-waste-processing.
[87] Boccaleoni, Anthony. Division Manager, Republic Services. Personal Communication. May 12, 2024.
[88] Santa Clara County. *Santa Clara County Five Year CIWMP/RAIWMP Review Report*. June 23, 2021.

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

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

Water Delivery System

Once operational, the project would use approximately 290,130 gallons of water per year.[89] Lateral connections would be made to the existing water main in Gianera Street to service the eight new residences on-site. An additional fire hydrant may be installed along the private road on-site, if determined required by the City at the building permit stage. The proposed development is consistent with the planned buildout of the General Plan and would not require the construction or expansion of water delivery systems. For specific development projects, such as the proposed project, the City confirms whether improvements to water delivery system are necessary to serve the project during the permitting stage. In the event improvements are needed, they would be minor, localized, and limited to work within the right-of-way. Construction of such improvements do not result in significant environmental impacts with the implementation of standard construction-related mitigation measures and conditions of approval identified in Sections 4.3 Air Quality, 4.4 Biological Resources, 4.5 Cultural Resources, 4.10 Hydrology and Water Quality, and 4.13 Noise of this Initial Study. The City's Fire Department has confirmed the water pressure and

[89] Water usage was estimated from the Air Quality Assessment CalEEMod output included in Appendix A.

fire flow in the water system would meet the City's performance standards with implementation of the project.[90] Therefore, the project would not result in significant environmental effects related to the relocation or construction of new or expanded water facilities.

Storm Drainage

As discussed in Section 4.10 Hydrology under checklist question c), the project would not exceed the capacity of the existing storm drainage system serving the project site, and therefore, would not require expansion of the stormwater system.

Wastewater Treatment and Sanitary Sewer Facilities

The project would generate approximately 246,611 gallons of wastewater per year, or 675.6 gpd (or 0.0006756 mgd).[91] As described above, the Facility has approximately 57 mgd of available treatment capacity. Based on the treatment capacity available, there would be sufficient capacity to serve the project and would not result in the relocation or construction of sanitary sewer and wastewater treatment facilities.

The project would abandon an existing six-inch sewer lateral line and install a new six-inch private sewer line to connect to Gianera Street, which has adequate capacity to service the project, as confirmed by the City's Department of Public Works.[92] Therefore, the project would not require the construction or relocation of new or expanded wastewater lines. The project would have a less than significant impact.

Electric Power, Natural Gas, and Telecommunication Facilities

The project proposes to voluntarily comply with the City's Reach Code and have all-electric residences. No use of natural gas is proposed. Additionally, the project would connect to existing electric and telecommunication systems and infrastructure. Therefore, the demand for these resources would be satisfied by existing services and construction of new or expanded facilities would not be required.

For these reasons, 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. **(Less than Significant Impact)**

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

[90] Plascencia, Calvin. Community Risk Reduction Division, Santa Clara Fire Department. Personal communications. September 3, 2024.
[91] Based on the general assumption that wastewater generated is approximately 85 percent of indoor water use.
[92] Nguyen, Viet. Associate Engineer, City of Santa Clara Department of Public Works. Personal Communication. August 23, 2024.

Once operational, the project would use approximately 290,130 gallons of water per year.[93] The proposed project is part of planned growth from the General Plan. It was determined that there are sufficient water supplies to serve the buildout of the General Plan under normal, single critical dry year, and multiple dry year events in each five year UWMP planning period with the exception of 2035 in the event the City no longer has a contract with SFPUC and no longer receives water from SFPUC.[94] However, the General Plan FEIR noted the shortfall in supply of 0.6 percent is well within the margin of error related to the projections and, therefore, is negligible and conservatively assumed no increase in conservation or recycled water use, or mandatory conservation measures are required.[95]

The City relies on imported water from Valley Water and SFPUC. The City's contract with SFPUC is interruptible and may be unavailable after 2028. As discussed in the General Plan FEIR, with the uncertainties inherent in future imported water supplies, the City of Santa Clara plans to meet future demand growth by pumping additional groundwater, relying on more recycled water, and increased conservation.[96] **(Less than Significant Impact)**

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

As discussed under checklist question a), the project would generate 0.0006756 mgd of wastewater. As described above, the Facility has approximately 57 mgd of available treatment capacity. Based on the treatment capacity available, there would be sufficient capacity to serve the project in addition to the Facility's existing commitments. **(Less than Significant Impact)**

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

The proposed project would generate 5.94 tons, or 6.42 cubic yards, of waste per year.[97] NISL has a remaining capacity of approximately 12.4 million cubic yards, as of May 2023.[98] Based on the remaining capacity at NISL, there is sufficient disposal capacity to serve the project. The project would not impair solid waste reduction goals by participating in the City's Construction and Demolition Debris Recycling Program and being served by the City's waste collection services. For these reasons, construction and operation of the proposed project would not result in a significant

[93] Water usage was estimated from the Air Quality Assessment CalEEMod output Appendix A.
[94] City of Santa Clara. *2010-2035 General Plan Integrated Final Environmental Impact Report*. January 2011. Page 223.
[95] Ibid.
[96] Ibid. Page 224.
[97] Solid waste was estimated from the Air Quality Assessment CalEEMod output included in Appendix A. Cubic yards based on a compaction rate of 1,850 pounds per cubic yard.
[98] Boccaleoni, Anthony. Division Manager, Republic Services. Personal Communication. May 12, 2024.

increase in solid waste generated within the City and would not require that new landfill facilities be contracted with or constructed to serve the proposed project. **(Less than Significant Impact)**

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

The proposed project would be required to comply with existing federal, state, and local regulations and programs pertaining to solid waste, including AB 341, SB 1383, CALGreen, and the City's Construction and Demolition Debris Recycling Program. Therefore, implementation of the project would have a less than significant impact on solid waste. **(Less than Significant Impact)**

4.20 Wildfire

4.20.1 Environmental Setting

4.20.1.1 *Regulatory Framework*

State

Fire Hazard Severity Zones

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 (FHSZs), these maps influence how people construct buildings and protect property to reduce risk associated with wildland fires. FHSZs are divided into areas where the state has financial responsibility for wildland fire protection, known as state responsibility areas (SRAs), and areas where local governments have financial responsibility for wildland fire protection, known as local responsibility areas (LRAs). Homeowners living in an SRA are responsible for ensuring that their property is in compliance with California's building and fire codes. Only lands zoned for very high fire hazard are identified within LRAs.

4.20.1.2 *Existing Conditions*

The project site is located in an urbanized area of the City. This area is not located within a SRA or FHSZ as designated by Cal Fire's Fire and Resource Assessment Program.[99]

4.20.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒

[99] Cal Fire Office of the State Fire Marshal. "Fire Hazard Severity Zone Viewer." Accessed June 6,2024. https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/.

	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:				
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

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

4.21 Mandatory Findings of Significance

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

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

As discussed in the individual resource sections of this Initial Study, the proposed project would not degrade the quality of the environment with the implementation of identified standard permit conditions and mitigation measures. The project would implement mitigation measures MM BIO-1.1 to reduce potential disturbance to nesting birds and raptors (see Section 4.4 Biological Resources) and mitigation measures MM CUL-1.1, MM CUL-1.2, and MM CUL-2.1 to reduce potential impacts to buried cultural and TCRs (see Section 4.5 Cultural Resources and Section 4.18 Tribal Cultural Resources). **(Less than Significant Impact with Mitigation Incorporated)**

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

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

As discussed in Section 4.1, the project meets the criteria identified in SB 743; therefore, the project would result in less than significant aesthetic impacts (including cumulative aesthetic impacts). The project would not result in any impacts to agriculture and forestry resources, mineral resources, or wildfire; therefore, the project would not contribute to significant cumulative impacts to those resources.

The project's impact on broader resources including air quality, energy, GHG, and VMT are evaluated at a cumulative level. That is, if a project results in a significant impact to air quality (specifically criteria air pollutants), energy, GHG, and VMT, the project would be considered to have a significant cumulative impact on those resources. As discussed in Sections 4.3 Air Quality, 4.6 Energy, 4.8 Greenhouse Gas Emissions, and 4.17 Transportation, the project would not result in significant (individual and cumulative) impacts to those resources. The project's cumulative community health risk impact was evaluated under checklist question c) in Section 4.3 Air Quality and concluded to be less than significant.

In addition, the project is consistent with the General Plan and the impacts from buildout of the General Plan were evaluated in the General Plan FEIR. As identified in the General Plan FEIR, buildout of the General Plan would result in significant cumulative unavoidable impacts to land use, population and housing, noise, transportation, and solid waste. The significant cumulative land use and population and housing impacts were due to regional jobs-housing imbalance, the significant cumulative noise impact was due to increased traffic noise levels on roadway segments, the significant cumulative transportation impact was due to substandard levels of service, and the significant cumulative solid waste impact was due to uncertainties of solid waste disposal location beyond the contract year with NISL. The project's contribution to the significant cumulative land use, population and housing, noise, transportation, and solid waste impacts are not cumulatively considerable because the project size and associated growth is relatively small compared to the General Plan buildout for the City.

The General Plan FEIR also concluded that buildout of the General Plan (which includes the proposed project) would result in less than significant cumulative biological resources, cultural resources (including TCRs), geology and soils, hazards and hazardous materials, hydrology and water quality, public services, recreation, and utilities and service systems (except for solid waste disposal), assuming compliance with applicable laws and regulations, conditions of approval, and project-specific mitigation measures. As discussed throughout this Initial Study, the project would be consistent with the General Plan FEIR assumptions by complying with applicable laws and regulations, conditions of approval, and project-specific mitigation measures (including mitigation measures MM AQ-3.1, MM BIO-1.1, MM CUL-1.1, MM CUL-1.2, MM CUL-2.1, MM GEO-1.1, MM NOI-1.1, MM NOI-1.2, and MM NOI-2.1). Therefore, the project would not result in cumulatively considerable contributions to significant cumulative impacts. **(Less than Significant Impact with Mitigation Incorporated)**

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

Consistent with Section 15065(a)(4) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. Under this standard, a change to the physical environment that might otherwise be minor must be treated as significant if 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 hazardous materials, construction TACs, and noise. As explained in Sections 4.3 Air Quality, 4.9 Hazards and Hazardous Materials, and 4.13 Noise, the project's implementation of conditions of approval, mitigation measures MM AQ-3.1, MM NOI-1.1, MM NOI-1.2, and MM NOI-2.1 identified in those sections would reduce these impacts to a less than significant level. **(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:

Association of Bay Area Governments and Metropolitan Transportation Commission. *Plan Bay Area* 2050. October 21, 2021.

Bay Area Air Quality Management District. *Final 2017 Clean Air Plan.* April 19, 2017.

Cal Fire Office of the State Fire Marshal. "Fire Hazard Severity Zone Viewer." Accessed June 6,2024. https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/.

California Air Resources Board. "Advanced Clean Cars II." Accessed June 6, 2024. https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii.

---. "Overview: Diesel Exhaust and Health." Accessed June 6, 2024. https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health.

California Building Standards Commission. "California Building Standards Code." Accessed June 6, 2024. https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo.

California Department of Conservation. "California Important Farmland Finder." Accessed June 6, 2024. https://maps.conservation.ca.gov/DLRP/CIFF/.
https://sccplanning.maps.arcgis.com/apps/webappviewer/index.html?id=1f39e32b4c0644b0915354c3e59778ce.

California Department of Finance. "E-5 City/County Population and Housing Estimates." May 2023. Accessed on March 20, 2024. https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2023/.

California Department of General Services. "CALGreen." Accessed June 12, 2024. https://www.dgs.ca.gov/BSC/CALGreen.

California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements" Accessed June 6, 2024. http://hcd.ca.gov/community-development/housing-element/index.shtml.

California Department of Tax and Fee Administration. "Net Taxable Gasoline Gallons." Accessed June 6, 2024. https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=VehicleTaxableFuelDist.

California Department of Transportation. “California State Scenic Highway System Map.” Accessed June 6, 2024. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa.

---. “Scenic Highways.” Accessed June 6, 2024. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

California Energy Commission (CEC). “2022 Building Energy Efficiency Standards.” Accessed June 6, 2024. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency.

---. “2022 Buil ding Energy Efficiency Standards What’s New for Multifamily.” Revised August 4, 2022. Accessed June 6, 2024. https://www.energy.ca.gov/sites/default/files/202208/2022_Multifamily_Whats_new_Summary_ADA.pdf.

---. “2022 Building Energy Efficiency Standards What’s New for Single-Family Residential.” Revised July 15, 2022. Accessed June 6, 2024. https://www.energy.ca.gov/sites/default/files/2022-08/2022_Single family_Whats_New_Summary_ADA.pdf.

---. “2022 Building Energy Efficiency Standards What’s New for Nonresidential.” Revised August 4, 2022. Accessed June 6, 2024. https://www.energy.ca.gov/sites/default/files/202208/2022_Nonresidential_Whats_New_Summary_ADA.pdf.

---. “Natural Gas Consumption by County.” Accessed June 6, 2024. http://ecdms.energy.ca.gov/gasbycounty.aspx.

---. Energy Consumption Data Management System. “Electricity Consumption by County.” Accessed June 6, 2024. http://ecdms.energy.ca.gov/elecbycounty.aspx.

California Environmental Protection Agency. “Cortese List Data Resources.” Accessed June 6,2024. https://calepa.ca.gov/sitecleanup/corteselist/.

California Gas and Electric Utilities. 2023 *California Gas Report.* Accessed June 6, 2024. https://www.socalgas.com/sites/default/files/Joint_Biennial_California_Gas_Report_2023_Supplement.pdf.

California Legislative Information. “Chapter 2.7. Modernization of Transportation Analysis for Transit-Oriented Infill Projects [21099- 21099.].” Accessed June 6, 2024. https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PRC&division=13.&part=&chapter=2.7.&article=.

California Office of Historic Preservation. "California Historical Resources." Accessed June 21, 2024. https://ohp.parks.ca.gov/ListedResources/?view=name&criteria=Santa+Clara.

---. "CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6." Accessed June 6, 2024. http://www.ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf.

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

California State Water Resources Control Board. "2020-2022 California Integrated Report (Clean Water Act Section 303(d) List and 305(b) Report)." May 11, 2022. Accessed June 6,2024. https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_integrated_report.html.

CalRecycle. Analysis of the Progress Toward the SB 1383 Organic Wase Reduction Goals. Revised November 30, 2020. Accessed June 7, 2024. https://www2.calrecycle.ca.gov/Publications/Details/1693#:~:text=Analysis%20of%20the%20Progress%20Toward,(DRRR%2D2020%2D1693)&text=SB%201383%20establishes%20targets%20to,75%20percent%20reduction%20by%202025.

CARB. *2022 Scoping Plan for Achieving Carbon Neutrality*. December 2022.

City of San José. "San José-Santa Clara Regional Wastewater Facility." Accessed June 7, 2024. https://www.sanjoseca.gov/your-government/departments-offices/environmental-services/water-utilities/regional-wastewater-facility.

---. "Historic Resources." Accessed June 10, 2024. https://www.santaclaraca.gov/our-city/departments-a-f/community-development/planning-division/historic-preservation.

---. "History of the Fire Department." Last Updated December 7, 2021. Accessed June 7, 2024. https://www.santaclaraca.gov/our-city/departments-a-f/fire-department/about-us/history.

---. "Land Use Classifications." Accessed June 6, 2024. Land Use Classifications | City of Santa Clara (santaclaraca.gov).

---. "Mixed Waste Processing." Accessed June 20, 2024. https://www.santaclaraca.gov/our-city/departments-g-z/public-works/environmental-programs/residential-garbage-recycling/mixed-waste-processing.

---. 2010-2035 General Plan Integrated Final Environmental Impact Report. SCH# 2008092005. January 2011.

---. *2010-2035 General Plan.* 2014.

---. *2020 Urban Water Management Plan*. June 22, 2021.

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

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

---. City of Santa Clara General Plan – 8.9 Historic Preservation and Resource Inventory. 8.9-18 and 8.9-19.

County of Santa Clara. *Williamson Act Properties Geodatabase*. Accessed June 6, 2024. https://sccplanning.maps.arcgis.com/apps/webappviewer/index.html?id=1f39e32b4c0644b0915354c3e59778ce.

Education Data Partnership. "Ed Data Education Data Partnership CDE/EdSource/FCMAT." Accessed April 12, 2024. http://www.ed-data.org/index.

FEMA. "FEMA Flood Map Service Center: Search By Address." Accessed June 6, 2024. FEMA Flood Map Service Center | Search By Address.

Illingworth & Rodkin. *2303 Gianera Street Noise And Vibration Assessment*. August 29, 2024.

Institute of Transportation Engineers. *Trip Generation Manual, 11th Edition*. 2021.

National Park Service. "National Register Database and Research." Accessed June 21, 2024. https://www.nps.gov/subjects/nationalregister/database-research.htm.

Santa Clara County Airport Land Use Commission. *San José Mineta International Airport. Airport Land Use Compatibility Plan*. March 27, 2024.

Santa Clara County. *Santa Clara County Five Year CIWMP/RAIWMP Review Report*. June 23, 2021.

Santa Clara Police Department. "Fact Sheet." Accessed March 20, 2024. https://www.santaclaraca.gov/our-city/departments-g-z/police-department/about-us/fact-sheet

Santa Clara Unified School District. "About Us." Accessed March 20, 2024. https://www.santaclarausd.org/domain/15

---. "MySchool Locator." Accessed March 20, 2024. https://locator.decisioninsite.com/?StudyID=217157

---. *Residential and Commercial/Industrial Development School Fee Justification Study*. March 28, 2024. Accessed June 20, 2024. https://resources.finalsite.net/images/v1714077505/santaclarausdorg/jiv7lvbzaig9gs5lzr4p/SCUSDLevel1DevelopmentFeeJustificationStudy2024.pdf.

Silicon Valley Soil Engineering. *2303 Gianera Street Geotechnical Investigation*. February 2023.

U.S. Energy Information Administration. "Petroleum & Other Liquids, California Field Production of Crude Oil." February 28, 2023. https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=mcrfpca1&f=a

United States Department of Conservation. "CGS Seismic Hazards Program: Liquefaction Zones." Accessed June 6, 2024. https://gis.data.ca.gov/datasets/b70a766a60ad4c0688babdd47497dbad_0/explore?location=37.351970%2C-121.989118%2C18.63.

United States Department of Energy. *Energy Independence & Security Act of 2007.* Accessed June 6, 2024. http://www.afdc.energy.gov/laws/eisa.

United States Department of Transportation. USDOT Announces New Vehicle Fuel Economy Standards for Model Year 2024-2026." Accessed June 6, 2024. https://www.nhtsa.gov/press-releases/usdot-announces-new-vehicle-fuel-economy-standards-model-year-2024-2026.

United States Energy Information Administration. "California State Energy Profile." Accessed June 6, 2024. https://www.eia.gov/state/print.php?sid=CA.

---. "Natural Gas Consumption by End Use. 2021." Accessed March 18, 2024. https://www.eia.gov/state/?sid=CA#tabs-2.

United States Environmental Protection Agency. "EPA Actions to Protect the Public from Exposure to Asbestos." Accessed April 19, 2022. https://www.epa.gov/asbestos/epa-actions-protect-public-exposure-asbestos

---. "Summary of the Resource Conservation and Recovery Act." Accessed June 6,2024. https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act.

---. "Superfund: CERCLA Overview." Accessed June 6, 2024. https://www.epa.gov/superfund/superfund-cercla-overview.

---. "The 2023 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." December 2023. https://www.epa.gov/system/files/documents/2023-12/420r23033.pdf.

United States Geologic Survey. “Alquist-Priolo Faults.” Accessed June 6, 2024. https://earthquake.usgs.gov/education/geologicmaps/apfaults.php.

Valley Water. “Dam Safety Program.” Accessed June 19, 2024. https://www.valleywater.org/flooding-safety/dam-safety-program.

---. “Groundwater Management Plan 2021 for the Santa Clara and Llagas Subbasins.” November 2021.

---. “Local Dams and Reservoirs.” Accessed June 6, 2024. https://www.valleywater.org/your-water/local-dams-and-reservoirs.

---. *2021 Groundwater Management Plan, Santa Clara and Llagas Subbasins*. November 2021.

Personal Communications

- Boccaleoni, Anthony. Division Manager, Republic Services.
- Nguyen, Viet. Associate Engineer, City of Santa Clara Department of Public Works.
- Plascencia, Calvin. Community Risk Reduction Division, Santa Clara Fire Department.
- Shoup, Daniel. Principal and registered professional archaeologist, A/HC.

Section 6.0 Lead Agency and Consultants

6.1 Lead Agency

City of Santa Clara
Community Development Department
Reena Brilliot, Acting Director
Daniel Sobczak, Associate Planner

6.2 Consultants

David J. Powers & Associates, Inc.
Environmental Consultants and Planners
Kristy Weis, Vice President/Principal Project Manager
Amy Wang, Project Manager
Kishann Rai, Researcher
Ryan Osaka, Graphic Artist

AEI Consultants
Hazardous Materials Consultant
Cade Klock, Senior Geologist
Samantha Golding, Project Geologist II

Archaeological/Historical Consultants
Archaeological Consultants
Dan Shoup, Archaeologist
Jennifer Ho, Archaeologist

HortScience | Bartlett Consulting
Biological Consultants
Pam Nagle, Consulting Arborist and
Urban Forester

Illingworth & Rodkin, Inc.
Acoustical and Air Quality Consultants
Michael Thill, Principal
Carrie Janello, Senior Consultant
Zachary Palm, Staff Consultant
Jordyn Bauer, Staff Consultant

Silicon Valley Soil Engineering
Geotechnical Consultants
Vien Vo, P.E.
Sean Deivert, Project Manager

Section 7.0 Acronyms and Abbreviations

AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACM	asbestos-containing material
ALUC	Airport Land Use Commission
APN	Assessor's Parcel Number
ATCM	air toxic control measure
BAAQMD	Bay Area Air Quality Management District
Bay Area	San Francisco Bay Area
bgs	below ground surface
BMPs	Best Management Practices
Btu	British thermal unit
CAAQS	California Ambient Air Quality Standard
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health
CalARP	California Accidental Release Prevention
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Standards Code
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFC	chlorofluorocarbon
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH_4	methane
CLUP	Comprehensive Land Use Plan
CNEL	Community Noise Equivalent Level
CO	carbon monoxide

CO_2	carbon dioxide
CO_2e	carbon dioxide equivalents
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
dBA	A-weighted decibel
DNL	Day/Night Average Sound Level
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
EV	Electric Vehicles
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FMMP	Farmland Mapping and Monitoring Program
General Plan	City of Santa Clara General Plan
General Plan FEIR	City of Santa Clara Draft 2010-2035 General Plan Integrated Final Environmental Impact Report
GHG	greenhouse gas
GHGRS	Greenhouse Gas Reduction Strategy
GWh	gigawatt hour
GWP	Global Warming Potential
Habitat Plan	Santa Clara Valley Habitat Plan
ibid	Same source as previous footnote
L_{eq}	Energy-Equivalent Sound/Noise Descriptor
L_{max}	Maximum A-weighted noise level during a measurement period
LBP	lead-based paint
LID	Low Impact Development
LOS	Level of Service
LRA	Local Responsibility Area

MBTA	Migratory Bird Treaty Act
MEI	maximally exposed individual
$MMTCO_2e$	million metric tons of carbon dioxide equivalent
MND	Mitigated Negative Declaration
mpg	miles per gallon
MTC	Metropolitan Transportation Commission
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standard
NAHC	Native American Heritage Commission
NCP	National Contingency Plan
NESHAP	National Emission Standards for Hazardous Air Pollutants
NISL	Newby Island Landfill
NO_2	nitrogen dioxide
NOD	Notice of Determination
NO	nitric oxide
NO_x	nitrogen oxides
NRHP	National Register of Historic Places
O_3	ozone
PCB	polychlorinated biphenyls
PFC	perfluorocarbon
PDA	Priority Development Areas
PG&E	Pacific Gas and Electric Company
PM	particulate matter
PM_{10}	particulate matter with a diameter of 10 microns or less
$PM_{2.5}$	particulate matter with a diameter of 2.5 microns or less
PPV	Peak Particle Velocity
R&D	Research and Development
RCRA	Resource Conservation and Recovery Act
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SB	State Bill
SCFD	City of Santa Clara Fire Department

SCS	Sustainable Communities Strategy
SFHA	Special Flood Hazard Areas
SCPD	Santa Clara Police Department
SCUSD	Santa Clara Unified School District
SFPU	San Francisco Public Utilities Commission
SF_6	sulfur hexafluoride
SHMA	Seismic Hazards Mapping Act
SMARA	Surface Mining and Reclamation Act
SMGB	State Mining and Geology Board
SMP	Site Management Plan
SO_x	sulfur oxides
SO_2	sulfur dioxide
SR	State Route
SRA	State Responsibility Area
SWRCB	State Water Resources Control Board
TACs	Toxic Air Contaminants
Title 24	Title 24, Part 6 of the California Code of Regulations
TSCA	Toxic Substances Control Act
USFWS	United States Fish and Wildlife Service
VMT	vehicle miles traveled
Williamson Act	California Land Conservation Act