Initial Study

Intel Central Utility Building

City File No.: PLN22-00495

Prepared by

CITY OF SANTA CLARA CALIFORNIA
1852
THE MISSION CITY

In Consultation with

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

January 2024

Table of Contents

Table of Contents

Figures

Tables

Appendices

All appendices are incorporated herein by this reference. No other documents are incorporated by reference.

Section 1.0 Introduction and Purpose

1.1 Purpose of the Initial Study

The City of Santa Clara, as the Lead Agency, prepared this Initial Study for the Intel Central Utility Building project in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 et. seq.) and the regulations and policies of the City of Santa Clara, California.

The project proposes to construct a 17,000-square foot Central Utility Building (CUB) to serve the existing and planned equipment at the existing Santa Clara 1 (SC1) cleanroom facility. The SC1 cleanroom is located within the central southwestern portion of the site, directly adjacent to the proposed CUB, and is utilized for the manufacture of microchips and other materials in a controlled environment. This Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the proposed CUB.

1.2 Public Review Period

Publication of this Initial Study marks the beginning of a 30-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 30-day public review period should be sent to:

Steve Le, Senior Planner
Community Development Department
City of Santa Clara
1500 Warburton Avenue
Santa Clara, CA 95050
(408) 615-2468
SLe@SantaClaraCA.gov

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 public hearing 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

Intel Central Utility Building (CUB) Project

2.2 Lead Agency Contact

Steve Le, Senior Planner
Community Development Department
City of Santa Clara
1500 Warburton Avenue
Santa Clara, CA 95050
(408) 615-2468
SLe@SantaClaraCA.gov

2.3 Project Applicant

Intel Corporation

2.4 Project Location

The 1.3-acre project site is located at 3065 Bowers Avenue in the City of Santa Clara.

2.5 Assessor's Parcel Number

Assessor's Parcel Number (APN) 216-46-015

2.6 General Plan Designation and Zoning District

General Plan designation of High Intensity Office/Research and Development and a zoning district of MP-Planned Industrial.

2.7 Project-Related Approvals, Agreements, and Permits

- Architectural Review
- Use Permit
- Issuance of Demolition, Grading, Building, and Occupancy permits

Section 3.0 Project Description

3.1 Project Location and Existing Setting

The project site is an approximately 1.3-acre area on the southwestern corner of the 26-acre Intel Bowers Campus (Intel Campus) located at 3065 Bowers Avenue in the City of Santa Clara (APN 216-46-015). The Intel Campus is bordered by Bowers Avenue and industrial buildings to the west, Central Expressway and industrial buildings to the south, and industrial buildings and data centers to the east. A regional map, vicinity map, and aerial photograph showing the site and surrounding land uses are shown on Figure 3.3-1, Figure 3.3-2, and Figure 3.3-3, respectively.

The project site is currently developed with a paved surface parking area with landscaped islands.

3.2 General Plan and Zoning

The site has a General Plan designation of High Intensity Office/Research and Development (R&D). The High Intensity Office/R&D General Plan designation is intended for high-rise or campus-like developments for corporate headquarters, R&D, and supporting uses, with landscaped areas for employee activities. Permitted uses include offices and prototype R&D uses. Accessory or secondary, small-scale supporting retail uses that serve local employees and visitors are also permitted.

The site is in the MP-Planned Industrial zoning district. The MP-Planned Industrial zoning district is intended to provide an environment exclusively for and conducive to the development and protection of modern, large-scale administrative facilities, research institutions, and specialized manufacturing organizations, all of a non-nuisance type. Permitted uses under this district include chemical and physical science offices and laboratories; engineering and cartographic offices and laboratories; manufacturing, assembling, and packaging of electronic equipment, instrument, devices, and pharmaceuticals; research offices and laboratories; testing offices and laboratories; and incidental and accessory buildings, storage buildings, outdoor storage, warehouses, and exposed mechanical equipment. The zoning allows for a maximum building height of 70 feet.

3.3 Proposed Development

The project proposes to redevelop the approximately 1.3-acre project site with a 17,000-square foot Central Utility Building (CUB). Figure 3.3-4 depicts the existing conditions of the overall campus and Figure 3.3-5 depicts the campus with the proposed CUB development. The CUB structure would have a ground-level footprint of approximately 14,200 square feet with an additional 2,800 square feet of mechanical penthouse at the roof level. The CUB would have a height of 45 feet, which includes a 20-foot parapet to screen rooftop equipment.

The CUB would serve the existing and planned equipment at the SC1 cleanroom facility that is located within the central southwestern portion of the site, directly adjacent to the proposed CUB. The SC1 cleanroom is utilized for the manufacture of microchips and other materials in a controlled environment. The CUB would house a chiller area, pumps, brine containment, generator yard, electrical substation/battery storage room, mechanical equipment, and natural gas boilers. The CUB would also include a 175-square-foot office area to be utilized by engineering and maintenance staff. The conceptual site plan, floor plan, roof plan, and elevations are shown on Figure 3.3-6, Figure 3.3-7, Figure 3.3-8, and Figure 3.3-9, respectively.

Individual components of the CUB are described in greater detail in the following subsections.

3.3.1 Chillers, Pumps, Cooling Towers, and Boilers

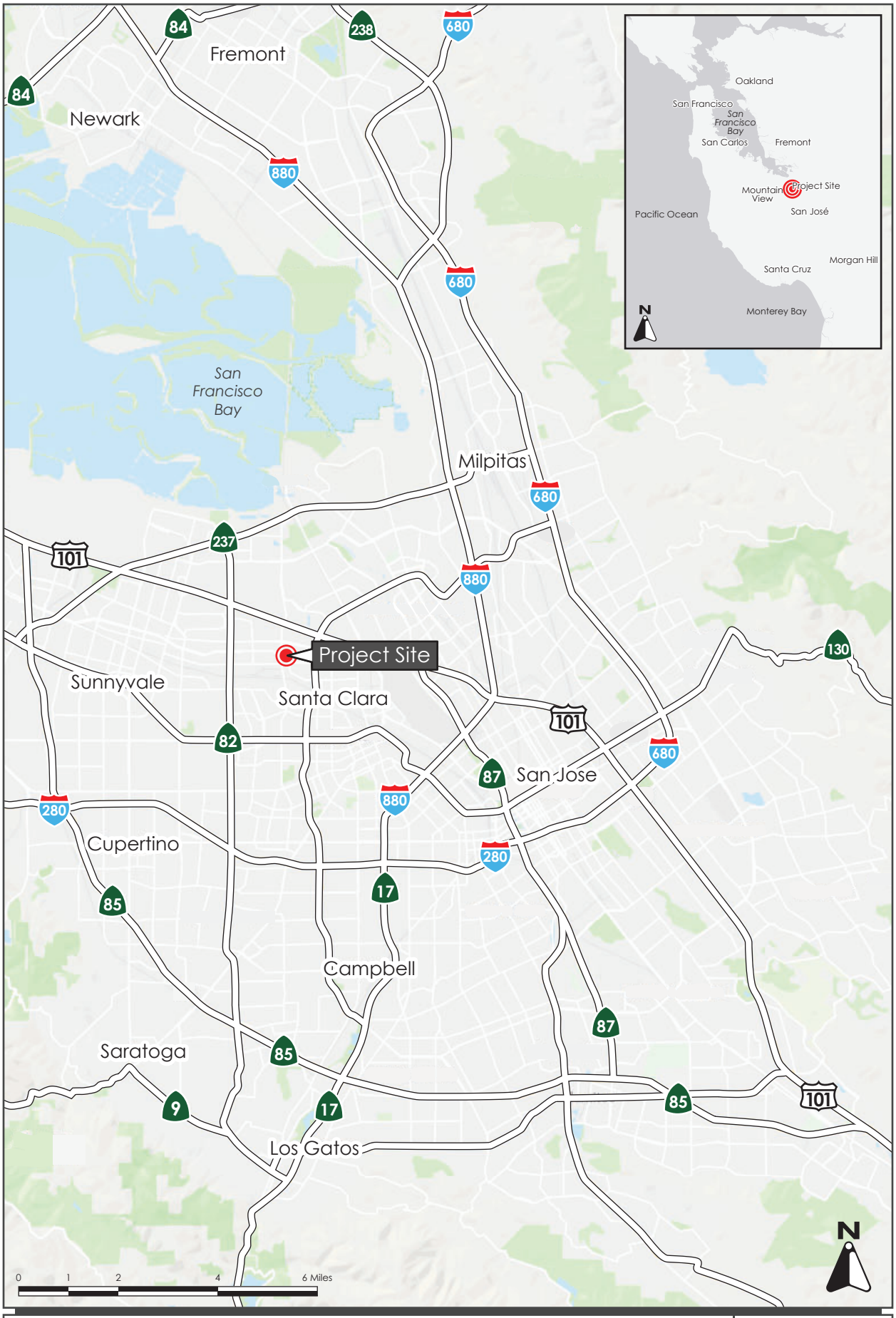
The CUB would house three ground-level chillers, each with 1,300-ton refrigeration capacity, and associated pump and controls. Additionally, the CUB would include three cooling towers, each consisting of two cells, for a total of six cells. Two cooling towers would operate at full capacity (4,000 hours per year) while the third cooling tower would be redundant and used in the event one of the other cooling towers fails. The cooling towers and an approximately 2,800-square foot electrical penthouse would be located on the roof level. The building would also include natural gas hookups serving two natural gas powered boilers which are needed to achieve the required water heating temperatures of 160 to 180 degrees Fahrenheit (°F). There would be a third natural gas boiler for redundancy purposes, and this boiler would only be used if the other two natural gas boilers are inoperable.

3.3.2 Generator Yard

Two 2.8-megawatt (MW) diesel-fueled generators would be located within an enclosed, exterior generator yard. The generators would provide 5.6 MW of backup power. Each generator would be housed within a generator enclosure for security purposes and to reduce noise emissions.

The backup generators would be run for short periods for testing and maintenance purposes and otherwise would not operate unless a disturbance or interruption of the electricity supply occurs. The generators would each be tested for 30 minutes monthly.

The generators would use ultra-low sulfur diesel as fuel (<15 parts per million sulfur by weight). Each generator would have a fuel tank within the generator enclosure with leak detection and spill containment under the fuel filter. The generators would have a combined diesel fuel storage capacity of approximately 3,000 gallons, which is sufficient to provide more than 24 hours of emergency generation at full electrical demand of the facility.



REGIONAL MAP | FIGURE 3.3-1

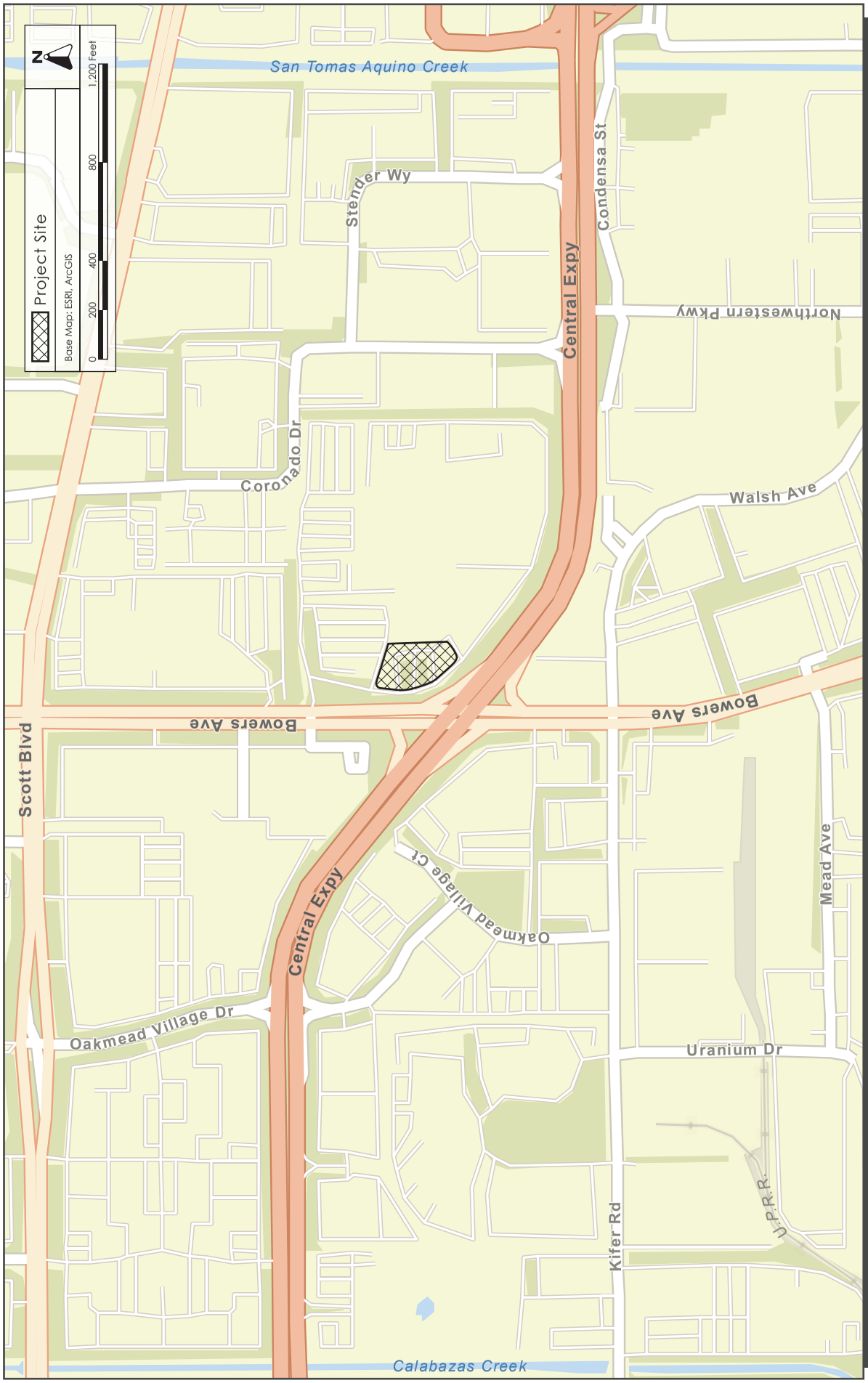
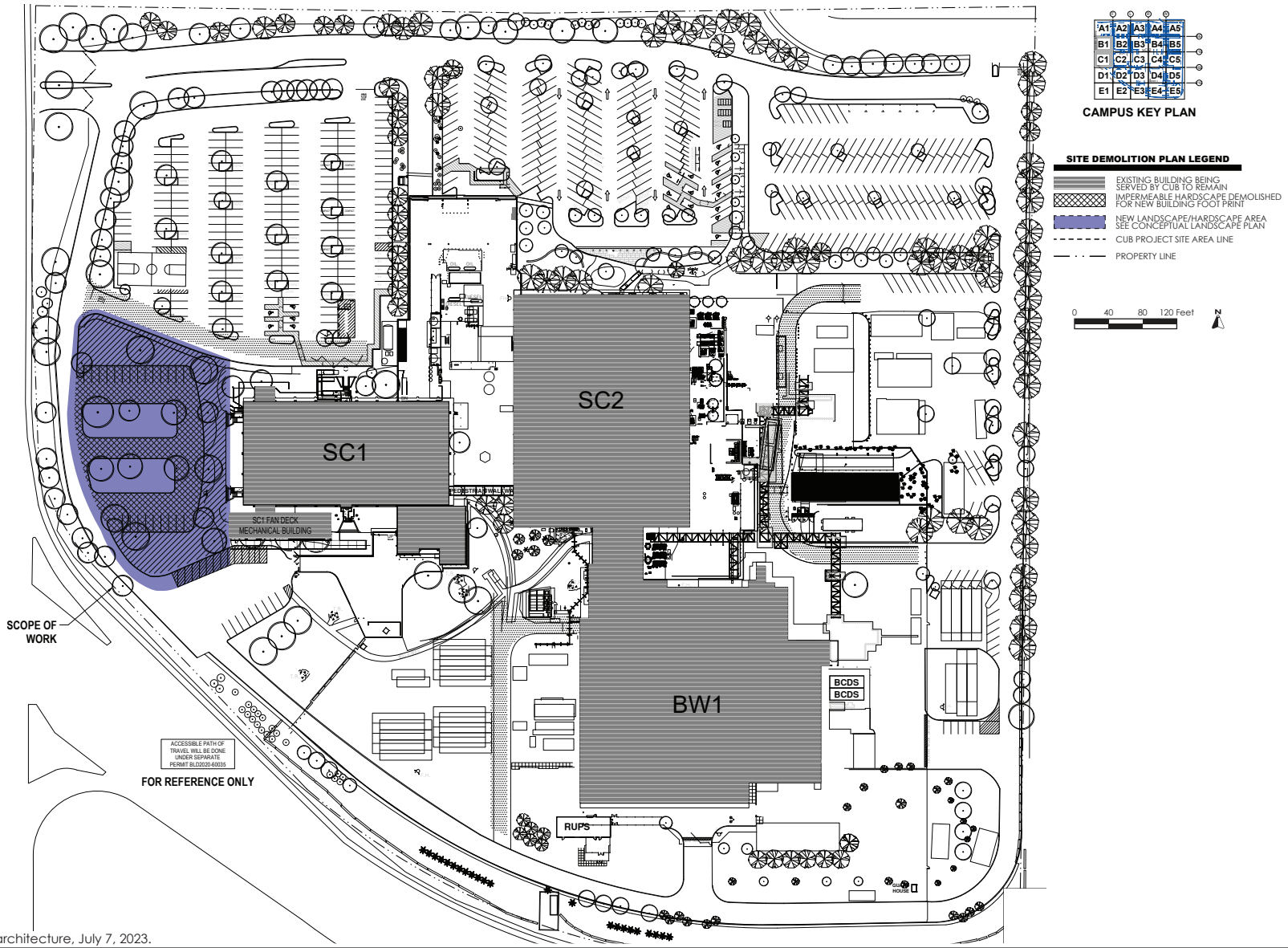


FIGURE 3.3-2

VICINTIY MAP

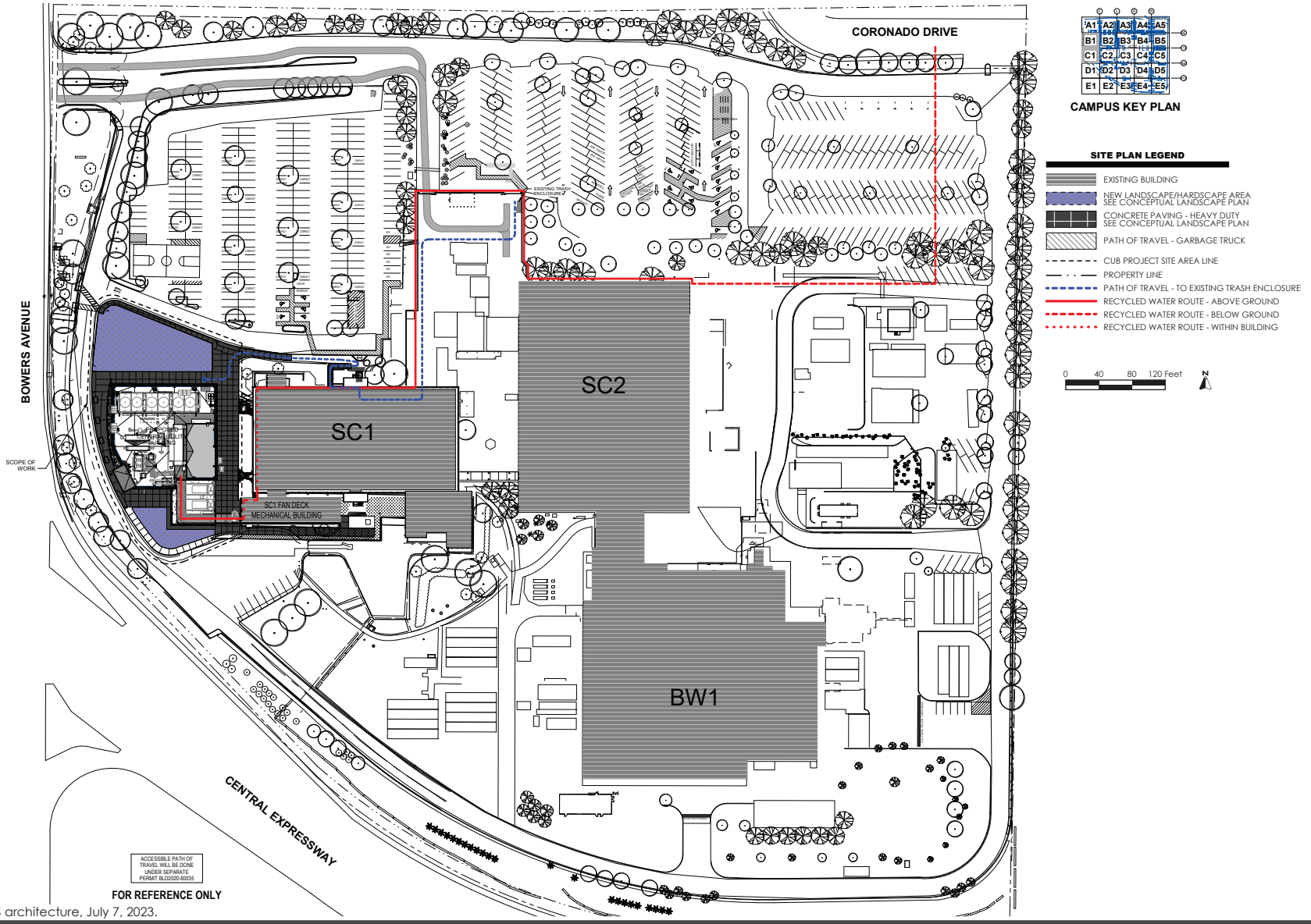
AERIAL PHOTOGRAPH AND SURROUNDING LAND USES | FIGURE 3.3-3



Source: TWINSTEPS architecture, July 7, 2023.

INTEL CAMPUS EXISTING CONDITIONS MAP

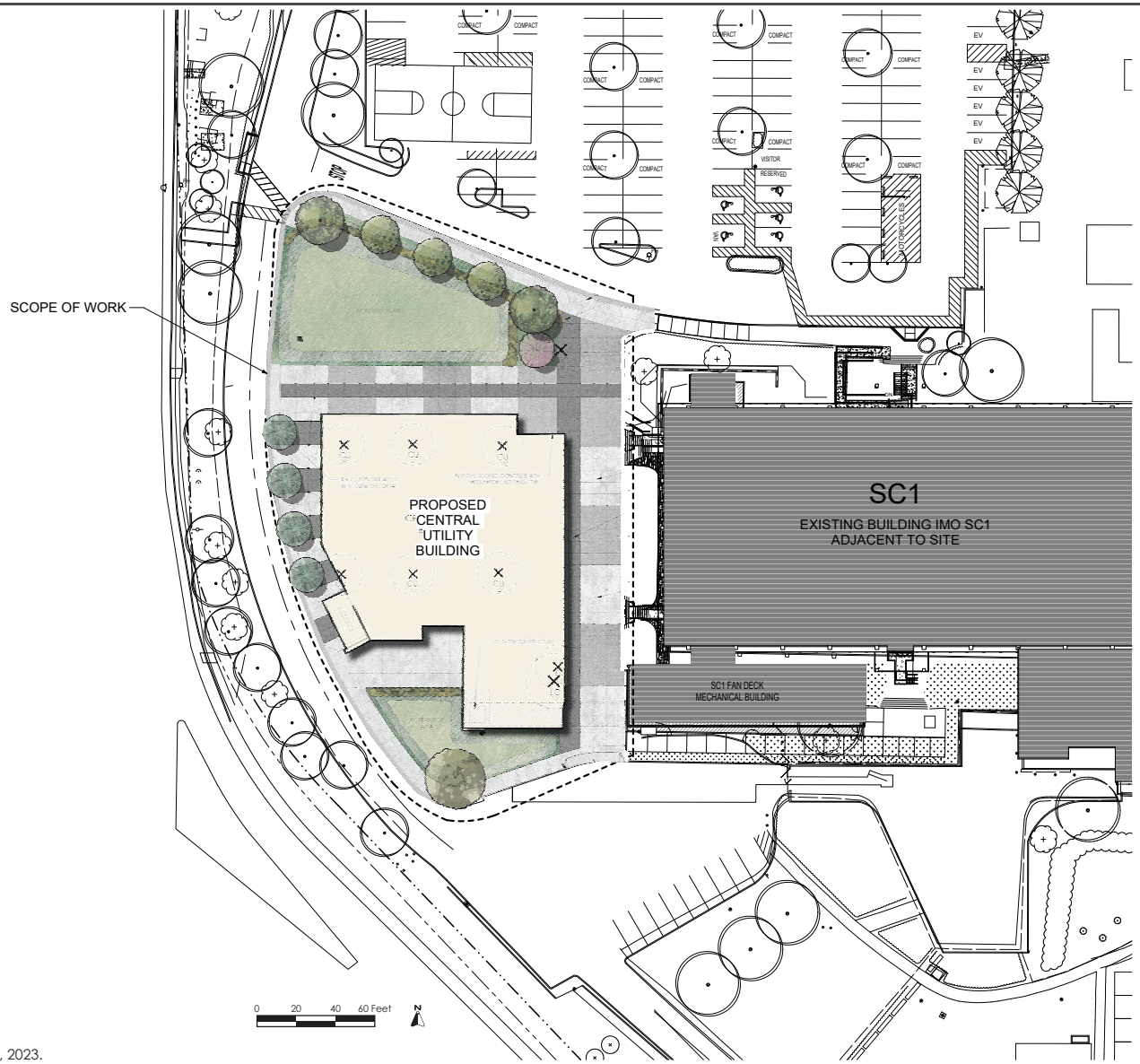
FIGURE 3.3-4



Source: TWINSTEPS architecture, July 7, 2023.

INTEL CAMPUS PROPOSED CONDITIONS MAP

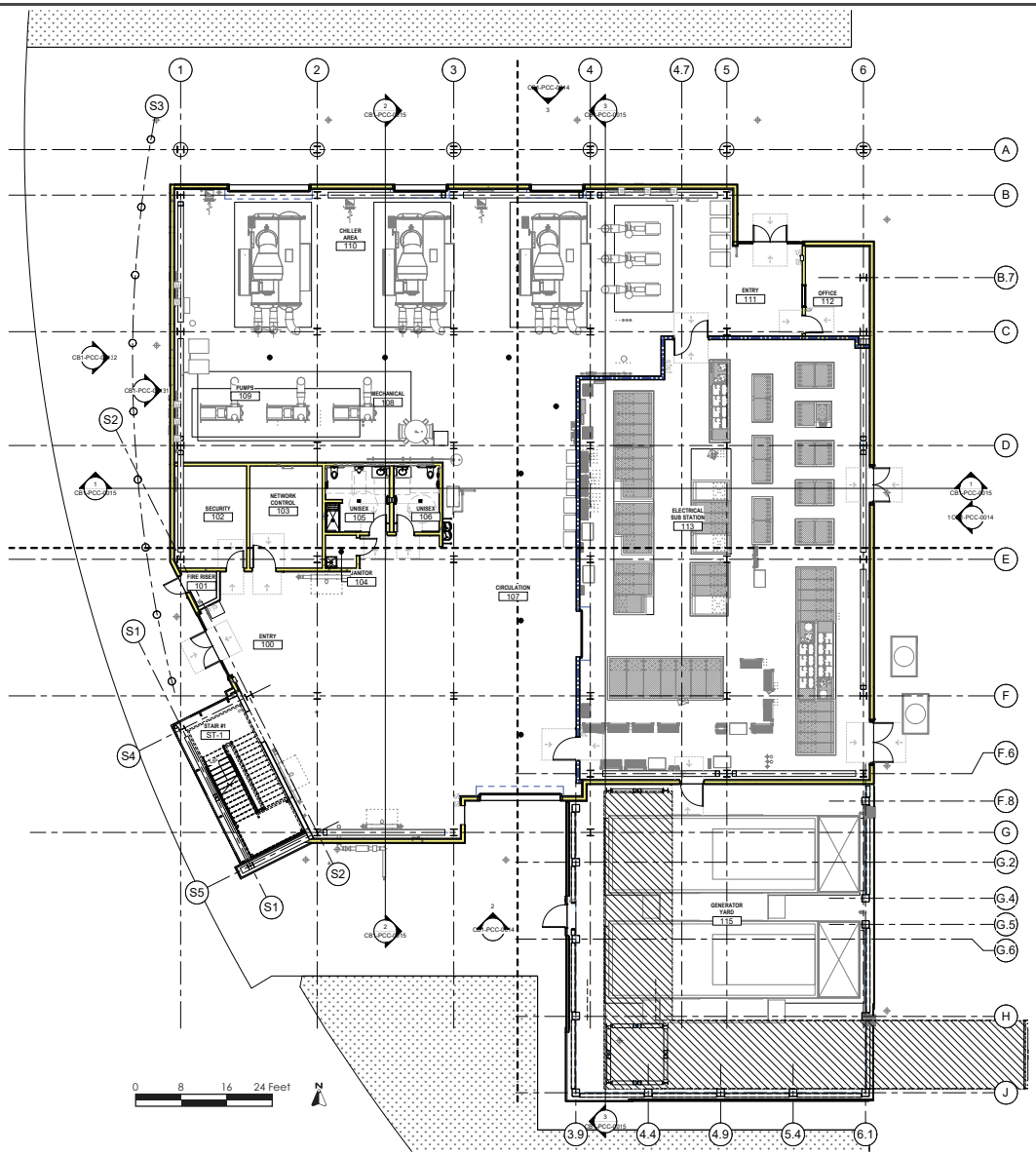
FIGURE 3.3-5



Source: TWINSTEPS architecture, July 7, 2023.

CONCEPTUAL SITE PLAN

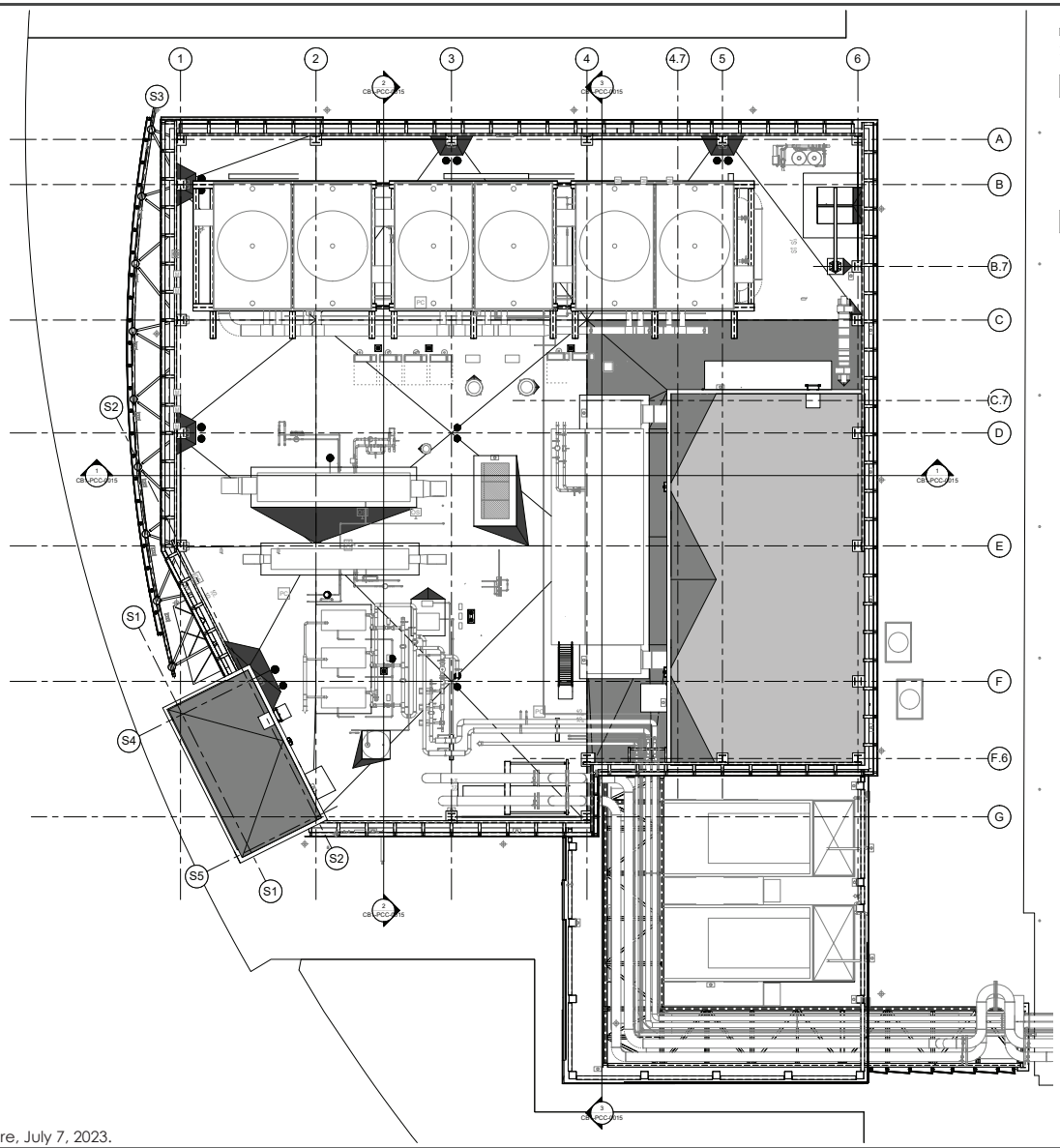
FIGURE 3.3-6



Source: TWINSTEPS architecture, July 7, 2023.

CONCEPTUAL FLOOR PLAN

FIGURE 3.3-7



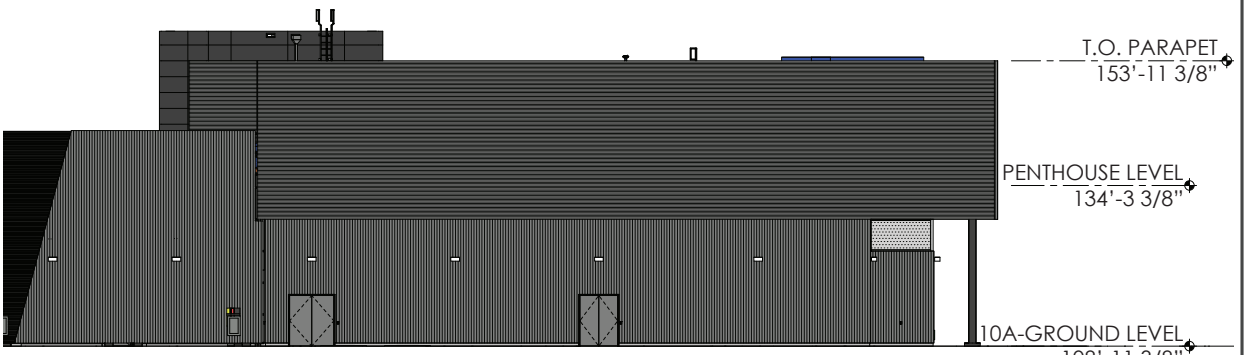
Source: TWINSTEPS architecture, July 7, 2023.

CONCEPTUAL ROOF PLAN

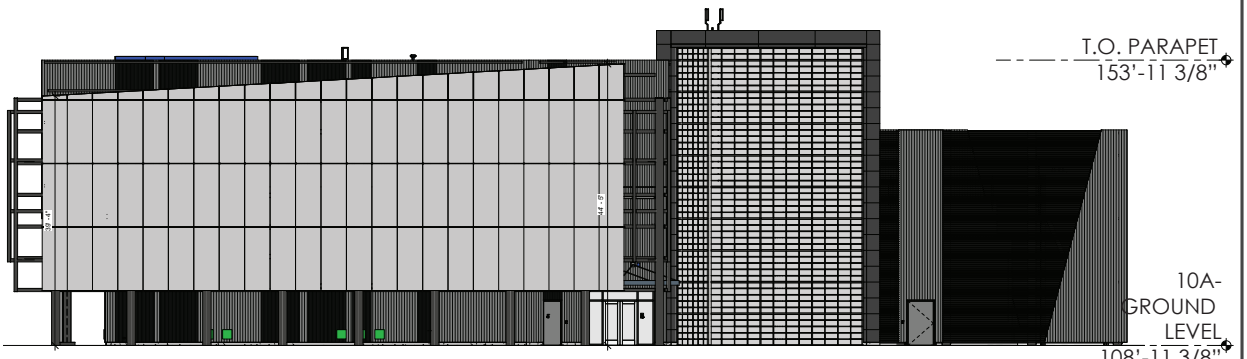
FIGURE 3.3-8

NORTH ELEVATION

SOUTH ELEVATION



EAST ELEVATION



WEST ELEVATION

Source: TWINSTEPS architecture, July 7, 2023.

BUILDING ELEVATIONS | FIGURE 3.3-9

3.3.3 Site Access and Parking

Access to the site would be provided via an existing two-way driveway on Bowers Avenue. The proposed CUB would serve and be part of the existing Intel Campus operations; however, the project would not generate new employees or regular trips to and from the site. Staff working within the CUB would be existing employees from the Intel Campus, and the overall campus has a surplus of parking in the existing surface parking lots north and northeast of the CUB site. Therefore, parking for the CUB would be accommodated within the existing surface lot to the north and northeast. The project would include a 26-foot-wide fire access lane along the western and southern borders of the CUB for emergency services.

3.3.4 Landscaping and Stormwater Controls

The project would remove nine trees, all of which are protected under the City's General Plan and City Code.[1] The project proposes to plant a total of 11, 36-inch box trees. The proposed landscaping plan is shown on Figure 3.3-10.

Stormwater runoff from the site's impervious surfaces would be directed to treatment systems before being collected in a series of pipes sized for a 10-year storm event in accordance with the City's design requirements. A 6,248-square foot bioretention treatment area would be located on the northwestern corner of the project site. A second 2,005-square foot bioretention treatment area would be located on the southwestern corner of the project site. The proposed stormwater control plan is shown on Figure 3.3-11.

3.3.5 Recycled Water

The project proposes to use reclaimed water for landscape irrigation on the CUB site, as well as for the plumbing fixtures in the CUB. In addition, recycled water would be used in the proposed cooling towers within the CUB. Recycled water is available from an existing line in Coronado Drive at the northeastern portion of the Intel Campus. To serve the CUB and project site, a connection to this line would be trenched from Coronado Drive to the northeast side of the campus, where it would connect to a proposed soft water system. From there, the water line would be routed west along the northern side of SC2 and SC1 buildings via an aboveground utility trestle, and then connect with the CUB site via a proposed underground connection with SC1. See Figure 3.3-12 for a depiction of the recycled water routing plan.

3.3.6 Electrical Substation/Battery Storage

The project proposes a unit substation system to convert medium voltage electricity to low voltage electricity to serve the CUB. A triple-ended substation would be in a dedicated, ventilated electrical

[1] The goal of the City's General Plan Policy 5.10.1-P4 and City Code, Chapter 12.35 is to protect all healthy cedars, redwoods, oaks, olives, bay laurel, and pepper trees of any size, and all trees over 36 inches in circumference (approximately 11 inches or more in diameter) as measured from 48 inches above the ground surface.

room on the roof level. The substation end transformers would receive power from two proposed underground electrical lines. These lines would be routed from two existing switchgears located in a central utility yard on the Intel Campus, northeast of the proposed CUB, and would connect to the eastern portion of the CUB (see Figure 3.3-12). Combined, the two lines would be capable of providing six-megavolt amperes (MVA) of power to the electric equipment in the CUB and adjacent buildings.

An uninterruptable power supply (UPS) battery storage room/electric room housing three 1,250-kilowatt (kW), five-minute, lead-acid battery systems would be located on the grade level. The battery systems would have exterior access and would be monitored, ventilated, and spaced appropriately. The room would be two-hour fire rated, meaning the material could resist fire for two hours, and each set of two battery cabinets would be separated from each other and the wall by three feet of spacing. The overall UPS system would be composed of two 1,250-kW systems with a redundant third system. These UPS systems would provide uninterrupted power to the CUB and other campus buildings in the event of an interruption in utility electricity supply, until the two non-redundant, 2.8 MW generators are activated.

3.3.7 Construction

Construction of the project is anticipated to begin in early 2024 and would take approximately 15 months, with estimated completion in summer 2025. Construction activities would include demolition, excavation, grading, building construction, and paving, as well as deliveries and installation of the proposed equipment. Portions of the proposed CUB and the mechanical equipment may be prefabricated by manufacturers off-site and delivered and installed at the project site. The project would require excavation to depths of up to ten feet for construction of the CUB, with up to 1,000 cubic yards of soil exported and 1,000 cubic yards of soil imported. Construction of the underground portions of the recycled waterline would require excavation of a six-foot trench running from Coronado Drive to the northeastern portion of the Intel Campus. A majority of the excavated soil in the trench would be backfilled, however, approximately 40 cubic yards would be off-hauled from excavation of 25 trench posts.

PLANT PALETTE

Sunset Zone: 15

NOTE: ALL TREES SHALL BE CONSIDERED REPLACEMENT TREES

Symbol	Botanical Name	Common Name	SIZE	QUANTITY	WUCOLS Region: 1
TREES					
	Cercis canadensis	Eastern Redbud	36" box	1	Mod
	Eucalyptus citriodora	Lemon-scented Gum	36" box	1	Low
	Laurus nobilis 'Saratoga'	Saratoga Sweet Bay	36" box	4	Low
	Quercus agrifolia	Coast Live Oak	36" box	2	Low
	Tristania conferta	Brisbane Box	36" box	3	Mod

Symbol	Botanical Name	Common Name	WUCOLS Region 1
SHRUBS/ GROUNDCOVERS			
	Aloe species	Aloe	Low
	Anigozanthos flavidus	Kangaroo Paw	Low
	Baccharis p. 'Twin Peaks'	Coyote Bush	Low
	Bougainvillea 'Raspberry Ice'	Bougainveillea	Low
	Bouteloua g. 'Blonde Ambition'	Blue Grama	Low
	Bulbine frutescens 'Hallmark'	Stalked Bulbine	Low
	Calamagrostis 'Karl Foerster'	Feather Reed Grass	Mod
	Callistemon v. 'Little John'	Dwarf Bottlebrush	Low
	Carex o. 'Evergold'	Evergold Japanese Sedge	Low
	Carissa m. 'Green Carpet'	Dwarf Natal Plum	Low
	Cistus x purpureus	Orchid Rock Rose	Low
	Coprosma 'Marble Queen'	Variegated Mirror Plant	Mod
	Dianella t. 'Variegata'	Flax Lily	Mod
	Echeveria 'Afterglow'	Echeveria	Low
	Festuca I. 'Siskiyou Blue'	Siskiyou Blue Fescue	Mod
	Grevillea lanigera 'Coastal Gem'	Coastal Gem Grevillea	Low
	Hemerocallis hybrids	Daylily	Mod
	Lantana 'New Gold'	New Gold Lantana	Low
	Lavandula 'Meerlo'	Meerlo English Lavender	Low
	Lomandra 'Breeze'	Dwarf Mat Rush	Low
	Muhlenbergia capillaris	Pink Muhly	Low
	Myoporum parvifolium	Myoporum	Low
	Myrtus communis 'Compacta'	Dwarf Myrtle	Low
	Pennisetum setaceum	Fountain Grass	Low
	Phormium tenax	Hybrid New Zealand Flax	Low
	Rhamnus californica 'Eve Case'	Dwarf Coffeberry	Low
	Rhaphiolepis indica	India Hawthorn	Low
	Rosa 'Flower Carpet'	Flower Carpet Rose	Low
	Rosmarinus o. 'Huntington Carpet'	Creeping Rosemary	Low
	Salvia gregii 'Flame'	Furman's Red Autumn Sage	Low
	Salvia leucantha	Mexican Bush Sage	Low
LOW SCREEN SHRUBS (Front Bioretention Areas)			
	Calamagrostis 'Karl Foerster'	Feather Reed Grass	Mod
	Callistemon v. 'Little John'	Dwarf Bottlebrush	Low
	Ceanothus g. 'Anchor Bay'	Anchor Bay Ceanothus	Low
	Grevillea 'Superb'	Superb Grevillea	Low
	Westringia 'Blue Gem'	Blue Gem Coast Rosemary	Low

Hydroseed - Native Wildflower Seed Mix in Bioretention Basins

NATURAL SCORED CONCRETE WITH LIGHT TOPCAST FINISH, TYP.

NATURAL SCORED CONCRETE WITH MEDIUM TOPCAST FINISH, TYP.

NATURAL SCORED CONCRETE WITH HEAVY TOPCAST FINISH, TYP.

EXISTING TREES REMOVED

PI — INDICATES SPECIES (See Tabulation Below)
XX" — INDICATES TRUNK DIAMETER

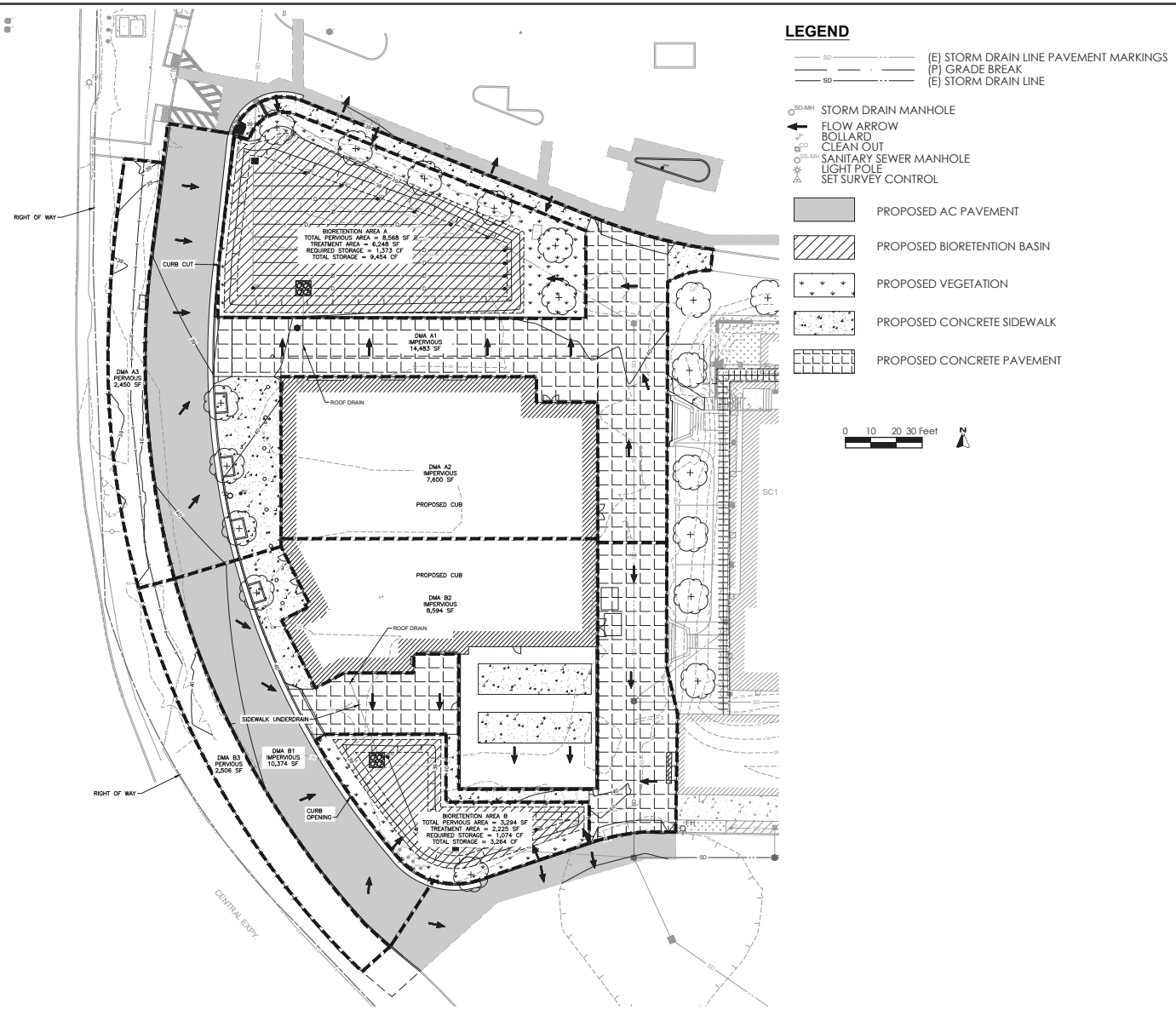
TREE REMOVAL TABULATION:

HERITAGE TREE SPECIES (REPLACE 2:1 RATIO)	QUANTITY REMOVED	QUANTITY/ SIZE REQUIRED
	0	0
PROTECTED TREES REMOVED (REPLACEMENT RATIO = 2:1 OR 1:1 W/ 36" BOX)		
(CU) Cupaniopsis anacardioides (Carrotwood)	6	6 (36" BOX)
(EC) Eucalyptus camaldulensis (River Red Gum)	3	6 (36" BOX)
Total Replacement Trees Required		9 (36" BOX)
Total Replacement Trees Provided		9 (36" BOX)
TOTAL TREES PROVIDED (See Plant Palette)		11 (36" BOX)

0 20 40 60 Feet N

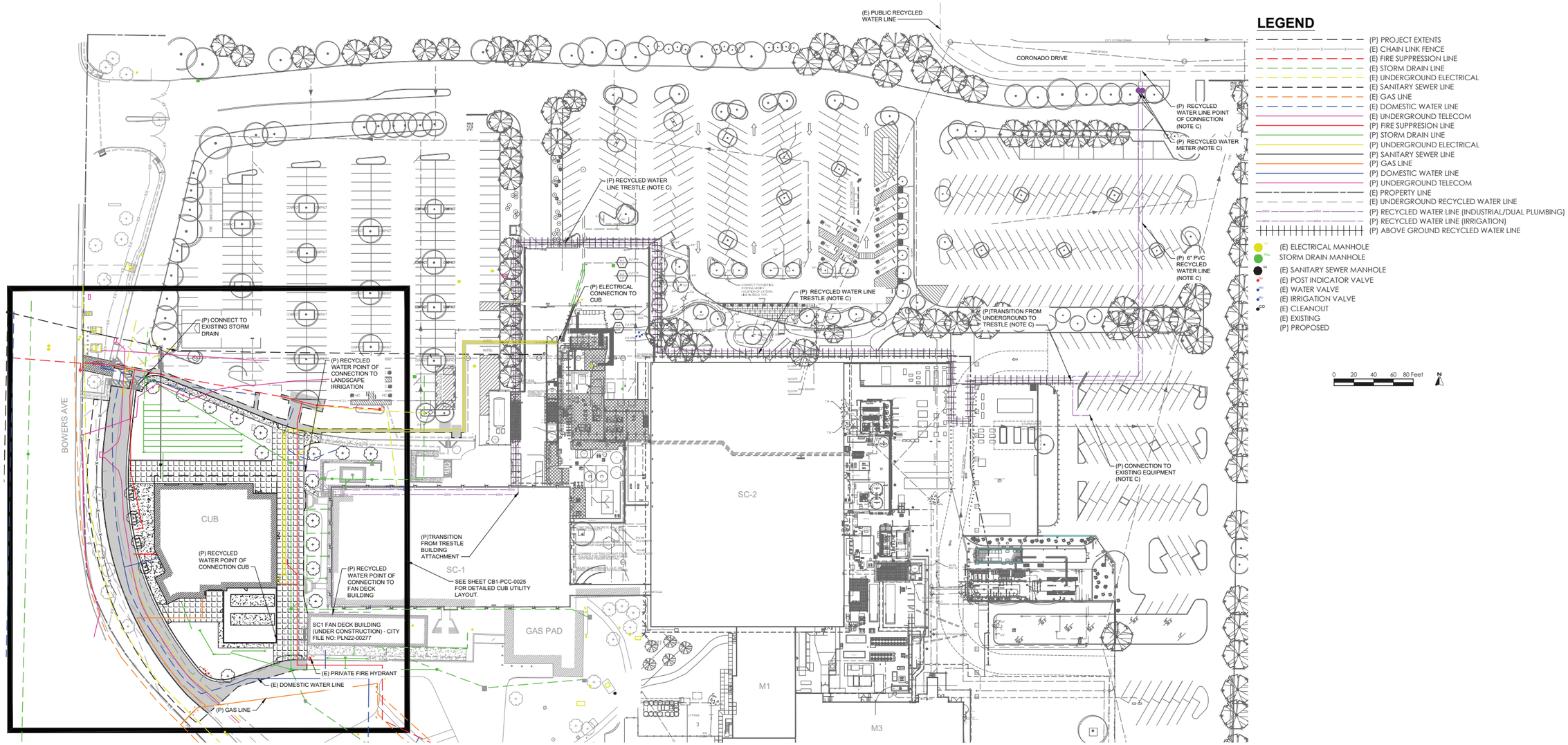
Source: Glumac; Conceptual Design & Planning Company, March 15, 2023.

CONCEPTUAL LANDSCAPE PLAN | FIGURE 3.3-10



Source: Tetra Tech, July 7, 2023.

STORMWATER CONTROL PLAN | FIGURE 3.3-11



Source: Tetra Tech, July 7, 2023.

RECYCLED WATERLINE AND UNDERGROUND ELECTRICAL LINES ROUTING PLAN | FIGURE 3.3-12

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

The discussion for each environmental subject includes the following subsections:

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

4.1 Aesthetics

4.1.1 Environmental Setting

4.1.1.1 *Regulatory Framework*

State

Streets and Highway Code Sections 260 through 263

The California Scenic Highway Program (Streets and Highway Code, Sections 260 through 263) is managed by the California Department of Transportation (Caltrans). The program is intended to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. There are no state-designated scenic highways in the City of Santa Clara.[2]

In Santa Clara County, the one state-designated scenic highway is a 10.8-mile stretch of SR 9, from Santa Cruz County to the Los Gatos City Limit (post mile R0.0 to post mile R10.8). 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.

Local

Santa Clara City Code

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

- Encourage the orderly and harmonious appearance of structures and properties;
- Maintain public health, safety, and welfare;
- Maintain property and improvement values throughout the City;
- Encourage physical development of the City that is consistent with the General Plan and other City regulations; and,

[2] California Department of Transportation. "Scenic Highways." Accessed December 12, 2022. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

- Enhance the aesthetic appearance, functional relationships, neighborhood compatibility, and excellent design quality of the City.

Architectural Policies – Community Design Guidelines

The City's Architectural Review (City Code Section 18.76) process considers plans and drawings submitted for architectural review for design, aesthetic considerations, and consistency with zoning standards, generally prior to submittal for building permits. In reviewing architectural submittals, the Director of Community Development follows the City's Community Design Guidelines. The intent of these guidelines is to provide consistent development standards in the interest of continued maintenance and enhancement of the high-quality living and working environment in the City.

City of Santa Clara 2010-2035 General Plan

General Plan policies applicable to aesthetics include, but are not limited to, the following:

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

4.1.1.2 *Existing Conditions*

The 1.3-acre project site is located on the southwestern corner of the existing 26-acre Intel Bowers Campus in Santa Clara. The Intel Campus consists of industrial buildings with exposed pipes, metal trestles along building exteriors, and mechanical equipment storage yards. The buildings range from one to two stories. There are also mobile offices and storage containers scattered around the campus. Landscaping consisting of trees, shrubbery, and planting areas border the perimeter of the campus and break up the parking lots on the northern side of the campus. The project site is currently occupied by a paved surface parking lot and planters with landscaping vegetation and trees. The existing SC1 Building is adjacent to the project site's eastern boundary. The SC1 building is a two-story flat-roofed office and fab facility with a basement level. The exterior of the building consists of horizontals bands that separate the levels of the building and vertical columns of concrete that break up the dark tinted windows into individual groups of four windows. Pipes and ducts are fully exposed on the roof and along the upper exterior level of the basement.

The site is within a fully developed urban area in Santa Clara with flat topography. There are no scenic vistas within the City of Santa Clara.[3] No scenic highways are visible from the project site; the closet eligible state scenic highway is Interstate 280, located approximately four miles south of the project site. There are also no scenic resources on-site.

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?[4] If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

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

As described in Section 4.1.1.2 Existing Conditions, there are no scenic vistas within the City of Santa Clara. The project, therefore, would not have a substantial adverse effect on a scenic vista. **(No Impact)**

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

As described in Section 4.1.1.2 Existing Conditions, the nearest eligible scenic highway is over four miles south of the project site and would not be visible from the site. The project, therefore, would not substantially damage scenic resources within a state scenic highway. **(No Impact)**

[3] City of Santa Clara. *Integrated Final Environmental Impact Report City of Santa Clara 2010-2035 General Plan*. January 2011. Page 141.

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

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

Aesthetic values are subjective. Opinions as to what constitutes a degradation of visual character differs among individuals. An objective method for assessing what constitutes a visually acceptable standard for new buildings is the City's design standards and the implementation of those standards through the City's design process. The following discussion addresses the proposed changes to the visual setting of the project area and factors that are part of the community's assessment of the aesthetic values of a project's design.

As described in Section 4.1.1.2 Existing Conditions, the project site is a surface parking lot with landscape planters. The surrounding area includes industrial buildings with fenced mechanical yards, loading zones, concrete pads, mobile trailers, and facility support equipment (e.g., pipes, trestles, and ducts). The project would redevelop the surface parking lot with a 17,000-square foot (14,200-square foot building footprint) CUB, removing 9,780-square feet of landscaping. The CUB would have a maximum height of 45 feet to the top of the parapet. All rooftop equipment would be shielded by metal panels along the exterior of the building, and a screen along the western side of the CUB would further shield the building from the public view along Bowers Avenue. The prefinished perforated metal wall screen is a separate panel feature that would be attached to the CUB. The panel would be a dark grey color. The chillers, electric substation, and generator yard would be within an enclosed exterior yard, obscured from public view. New landscaping like the existing landscaping on campus would be provided. The landscaping would consist of trees lining the northern and southern boundaries of the project site. Trees would also line a portion of the project's western boundaries. Within the northern and southern areas of the project site, two bioretention areas would also be installed. A total of 11 trees would also be planted to replace the nine protected trees that would be removed because of the project (see Section 4.4 for additional details).

As mentioned in Section 2.6 General Plan Designation and Zoning District, the project site is in the MP zoning district. The proposed project would be consistent with the allowed uses in the MP zoning district because it would be a mechanical equipment building that supports the manufacture, assembling, and packaging of electronic equipment, instruments, and devices. The building height of 25-feet would not exceed the building height limit of 70-feet. The parapet would extend the height of the CUB to 45 feet. Per Section 18.64.010(a) of the City Code, the proposed parapets are not subject to the height restrictions. Therefore, the CUB would be consistent with the MP zoning requirements. The proposed project would also be similar in scale and style to existing buildings on the Intel Campus. The project would be subject to the City's design review process and would conform to current community design guidelines and landscaping standards for the MP zoning district. The guidelines were developed to support community aesthetic values, preserve neighborhood character, and promote a sense of community and place throughout the City. The

project, therefore, would not conflict with applicable zoning and other regulations governing scenic quality. **(Less than Significant Impact)**

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

For aesthetic purposes, light refers to the brightness generated by a source of light. Examples of light sources include stationary sources (e.g., light poles in a surface parking light and building security lights) and mobile sources (e.g., vehicles driving on roadways). Glare is defined as focused, intense light emanated directly from a source or indirectly when light reflects from a surface. Daytime glare is caused in large part by sunlight shining on highly reflective surfaces at or above eye level. Reflective surfaces area associated with buildings that have expanses of polished or glass surfaces, light-colored pavement, and the windshields of parked cars.

The project site is part of the Intel Campus, which is developed with existing industrial buildings that include security lighting, outdoor building lighting, and interior light fixtures. The project would install exterior lights at all doors and access areas and have outdoor security lighting. The outside lighting would comply with the City's lighting requirements (City Code Section 18.48.140) and would be comparable in brightness to the ambient lighting in the surrounding area. The exterior surface of the CUB would not be a substantial source of glare during daytime, as the building would not include windows and the exterior surfaces of the project would consist of primarily darker colored metal panels and concrete.

Building materials and lighting plans would be reviewed through the City's architectural review process by the Planning Division staff prior to issuance of building permits to ensure that the project would not create a substantial new source of light or glare. Therefore, the project would not create a new source of substantial light or glare, nor would it adversely affect day or nighttime views in the area. **(Less than Significant Impact)**

4.2 Agriculture and Forestry Resources

4.2.1 Environmental Setting

4.2.1.1 *Regulatory Framework*

State

Farmland Mapping and Monitoring Program

The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) assesses the location, quality, and quantity of agricultural land and conversion of these lands over time. Agricultural land is rated according to soil quality and irrigation status. The best quality land is identified as Prime Farmland. In CEQA analyses, the FMMP classifications and published county maps are used, in part, to identify whether agricultural resources that could be affected are present on-site or in the project area.[5]

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.[6]

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 and are used to identify whether forest land, timberland, or timberland production areas that could be affected are located on or adjacent to a project site.[8]

[5] California Department of Conservation. "Farmland Mapping and Monitoring Program." Accessed January 9, 2023. http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx.
[6] California Department of Conservation. "Williamson Act." http://www.conservation.ca.gov/dlrp/lca.
[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)).
[8] California Department of Forestry and Fire Protection. "Fire and Resource Assessment Program." Accessed January 9, 2023. http://frap.fire.ca.gov/.

4.2.1.2 *Existing Conditions*

According to the Santa Clara County Important Farmland 2020 Map, the project site is designated as *Urban and Built-Up Land. Urban and Built-Up Land* is defined as residential land with a density of at least six units per 10-acre parcel, as well as land used for industrial and commercial purposes, golf courses, landfills, airports, sewage treatment, and water control structures.[9] According to Santa Clara County Office of the Assessor, the site is not subject to a Williamson Act contract.

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?	☐	☐	☐	☒

[9] California Department of Conservation, *Santa Clara County Important Farmland Map 2020.* https://www.conservation.ca.gov/dlrp/fmmp/Pages/SantaClara.aspx

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?

According to the Santa Clara County Important Farmland 2020 Map, the project site is designated as *Urban and Built-Up Land*. The project, therefore, would not convert farmland to non-agricultural use. **(No Impact)**

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

The project site is currently zoned MP-Planned Industrial. According to the Santa Clara County Office of the Assessor, the site is not subject to a Williamson Act contract. The project, therefore, would not conflict with existing zoning for agricultural use, or a Williamson Act contract. **(No Impact)**

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

The project site is currently zoned MP-Planned Industrial. According to Santa Clara County Office of the Assessor, the site is not subject to a Williamson Act contract. The project, therefore, would not conflict with existing zoning for, or cause rezoning of, 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?

No forest land is located on or adjacent to the site. The project, therefore, would not result in a loss of forest land or conversion of 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?

As described above, no farmland or forest land is located on or near the site. The project, therefore, would not involve other changes in the existing environment which could result in conversion of farmland, to non-agricultural use or conversion of forest land to non-forest use. **(No Impact)**

4.3 Air Quality

The following discussion is based, in part, on an Air Quality and Greenhouse Gas Assessment prepared for the project by Illingworth & Rodkin, Inc. (I&R). A copy of the report, dated July 2023, is included as Appendix A of this Initial Study.

4.3.1 Environmental Setting

4.3.1.1 *Background Information*

Criteria Pollutants

Criteria air pollutants are pollutants that have established federal or state standards for outdoor concentrations to protect public health. Pursuant with the federal and state Clean Air Act, the United States Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established and enforce 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 April 14, 2023. 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 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, 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 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 particular matter 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 the 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 particulate matter 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 other serious health effects that range from eye irritation, respiratory issues, and neurological damage. 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; 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 persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools.

4.3.1.2 *Regulatory Framework*

Federal and State

Clean Air Act

At the federal level, the 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.

[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.

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

Diesel Risk Reduction Plan

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

Regional

2017 Clean Air Plan

The Bay Area Air Quality Management District (BAAQMD) is the agency primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how 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 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 Air District 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

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

Policies	Description
5.10.2-P3	Encourage implementation of technological advances that minimize public health hazards and reduce the generation of air pollutants.
5.10.2-P6	Require "Best Management Practices" for construction dust abatement.

4.3.1.3 *Existing Conditions*

The San Francisco Bay Area (Bay Area) Air Basin is designated a nonattainment area for the federal O_3 and $PM_{2.5}$ standards and for the state O_3, PM_{10}, and $PM_{2.5}$ standards.[13,14] The area has attained both NAAQS and CAAQS for CO, SO_2, and NO_2. As the regional air district, BAAQMD is responsible for attaining the NAAQS and CAAQS for these pollutants. As part of an effort to attain and maintain ambient air quality standards for O_3, PM_{10}, and $PM_{2.5}$, BAAQMD has established thresholds of significance for these air pollutants and their precursors that apply to both construction period and operational period impacts. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce O_3 levels. The highest O_3 levels in the Bay Area occur in the eastern and southern inland valleys where temperatures are higher, there is less wind circulation, and sources of the precursor pollutants (ROG and NO_x) are prominent. In the Bay Area, most particulate matter is generated from the following activities: combustion, factories, construction, grading, demolition, agriculture, and motor vehicles. Motor vehicles are currently responsible for about half of particulates in the Bay Area. Elevated concentrations of PM_{10} and $PM_{2.5}$ are the result of both region-wide emissions and localized emissions.

Existing Air Pollutant Levels

BAAQMD monitors air pollution at various sites within the Bay Area. The nearest official monitoring station to the City of Santa Clara is located at 158 East Jackson Street in San José, approximately five miles southeast of the site. O_3, PM_{10}, and $PM_{2.5}$ pollutant monitoring results for the years 2019 to 2021 at the San José Jackson monitoring station are shown in Table 4.3-2.

[13] Bay Area Air Quality Management District. "Air Quality Standards and Attainment Status." Last Updated January 5, 2017. Accessed April 14, 2023.

[14] The area has attained both state and federal ambient air quality standards for CO. The project does not include substantial new emissions of SO2 or lead. These criteria pollutants are not discussed further.

Table 4.3-2: O_3, PM_{10}, and $PM_{2.5}$ Air Quality Standards Violations and Highest Concentrations

Pollutant	Standard	2019 (Days Exceeding Standard)	2020 (Days Exceeding Standard)	2021 (Days Exceeding Standard)
Ozone	State 1-hour	1	1	3
	State 8-hour	2	2	4
	Federal 8-hour	2	2	4
Carbon Monoxide	Federal 8-hour	0	0	0
	State 8-hour	0	0	0
Nitrogen Dioxide	State 1-hour	0	0	0
PM_{10}	Federal 24-hour	0	0	0
	State 24-hour	11.8	*	0
$PM_{2.5}$	Federal 24-hour	0	12	1

All monitoring data is from the San José-Jackson monitoring station.

* means there was insufficient (or no) data available to determine the value

Source: California Air Resources Board. "Select 8 Summary." Accessed July 24, 2023. https://www.arb.ca.gov/adam/select8/sc8start.php

CARB's air quality data statistics do not include CO or NO_2. Air pollution summary data provided by BAAQMD is used instead but the data is two years behind the available data from CARB. CO and NO_2 pollutant monitoring results for the years 2017 to 2019 at the San José Jackson monitoring station are shown in Table 4.3-3.

Table 4.3-3: Ambient Air Quality Standards Violations and Highest Concentrations

Pollutant	Standard	2017 (Days Exceeding Standard)	2018 (Days Exceeding Standard)	2019 (Days Exceeding Standard)
Carbon Monoxide	Federal 8-hour	0	0	0
	State 8-hour	0	0	0
Nitrogen Dioxide	State 1-hour	0	0	0

All monitoring data is from the San José-Jackson monitoring station.

* means there was insufficient (or no) data available to determine the value

Source: Bay Area Air Quality Management District. "Air Quality Summary Reports." Last updated April 13, 2023. Accessed July 24, 2023. https://www.baaqmd.gov/about-air-quality/air-quality-summaries.

The Bay Area Air Basin does not meet state or federal ambient air quality standards for ground level O_3 and $PM_{2.5}$, nor does it meet state standards for PM_{10}. The Bay Area is designated attainment or unclassified for all other pollutants.

Sensitive Receptors

The closest sensitive receptors to the project site are multi-family homes located about 1,600 feet to the northeast at the southwestern corner of the Scott Boulevard and San Tomas Aquino Creek intersection. This project would not introduce new sensitive receptors (e.g., residents) to the area.

Odors

Common sources of odors and odor complaints include wastewater treatment plants, transfer stations, coffee roasters, painting/coating operations, and landfills. Significant sources of offending odors are typically identified based on complaint histories received and compiled by BAAQMD. Typical large sources of odors that result in complaints are wastewater treatment facilities, landfills including composting operations, food processing facilities, and chemical plants. Other sources, such as restaurants, paint or body shops, and coffee roasters typically result in localized sources of odors. The project site is in an industrial area and is not surrounded by facilities that produce substantial odors.

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 4.3-4. Table 4.3-5 below lists the BAAQMD health risk and hazards thresholds for single-source and cumulative-sources.

Table 4.3-4: 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 lead agencies should annualize impacts over the scope of actual days that peak impacts would occur rather than over the full year for construction projects that require less than 1 year to complete. 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 4.3-5: 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 $\mu g/m^3$	0.8 $\mu g/m^3$ (average)

Notes: $\mu g/m^3$ = 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?

2017 Clean Air Plan

As described in Section 4.3.1.2 Regulatory Framework, the most current air quality plan from BAAQMD is the 2017 Clean Air Plan. The goals of the 2017 Clean Air Plan include protecting public health (as it relates to air quality) and protecting the climate. The BAAQMD Air Quality Guidelines states that a determination of consistency with the 2017 Clean Air Plan should demonstrate that the project supports the primary goals of the 2017 Clean Air Plan, includes applicable control measures from the 2017 Clean Air Plan, and does not disrupt or hinder implementation of any 2017 Clean Air Plan control measures.

The project would support the primary goals of the 2017 Clean Air Plan of protecting public health and protecting the climate and would be consistent with control measures that focus on reducing emissions in the transportation, building, and energy sectors. The project's consistency with the Clean Air Plan is summarized below in Table 4.3-6.

Table 4.3-6: Project Consistency with Applicable 2017 BAAQMD Clean Air Plan Control Measures

Control Measure	Project Consistency with Measure Intent
Energy Measures	
EN2 - Decrease Electricity Demand: Work with local governments to adopt additional energy-efficiency policies and programs. Support local government energy efficiency program via best practices, model ordinances, and technical support. Work with partners to develop messaging to decrease electricity demand during peak times.	The project would be required to comply with the most recent CALGreen requirements, which includes mandatory green building standards to reduce inefficient energy and water usage. The project would be consistent with this measure.
Building Measures	
BL1 - Green Buildings: Collaborate with partners such as KyotoUSA to identify energy-related improvements and opportunities for on-site renewable energy systems in school districts; investigate funding strategies to implement upgrades. Identify barriers to effective local implementation of the California Green Building Standards Code (CALGreen; Title 24) statewide building energy code; develop solutions to improve implementation/enforcement. Work with ABAG's BayREN program to make additional funding available for energy-related projects in the buildings sector. Engage with additional partners to target reducing emissions from specific types of buildings.	As discussed above, the project would be required to comply with the most recent CALGreen requirements. The project would also procure electricity from Silicon Valley Power (SVP), which currently provides electricity sourced from eligible renewable resources for commercial and industrial customers. Therefore, the project is consistent with this measure.

Control Measure	Project Consistency with Measure Intent
BL2 - Decarbonize Buildings: Explore potential Air District rulemaking options regarding the sale of fossil fuel-based space and water heating systems for both residential and commercial use. Explore incentives for property owners to replace their furnace, water heater or natural-gas powered appliances with zero-carbon alternatives. Update Air District guidance documents to recommend that commercial and multi-family developments install ground source heat pumps and solar hot water heaters.	The City adopted a Reach Code ordinance (City Reach Code Ordinance No. 2056, Chapter 15.36 Energy Code and Chapter 15.38 Green Building Code), which prohibits natural gas infrastructure in all new construction. While the project would be largely electric, the project would use natural gas for the boilers, as there currently is not a sufficient electrical substitute for this equipment. The City has granted the project an exception to this ordinance in accordance with the provisions of the Reach Code and, therefore, the project would be consistent with the City ordinance.
Natural and Working Lands Measures	
NW2 - Urban Tree Planting: Develop or identify an existing model municipal tree planting ordinance and encourage local governments to adopt such an ordinance. Include tree planting recommendations, BAAQMD's technical guidance, best management practices for local plans, and CEQA review.	The project would remove all nine of the existing trees on-site and plant a total of 11, 36-inch box trees on-site. The Santa Clara City Code requires a replacement ratio of 2:1 for 24-inch box replacement trees, therefore the project would technically be required to plant a minimum of 18, 24-inch box-sized trees. However, the City would grant the project an exception to this policy, allowing the project to plant only 11 trees, given that they will be 36-inch box trees rather than 24-inch box trees. The project would not remove any trees in the public right-of-way. With the City's exception, the project is consistent with this measure.
Waste Management Measures	
WA4 - Recycling and Waste Reduction: Develop or identify and promote model ordinances on community-wide zero waste goals and recycling of construction and demolition materials in commercial and public construction projects.	Consistent with the City's Construction & Demolition Debris Recycling requirement for a project greater than 5,000-square feet, the project would track and divert a minimum of 65 percent of discards created during the project. Therefore, the project is consistent with this control measure.
Water Measures	
WR2 - Support Water Conservation: Develop a list of best practices that reduce water consumption and increase on-site water recycling in new and existing buildings; incorporate into local planning guidance.	The project would be constructed consistent with CALGreen and Title 24 requirements, which require incorporation of water conservation measures. For this reason, the project would be consistent with this measure.

The project would support the primary goals of the 2017 Clean Air Plan of protecting public health and protecting the climate and would be consistent with control measures that focus on reducing emissions in the transportation, building, and energy sectors. Consistent with the provisions of the City's Reach Code, the project would receive an exception to use natural gas for boilers but would otherwise be all electric. This is an urban in-fill project that would be constructed in accordance

with the Title 24 building code and electricity for the project would be procured from SVP. As a result, the proposed project would not conflict with the latest Clean Air planning efforts.

Construction Criteria Air Pollutant Emissions

The California Emissions Estimator Model (CalEEMod) Version 2022.1.0 was used to estimate emissions from on-site construction activity, construction vehicle trips, and evaporative emissions. The model provides emission estimates for both on-site and off-site construction activities. On-site activities are primarily made up of construction equipment emissions, while off-site activity includes worker, hauling, and vendor traffic. The project land use types and size, as well as the anticipated construction schedule as described in Section 3.0 Project Description, were entered into CalEEMod. The CARB EMission FACtors 2021 (EMFAC2021) model was used to predict emissions from construction traffic, which includes worker travel, vendor trucks, and haul trucks. The CalEEMod model output along with construction inputs are included in Appendix A.

Average daily emissions were calculated for construction of the project by dividing the annual construction emissions by the number of active construction workdays that year. Table 4.3-7 shows the average daily construction emissions of ROG, NO_X, PM_{10} exhaust, and $PM_{2.5}$ exhaust during construction of the project.

Table 4.3-7: Project Construction Criteria Pollutant Emissions

Year	ROG	NO_x	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
Average Daily (pounds/day)				
2023-2024 (250 construction workdays)	0.26	1.46	0.06	0.05
Significance Threshold (pounds per day)	54	54	82	54
Significant?	*No*	*No*	*No*	*No*

Note: Average daily emissions calculated by dividing the construction emissions by the number of construction workdays. Source: Illingworth & Rodkin. *Intel Central Utility Building Air Quality and Greenhouse Gas Assessment*. June 9, 2023.

As indicated in Table 4.3-7, the predicted construction period emissions would not exceed the BAAQMD significance thresholds. Therefore, project construction would have a less than significant criteria pollutant emissions impact and would not conflict with or obstruct implementation of the 2017 Clean Air Plan.

Operational Criteria Pollutant Emissions

Operational criteria pollutant emissions from the project would be generated primarily from operation of the project emergency generators (two 2.8 MW diesel generators), cooling towers (three cooling towers each consisting of two cells but the third cooling tower is redundant and would only operate if the two other cooling towers are inoperable), and the two natural gas boilers. The generators would be tested periodically and power the buildings in the event of a power

failure. For modeling purposes, it was assumed that the generators would be operated primarily for testing and maintenance purposes for a total of 50 hours per year per generator. In emergency situations, emergency generators' hours are not restricted by BAAQMD. The cooling towers were assumed to operate for approximately 4,000 hours per year per the project applicant. The natural gas boilers would be operational during all hours of every day (i.e., 24 hours per day for 365 days per year). Table 4.3-8 provides annual operational emissions and the average daily operational emissions for the project. The daily emissions were calculated assuming 365 days of operation.

Table 4.3-8: Project Operational Criteria Pollutant Emissions

Scenario	ROG	NO_x	PM_{10}	$PM_{2.5}$
Project Annual (tons/year)				
2025 Project Operational Annual Emissions	0.13	0.04	0.09	0.02
Project Generator Emissions	0.33	0.16	0.01	0.01
Project Cooling Tower Emissions	-	-	0.61	0.36
Project Natural Gas Boilers	0.19	0.39	0.26	0.26
Total Operational Emissions	0.65	0.59	0.97	0.66
Significance Threshold	10	10	15	10
Significant?	*No*	*No*	*No*	*No*
Average Daily (pounds/day)*				
2025 Daily Emissions	3.57	3.23	5.30	3.59
Significance Threshold	54	54	82	54
Significant?	*No*	*No*	*No*	*No*

Note: Average daily emissions calculated based on annual emissions and 365 days per year for operations. Emissions may not sum exactly due to rounding. Source: Illingworth & Rodkin. *Intel Central Utility Building Air Quality and Greenhouse Gas Assessment*. July 2023.

As shown in Table 4.3-8, the project would not exceed the BAAQMD significance thresholds for ROG, NO_X, PM_{10}, and $PM_{2.5}$ during operations. Therefore, the project would have a less than significant criteria pollutant emissions impact and would not conflict with or obstruct the implementation of the 2017 Clean Air Plan.

As described above, the project would not conflict with or obstruct implementation of the applicable air quality plan. The project design is consistent with the applicable 2017 Clean Air Plan control measures and project criteria air pollutant emissions (including both construction and operation emissions) would not exceed BAAQMD significance thresholds. Therefore, the project would not conflict with or obstruct implementation of the 2017 Clean Air Plan. **(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?

The Bay Area is designated a nonattainment area for the federal O_3 and $PM_{2.5}$ standards and for the State O_3, PM_{10}, and $PM_{2.5}$ standards. As described 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, by itself, result in nonattainment of ambient air quality standards. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. The proposed project would increase criteria pollutants in the Bay Area due to the construction and operational activities, which would contribute to existing violations of O_3 and particulate matter standards. However, as discussed above in checklist question a), the proposed project would not result in any air pollutant emissions exceeding BAAQMD's significance thresholds. Therefore, the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment. **(Less than Significant Impact)**

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

Criteria Air Pollutants

In a 2018 decision (*Sierra Club v. County of Fresno*), the state Supreme Court determined CEQA requires that when a project's criteria air pollutant emissions would exceed applicable thresholds and contribute a cumulatively considerable contribution to a significant cumulative regional criteria pollutant impact, the potential for the project's emissions to affect human health in the air basin must be disclosed. State and federal ambient air quality standards are health-based standards, and exceedances of those standards result in continued unhealthy levels of air pollutants. Air pollution by its nature is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. 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, as is the case for the proposed project, it is considered to have no adverse health effect.

Fugitive Dust

Construction activities associated with the project, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM_{10} and $PM_{2.5}$. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. The BAAQMD CEQA Air Quality Guidelines

consider these impacts to be less than significant if best management practices are implemented to reduce the emissions.

Impact AIR-1: The project would generate fugitive emissions during construction.

Mitigation Measures:

MM AIR-1.1: Prior to the issuance of any demolition, grading, or building permits (whichever occurs earliest), the project applicant and general contractor shall incorporate the following best management practices into their construction plans and implement the measures (as applicable) during project construction:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted wood chips, mulch, or gravel.
- Publicly visible signs shall be posted with the telephone number and name of the person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's General Air Pollution Complaints number shall also be visible to ensure compliance with applicable regulations.

A copy of the construction plans shall be submitted to the Director of Community Development or Director's designee for review and approval.

Implementation of MM AIR-1.1 would require the project to incorporate the BAAQMD recommended best management practices during construction. These nine measures would reduce fugitive dust emissions.

Toxic Air Contaminants

The 2022 BAAQMD CEQA Air Quality Guidelines recommend projects assess health risk impacts for sensitive land uses if a new source of air pollutants or TACs is cited within 1,000 feet of the project site boundaries, as any significant health risk impacts that would occur are typically within 1,000 feet of the pollution source. The project site is located approximately 1,600 feet southwest of the nearest sensitive receptors (residents of an apartment building southwest of the Scott Boulevard and San Tomas Aquino Creek intersection). Figure 4.3-1 shows the project site, 1,000 foot buffer, and the sensitive receptors in proximity to the project.

Additionally, the emergency generators, cooling towers, and natural gas boilers associated with the project would be subject to BAAQMD's permitting process. The permitting process ensures that all new stationary sources do not result in a significant health risk, as BAAQMD does not issue permits to any source that would cause a cancer risk of greater than 10 per million.

A preliminary health risk assessment was completed to assess the potential health risk impacts from the emergency generators, cooling towers, and natural gas boilers. The cooling towers are only sources of PM_{10} and $PM_{2.5}$; therefore, no volatile organic compound or criteria air pollutant emissions would be emitted. The health risk impacts associated with the stationary sources are shown in Table 4.3-9.

Table 4.3-9: Project Stationary Source Risk Impacts at Offsite Receptors

Source	Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Hazard Index
Project Emergency Generators	0.04	<0.01	<0.01
Project Cooling Towers	-	0.05	-
Project Natural Gas Boilers	0.04	0.01	<0.01
Total Project Impacts	0.08	<0.07	<0.02
BAAQMD Single-Source Threshold	10	0.3	1.0
Significant?	*No*	*No*	*No*

Source: Illingworth & Rodkin. *Intel Central Utility Building Air Quality and Greenhouse Gas Assessment*. July 2023.

Source: Illingworth & Rodkin, Inc., July 18, 2023.

SENSITIVE RECEPTORS IN PROXIMITY TO THE PROJECT SITE | FIGURE 4.3-1

As shown in Table 4.3-9, the health risks associated with the stationary sources would not exceed the BAAQMD single-source thresholds. A cumulative source analysis is not part of this analysis, as no sensitive receptors are within 1,000 feet of the project site boundaries and no project cumulative sources would affect sensitive receptors located beyond 1,000 feet. Based on the distance of the sensitive receptors and the project's compliance with the BAAQMD permitting process, the project would not result in health risk impacts exceeding the BAAQMD thresholds shown in Table 4.3-5 above.

Overall, the project would not expose sensitive receptors to substantial pollutant concentrations. The project would not generate criteria air pollutant or TAC emissions that would exceed the BAAQMD thresholds and implementation of MM AIR-1.1 would reduce fugitive dust emissions to less than significant levels. **(Less than Significant Impact with Mitigation Incorporated)**

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

The project would construct an industrial building to house mechanical equipment to support the existing SC1 Cleanroom facility. The heavy-duty construction equipment and vehicles required to construct the project would emit odors, such as diesel exhaust, during use and when idling (limited to five minutes). Diesel exhaust would also be emitted during routine testing and maintenance of the proposed backup generators. However, these odors would be intermittent, and the odors would disperse with distance. All construction-related odors would cease upon completion of construction. In addition, the project's proposed land use does not fall within land use categories listed in the BAAQMD 2017 CEQA Air Quality Guidelines for generating substantial odors, such as landfills, food manufacturing, compositing facilities, and chemical plants. Therefore, the project would not include any sources of significant odors that would cause complaints from surrounding uses. Odor impacts from construction and operational activities would be less than significant. **(Less than Significant Impact)**

4.4 Biological Resources

4.4.1 Environmental Setting

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.

Local

Santa Clara City Code

Chapter 12.35 of the Santa Clara City Code includes City policies for the purpose of preserving the City's urban forest, regulating the management of trees in public places, and encouraging the protection of trees for environmental, aesthetic, and economic purposes. The Santa Clara City Code restricts the removal of certain trees on private property without a permit, including trees with a diameter of 38 inches or more measured at 54 inches above natural grade, and all trees with a

diameter of 12 inches or more when measured at 54 inches above natural grade of the following species:

- Aesculus californica (California buckeye)
- Acer macrophyllum (big leaf maple)
- Cedrus deodara (deodar cedar)
- Cedrus atlantica "Glauca" (blue Atlas cedar)
- Cinnamomum camphora (camphor tree)
- Platanus racemosa (western sycamore)Quercus (native oak tree species), including:
    - Quercus agrifolia (coast live oak)
    - Quercus lobata (valley oak)
    - Quercus kelloggii (black oak)
    - Quercus douglasii (blue oak)
    - Quercus wislizeni (interior live oak)
- Sequoia sempervirens (coast redwood); and
- Umbellularia californica (bay laurel or California bay)

City of Santa Clara 2010-2035 General Plan

The General Plan includes several land use and conservation policies designed to protect biological resources in the City, specifically trees. These policies include the following:

Policies/Actions	Description
Policy 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.
Policy 5.10.1-P4	Protect all healthy cedars, redwoods, oaks, olives, bay laurel and pepper trees of any size, and all other trees over 36 inches in circumference measured from 48 inches above-grade on private and public property as well as in the public right-of-way.

4.4.1.1 *Existing Conditions*

The project site is in a developed, urban area of the City of Santa Clara. Surrounding land uses include Bowers Avenue and industrial buildings to the west, Central Expressway and industrial buildings to the south, and industrial buildings and a data center building to the east. The closest residences are located approximately 1,600 feet northeast of the site, southwest of the Scott Boulevard and San Tomas Aquino Creek intersection. Vegetation in the vicinity of the project site includes grass, shrubs, and trees. Habitats in developed areas such as the project area typically include predominantly urban-adapted birds and animals. There are no waterways, wetlands, or other sensitive habitats located on or adjacent to the project site. The nearest waterways are San Tomas Aquino Creek, located approximately 0.45 miles east of the project site, Calabazas Creek,

located approximately 0.55 miles west of the project site, and Saratoga Creek, located approximately one mile southeast of the project site.[15] The site is currently developed with a parking lot and landscape islands consisting of trees, tanbark and small shrubs.

Special Status Species

Wildlife habitats in developed, urban areas are low in species diversity. Species that use the habitat on the site are predominantly urban-adapted birds, such as rock doves, mourning doves, house sparrows, finches, and starlings. Special status plant and wildlife species are not present on the highly urbanized project site, although raptors (birds of prey) could use the trees on-site for nesting or as a roost. Raptors are protected by the Federal Migratory Bird Treaty Act (MBTA) (16 U.S.C. Section 703, et seq.).

Trees

Mature trees (both native and non-native) are valuable to the human environment, as they reduce the impacts of global climate change through carbon dioxide absorption, reduce urban heat island effect, provide nesting and foraging habitat for raptors and other migratory birds, and provide visual enhancement. The goal of the City's General Plan Policy 5.10.1-P4 and City Code, Chapter 12.35, is to protect all healthy cedars, redwoods, oaks, olives, bay laurel, and pepper trees of any size, and all trees over 36 inches in circumference (approximately 11 inches or more in diameter) as measured from 48 inches above the ground surface. The City's Community Design Guidelines require that mature trees removed or proposed for removal be replaced on-site, at a minimum, with a 24- or 36-inch box. Other standards may apply in cases where planting requirements must be met. There are nine trees on the project site as summarized in Table 4.4-1, below. The nine trees are all considered protected under the City's General Plan and City Code due to size (over 11 inches in diameter).

Table 4.4-1: Existing Tree Summary

Common Name	Species	Trunk Diameter
Carrotwood	*Cupaniopsis anacardioides*	12
Carrotwood	*Cupaniopsis anacardioides*	12
Carrotwood	*Cupaniopsis anacardioides*	18
Carrotwood	*Cupaniopsis anacardioides*	18
Carrotwood	*Cupaniopsis anacardioides*	28
Carrotwood	*Cupaniopsis anacardioides*	28
River Red Gum	*Eucalyptus camaldulensis*	12
River Red Gum	*Eucalyptus camaldulensis*	18
River Red Gum	*Eucalyptus camaldulensis*	18

[15] Valley Water. Santa Clara County Creeks. Map. Accessed April 6, 2023. https://data-valleywater.opendata.arcgis.com/datasets/santa-clara-county-creeks/explore

4.4.2 Impact Discussion

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

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?

As previously discussed, special status plant and wildlife species are not expected on the developed project site or recycled water line extension alignment on the Intel Campus. Urban adapted raptors (birds of prey) and other birds, however, could use the trees on the site for nesting. Potential construction impacts to nesting raptors and other birds are discussed below.

Potential Construction Impacts to Nesting Birds

If tree-nesting birds, including raptors, were to nest on the site or along the route of the recycled water line extension through the Intel Campus, construction activities associated with the project could result in the abandonment of active nests or direct mortality to these birds. Nesting birds are protected by the California Fish and Game Code 3503, which states, "it is unlawful to take, posses, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or could otherwise lead to nest abandonment. Additionally, migratory birds, including nesting raptors, are protected under the Migratory Bird Treaty Act and the California Fish and Game Code Sections 3503, 3503.5, and 2800. Migratory birds, especially raptors, utilize mature trees for nesting and foraging habitat. If any migratory birds were to nest on-site, construction of the proposed project may result in a loss of fertile eggs or nestlings, or lead to nest abandonment in raptor habitat.

Although unlikely at this location, tree removal during the nesting season could impact protected raptors and/or other protected migratory birds. Any loss of fertile bird eggs, or individual nesting birds, or any activities resulting in nest abandonment during construction are considered "take" by the CDFW, and therefore would constitute a significant impact.

Impact BIO-1: On-site construction activities could impact nesting and migratory birds.

Mitigation Measures:

MM BIO-1.1: Construction shall be scheduled to avoid the nesting bird season to the extent feasible. The nesting season for most birds, including most raptors, in the San Francisco Bay Area extends from February 1 through August 31.

If it is not possible to schedule construction activities between September 1 and January 31, then pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure no nest shall be disturbed during project implementation. This survey shall be completed no more than 14 days prior to the initiation of grading, tree removal, or other demolition or construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August).

During this survey, the ornithologist shall inspect all trees and other possible nesting habitats within and immediately adjacent to the construction area for nests. If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist shall determine the extent of a construction-free buffer zone to be established around the nest to ensure

that nests of bird species protected by the federal Migratory Bird Treaty Act or Fish and Game Code shall not be disturbed during project construction.

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

The project, with implementation of the above mitigation measure, would reduce impacts to nesting birds (if present) by avoiding construction during nesting bird season or completing pre-construction nesting bird surveys to minimize and/or avoid impacts to nesting birds.

Impacts to Birds During Project Operation

The project site is surrounded by commercial and industrial development. There are no open spaces, riparian nor wetland areas where a substantial number of migratory birds are known to occur surrounding the project site. The nearest waterways are San Tomas Aquino Creek, located approximately 0.45 miles east of the project site, Calabazas Creek, located approximately 0.55 miles west of the project site, and Saratoga Creek, located approximately one mile southeast of the project site, therefore the site is not directly adjacent to a waterway in which migratory birds are known to occur.[16] The project does not include reflective surfaces, and therefore would not pose a substantial hazard for bird strikes. **(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?

No riparian habitat or sensitive natural communities exist on or adjacent to the site or the recycled water line extension alignment on the Intel Campus. As stated in Section 4.4.1.1 Existing Conditions, the nearest waterways to the project site are San Tomas Aquino Creek, located approximately 0.45 miles east of the project site, Calabazas Creek, located approximately 0.55 miles west of the project site, and Saratoga Creek, located approximately one mile southeast of the project site.[17] The project site is separated from these creeks by urban development such as buildings and roadways. 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?

[16] Valley Water. Santa Clara County Creeks. Map. Accessed April 6, 2023. https://data-valleywater.opendata.arcgis.com/datasets/santa-clara-county-creeks/explore
[17] Valley Water. Santa Clara County Creeks. Map. Accessed April 6, 2023. https://data-valleywater.opendata.arcgis.com/datasets/santa-clara-county-creeks/explore

The project site does not contain, nor it is adjacent to, any wetlands. As a result, the project would not affect any federally protected wetlands as defined by Section 404 of the Clean Water Act. **(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 and recycled water line extension alignment on the Intel Campus are surrounded by development and there are no sensitive habitats or waterways on or adjacent to the project site. Due to the highly developed nature 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. There are no identified wildlife nursery sites present on the project site. 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. In addition, as described under Impact BIO-1, measures to mitigate impacts to nesting birds would be implemented if they are identified on-site 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?

There are nine trees on-site, all of which would be removed (see Figure 3.3-10). The Santa Clara City Code requires a replacement ratio of 2:1 for 24-inch box replacement trees, or replacement ratio of 4:1 for a 15-gallon replacement trees, therefore, the project would technically be required to plant a minimum of 18, 24-inch box-sized trees. However, the City has granted the project an exemption to this policy, allowing the project to plant only 11 trees on site, given that the trees would be 36-inch box-sized trees rather than 24-inch box-sized trees. In addition to the City Code requirements, General Plan Policy 5.3.1-P10 requires developers to replace trees removed as part of the development proposal at a minimum 2:1 ratio, on- or off-site; therefore, the developer will be required to provide seven additional off-site trees.

Trees throughout Intel Campus may be injured during construction activities associated with the recycled waterline extension. The following mitigation measures would be implemented to reduce impacts to existing trees to less than significant levels.

Impact BIO-2: Construction activities associated with the recycled waterline extension could injure trees to be retained on the Intel Campus.

Mitigation Measures:

MM BIO-2.1: Barricades – Prior to initiation of construction activity, temporary barricades would be installed around all trees in the construction area. Six-foot high,

chain link fences would be mounted on steel posts, driven two feet into the ground, at no more than ten-foot spacing. The fences shall enclose the entire area under the drip line of the trees or as close to the drip line area as practical. These barricades will be placed around individual trees and/or groups of trees.

MM BIO-2.2: Root Pruning (if necessary) – During and upon completion of any trenching/grading operation within a tree's drip line, should any roots greater than one inch in diameter be damaged, broken or severed, root pruning to include flush cutting and sealing of exposed roots should be accomplished under the supervision of a qualified arborist to minimize root deterioration beyond the soil line within 24 hours.

MM BIO-2.3: Pruning – Pruning of the canopies to include removal of deadwood should be initiated prior to construction operations. Such pruning will provide any necessary construction clearance, will lessen the likelihood or potential for limb breakage, reduce 'windsail' effect and provide an environment suitable for healthy and vigorous growth.

MM BIO-2.4: Fertilization – Fertilization by means of deep root soil injection should be used for trees to be impacted during construction in the spring and summer months.

MM BIO-2.5: Mulch – Mulching with wood chips (maximum depth of three inches) within tree environments should be used to lessen moisture evaporation from soil, protect and encourage adventitious roots and minimize possible soil compaction.

With implementation of mitigation measures MM BIO-2.1 - 2.5, the project would result in a less than significant impact to trees. **(Less Than Significant Impact with Mitigation Incorporated)**

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 and recycled water line extension alignment are not located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, the project would have not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. **(No Impact)**

4.5 Cultural Resources

The following discussion is based on a Historic Resource Technical Report prepared by Architectural Resources Group (ARG) in June 2023 (refer to Appendix B) and an Archaeological Sensitivity Assessment prepared by Archaeological/Historical Consultants (A/HC) in February 2023. A copy of the Archaeological Sensitivity Assessment, which is a confidential report, is on file at the City of Santa Clara Planning Division and is available upon request with appropriate credentials.

4.5.1 Environmental Setting

Federal and State

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.

National Register of Historic Places

The National Register of Historic Places (NRHP) is a comprehensive inventory of known historic resources throughout the United States. The NRHP is administered by the National Park Service and includes buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level. A historic resource listed in, or formally determined to be eligible for listing in, the NRHP is, by definition, included in the California Register of Historical Resources (CRHR).[18]

[18] Refer to Public Resources Code Section 5024.1(d)(1).

National Register Bulletin Number 15, *How to Apply the National Register Criteria for Evaluation*, describes the Criteria for Evaluation as being composed of two factors. First, the property must be "associated with an important historic context." The NRHP identifies four possible context types, of which at least one must be applicable at the national, state, or local level. As listed under Section 8, "Statement of Significance," of the NRHP Registration Form, these are:

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

Second, for a property to qualify under the NRHP's Criteria for Evaluation, it must also retain "historic integrity of those features necessary to convey its significance." While a property's significance relates to its role within a specific historic context, its integrity refers to "a property's physical features and how they relate to its significance." To determine if a property retains the physical characteristics corresponding to its historic context, the NRHP has identified seven aspects of integrity: 1) location, 2) design, 3) setting, 4) materials, 5) workmanship, 6) feeling, and 7) association.

California Register of Historical Resources

The guidelines for identifying historic resources during the project review process under CEQA are set forth in Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5(a). These provisions of CEQA create three categories of historical resources: mandatory historical resources; presumptive historical resources; and resources that may be found historical at the discretion of the lead agency. These categories are described below.

- **Mandatory Historical Resources***.* A resource the State Historical Resources Commission lists on the CRHR, or the State Historical Resources Commission determines to be eligible for listing in the CRHR, is defined by CEQA to be a historical resource. Resources are formally listed or determined eligible for listing by the State Historical Resources Commission in accordance with the procedures set forth in the provisions of state law relating to listing of historical resources.[19] If a resource has been listed in the CRHR, or formally determined to be eligible for listing by the State Historical Resources Commission under these procedures, it is conclusively presumed to be a historical resource under CEQA.

[19] Set forth in Public Resources Code Section 5024.1 and 14 California Code of Regulations (CCR) Section 4850, et. seq.

- **Presumptive Historical Resources**. A resource included in a local register of historic resources as defined by state law[20] or identified as significant in a historical resource survey meeting the requirements of state law,[21] shall be presumed to be historically or culturally significant. The lead agency must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- **Discretionary Historical Resources.** A resource that is not determined to be a significant historical resource under the criteria described above, may, in the discretion of the lead agency, be found to be a significant historical resource for purposes of CEQA, provided its determination is supported by substantial evidence in light of the whole record. The CEQA Guidelines further provide that generally, a lead agency should consider a resource historically significant if the resource is found to meet the criteria for listing on the CRHR, including the following:

    - Criterion 1 (Events): The resource is associated with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history and cultural heritage of California or the United States; or
    - Criterion 2 (Persons): The resource is associated with the lives of persons important to local, California, or national history; or
    - Criterion 3 (Architecture): The resource embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values, or
    - Criterion 4 (Information Potential): The resource has the potential to yield information important to the prehistory or history of the local area, California, or the nation.[22]

Historical resources eligible for listing in the CRHR must meet one of the criteria of significance described above *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 in evaluating adverse changes to them. Integrity is defined as "the authenticity of a

[20] Set forth in Public Resources Code Section 5020.1(k), a local register of historical resources is a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution.

[21] Under Public Resources Code Section 5024.1(g), a resource can be identified as significant in a historical resources survey and found to be significant by the State Office of Historic Preservation (i.e., listed in the CRHR) if three criteria are met: (1) the survey has or will be included in the State Historic Resources Inventory; (2) the survey and documentation were prepared in accordance with State Office of Historic Preservation procedures and requirements; and (3) the State Office of Historic Preservation has determined the resource has a significance rating of Category 1 to 5 on Form 523.

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

historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance." The process of determining integrity is similar for both the California and National Registers, and the same seven variables or aspects to define integrity 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.

Secretary of the Interior's Standards for Rehabilitation

The Secretary of the Interior is responsible for establishing standards for all programs under departmental authority and for advising federal agencies on the preservation of historic properties listed in or eligible for listing in the National Register. The Standards for Rehabilitation address the most prevalent treatment. "Rehabilitation" is defined as "the process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural values."

The intent of the standards is to assist the long-term preservation of a property's significance through the preservation of historic materials and features. The standards pertain to historic properties of all materials, construction types, sizes, and occupancy statuses and to a building's site, environment, and associates landscape features, as well as attached, adjacent, or related new construction. As stated in the definition, the treatment "rehabilitation" assumes that at least some repair or alteration of the historic building will be needed in order to provide for an efficient contemporary use; however, these repairs and alterations must not damage or destroy materials, features or finishes that are important in defining the property's historic character.

The 10 Standards for Rehabilitation are:

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.
6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
8. Significant archaeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Per CEQA Guidelines 14 CCR 15126.4(b)(1), a project that conforms with the Secretary of the Interior's Standards can generally be considered to cause a less than significant impact to historical resources.

Local

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 Resources Inventory (HRI). Any building, site, or property in Santa Clara that is 50 years old or older and meets at least one of the following criteria for cultural, historical, architectural, geographical, or archaeological significance is potentially eligible.[23]

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.

[23] City of Santa Clara. City of Santa Clara General Plan – 8.9 Historic Preservation and Resource Inventory. 8.9-18 and 8.9-19. Accessed April 10, 2020.

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.

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.

4.5.1.1 *Existing Conditions*

Archaeological Resources

Records Search

A records search for the property and a 0.25 -mile radius was completed at the Northwest Information Center of the California Historical Resources Information System (CHRIS) in January 2023. The records search found that no resources have been previously recorded within the project area or the 0.25-mile radius.

Previous studies in the project area were mainly focused along roadways and did not record any resources within 0.25-miles of the project area. The one study that was not along a roadway was study S-46038 for a project at 3080 Oakmead Village Drive, 0.25-miles west of the project area, which did not record any resources.

Sacred Lands File Search

A Sacred Lands File Search request was submitted to the Native American Heritage Commission for the project area. A response was received on January 31, 2023, stating that the search results were negative. However, the absence of specific information does not indicate the absence of cultural resources in the project area.

Archaeological Sensitivity

In Santa Clara, Native American sites are most often found within 0.50-mile of major watercourses and 0.25-mile of minor watercourses. The nearest fresh water in the early historic period was Sajon Creek, 670 feet east of the project area. As described above, there are no archaeological resources documented within a 0.25-mile radius of the project area. While the project area is located on recent Holocene-era fan deposit soils (which are more likely to contain buried archaeological deposits), these soils have been disturbed and replaced by human construction and activity. Though the project area is on a flat slope and had a major perennial creek less than 0.25-mile away (the Sajon Creek which is no longer present), research into the ecology of the early historic era indicates the project area was seasonally inundated in late prehistory and would not have provided a good location for long-term habitation. The project area, therefore, has a low sensitivity for buried Native American archaeological deposits.

Furthermore, the area around the project site remained undeveloped until 1970. The prior use of the project area land for agricultural purposes, lack of previous structures, and its current use as a parking lot make the site unlikely to have buried historic-era archaeological deposits. The project area, therefore, has a low sensitivity for buried archaeological deposits.

Historical Resources

The property contains facilities, colloquially known as the Intel Campus, which were constructed for, and continue to be occupied by, Intel Corporation. The property contains three primary buildings: SC1, a two-story building completed in 1971 that contains offices and fabs[24], Santa Clara 2 (SC2), a second building containing office and fabs completed in 1974; and Main Fab, a manufacturing facility built in the mid-1990s and later expanded, which extends from the south side of SC2. Although the three primary buildings on the Intel Campus were constructed during discrete construction campaigns and have distinct masses, this analysis considers them as a single property that has expanded over time to meet Intel's programmatic needs for the site.

History of Intel

Intel was established in 1968, and during the decades that followed, the company became an influential mainstay in the semiconductor and microelectronics industries and supported major

[24] "Fab" is a term popularly used in the semiconductor industry to refer to fabrication plants in which semiconductors are manufactured, a process that typically produces integrated circuit microchips from silicon wafers. Modern fabs are operated as highly controlled "cleanroom" environments in order to prevent the intrusion of dust and other contaminants that can cause the failure of chips during manufacturing.

developments in multiple technology sectors, including the proliferation of personal computers (PCs) through its contracts with IBM and other manufacturers. Based on the work of historians and technology journalists, Intel's importance within the context of Silicon Valley's development and the growth of the high technology sector worldwide during the post-World War II era is widely agreed upon. Experts in electronics have established Intel's significance by describing its pathbreaking technological advances and detailing the number of innovative and increasingly complex products that the company released continually since the turn of the 1970s. These innovations led to very rapid growth and enormous financial success for Intel, quickly bringing industry-wide recognition for its impactful product advances.

History of Intel Campus

SC1, the initial building constructed within the campus, was completed just a few years after the company's founding, and operated as Intel's first purpose-built administrative headquarters and manufacturing facility after the company outgrew its original leased space in Mountain View. SC1 was emblematic of Intel's swift growth, which justified a larger headquarters and customized fabrication space. Intel engineers developed the world's first microprocessor, the Intel 4004, for its market launch in 1971 in a fab within SC1. The building served as Intel's headquarters as the company maintained its industry dominance in memory chips and continued to reach microprocessor milestones, one of which established the architecture for several generations of microprocessors that were instrumental in the proliferation of PCs during the 1980s and 1990s. The subject property was Intel's headquarters and a core fabrication space for more than 20 years of market growth and technological innovation; therefore, the property is directly associated with Intel's role in making computing a part of daily life around the globe.

California Register of Historical Resources

The California Register criteria are modeled on the National Register criteria for eligibility. The Historic Resource Evaluation completed for the site determined that the property is eligible for listing in the CRHR under Criterion 1, Association with Significant Events. To be considered eligible for listing under CRHR Criterion 1, a property must be associated with one or more events important in a defined historic context. This criterion recognizes properties associated with single events, a pattern of events, repeated activities, or historic trends. The event or trends, however, must clearly be important within the associated context. Further, mere association of the property with historic events or trends is not enough, in and of itself; to qualify under this criterion the specific association must be considered important as well. The subject property is eligible under Criterion 1 for its association with Intel's role in making computing a part of daily life around the globe.

In order for a building to qualify for listing on the CRHR, it must display significance under one or more of the California Register criteria and retain historical integrity. Based on an integrity analysis completed for the property, the property currently retains high integrity of location, and moderate integrity of setting, design, materials, workmanship, feeling, and association.

Because the property is eligible for listing on the CRHR under Criterion 1, and the property retains its integrity, the property is considered a historical resource under CEQA.

Period of Significance

The period of significance for the Intel Campus, associated with its Criterion 1 significance, spans from 1971 to 1992. This period begins with Intel's completion of SC1 at 3065 Bowers Avenue, at which point the company was becoming established in the semiconductor industry for its memory chips and was actively working on the development of the pioneering microprocessor that it released as the Intel 4004. The period of significance ends with the completion of a new Intel headquarters campus on Mission College Boulevard in 1992, at which time the company moved its core administrative functions from the Intel Bowers Campus.

Character-Defining Features

A character-defining feature is an aspect of a built resource's design, construction, or details that is representative of its function, type, or architectural style. Generally, character-defining features include specific building systems, architectural ornament, construction details, massing, materials, craftsmanship, site characteristics, and landscaping built or installed within the period of significance. In order for an important historical resource to retain its significance, its character-defining features must be retained to the greatest extent possible.

Character-defining features of the Intel Campus include those dating to the 1971-1992 period of significance and consist of the following:

Site

- Property location at the intersection of Bowers Avenue and Central Expressway
- Location of SC1 and SC2 near the center of the parcel
- Visual primacy of SC1 and SC2 within the property
- Extant original landscaped elements, including granite pavers, pedestrian circulation paths, curvilinear curb lines, and planting beds adjacent to the north, west, and south facades of SC1 and the north façade of SC2 (vegetation not original)
- Orientation of SC1 and SC2 facing surface parking lots to the north

SC1

- Rectangular plan and reverse-stepped massing with flat roof
- Late Modern architectural design consisting of horizontal tiers
- Two-story height with basement
- Partially excavated and exposed basement level
- Shaped concrete support columns that transition to pilasters
- Concrete base tier
- Grooved metal panel cladding at the spandrel and frieze
- Bands of tinted windows held in anodized aluminum frames

- Entrances at the north and south facades featuring concrete landing platforms, steps, support columns, and canopies clad in grooved metal panels
- Presence of interior corridors providing access to technical fabrication spaces (although configuration and finishes have been altered).

SC2

- Rectangular footprint and reverse-stepped massing with flat roof
- Late Modern architectural design
- Two-story height
- Predominant use of metal panel cladding, arranged as broad opaque horizontal bands
- Narrow horizontal ribbons of angled, tinted windows held in aluminum frames
- Recessed, fully glazed entrance vestibule at north façade with concrete landing
- Hyphen connection to SC1 with fully glazed curtain walls and shaped concrete supports; and
- Presence of interior corridors providing access to technical fabrication spaces (although configuration and finishes have been altered)

The character-defining features of the property do not include Main Fab, equipment yards and fences/walls, various forms of facility support equipment, or other support facilities located adjacent to SC1 and SC2. Furthermore, the configuration of surface parking lots within the parcel dates to the period of significance and generally supported Intel's use of the site, but it was not central to the significant use of the building or directly associated with the specific design features that identify the property as Intel's headquarters.

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 Intel Campus is eligible for listing in the California Register under Criterion 1, association with significant events, for its association with Intel's critical role developing the semiconductor industry during the second half of the twentieth century. Therefore, the whole property is considered a historical resource under CEQA, although the 1.3-acre project site does not contain any character-defining features.

The project proposes to redevelop the approximately 1.3-acre project site, which currently consists of a parking lot, with a 17,000-square foot CUB. The CUB would serve the existing and planned equipment at the SC1 cleanroom facility. In order to serve the CUB and project site with recycled water, a connection to an existing recycled water line in Coronado Drive would be trenched from Coronado Drive to the northeast side of the campus, where it would connect to a proposed soft water system. From there, the water line would be routed west along the northern side of SC2 and SC1 buildings via an aboveground utility trestle, and then connect with the CUB site via a proposed underground connection with SC1. See Figure 3.3-12 for a depiction of the recycled water routing plan.

The project qualifies as a rehabilitation per the definition in the Secretary of the Interior's Standards for Rehabilitation (refer to Section 4.5.1, above). Per CEQA Guidelines 14 CCR 15126.4(b)(1), a project that conforms with the Secretary of the Interior's Standards can generally be considered to cause a less than significant impact to historical resources. Below is an assessment of the project's compliance with each standard under the Standards for Rehabilitation:

Standard 1: A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.

> **Analysis:** The proposed CUB would serve the existing and planned equipment at the SC1 facility. SC1 currently houses office and fabrication facilities related to Intel's product manufacturing process. The current use would not change as a result of the proposed project; in fact, the project proposes new facilities intended to support the continued use of SC1 in a manner that is generally consistent with its product development and fabrication role during the period of significance. The project does not propose any changes to the property's character-defining features. Therefore, the project would comply with Standard 1.

Standard 2: The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

> **Analysis:** Construction of the proposed CUB would occur west of SC1 in a generally rectangular site that currently contains a secondary parking lot. The new construction would be separated 50 feet from SC1 and would not have a direct physical connection to the

original building. Rather, the CUB would feature a raised trestle structure that would connect its southeast corner to the Fan Deck Building, a separate building that has been permitted separately and will be constructed immediately to the south of SC1 prior to the CUB. The parking lot where the CUB would be built dates to the original construction of SC1 but is not a character-defining feature of the property, as it lacks a direct association with the historically significant events that took place at the property. The CUB's footprint would lie inside of the perimeter vehicular drive along the property's western boundary, and the new facility would not change the configuration of curved curb lines that are original to the property.

Additionally, the project proposes to construct a raised trestle carrying a recycled water pipeline along the north façade of both SC1 and SC2. The new trestle would be designed to minimize its visual impact on the facilities. At the main north entrance to SC1, the pipeline would lower to pass under the existing concrete landing platform. At SC1, the pipeline would not be screened but would run at a height beneath the first-floor window where an exposed pipeline is currently located. At SC2, the pipeline would be raised on support columns that would carry it above the first-floor window band, and the pipeline would be screened using face-mounted perforated panels that would match the color of the facility's original cladding. Therefore, the new pipeline would not introduce a distracting element where one does not currently exist and would not substantially change the facility's visual character. Therefore, the project would comply with Standard 2.

Standard 3: Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.

Analysis: The project does not involve the introduction of conjectural elements that would lessen an observer's ability to understand SC1's historical development chronology. The CUB would be designed in a contemporary architectural style that is distinct from the Late Modern vocabulary that defines SC1, making the CUB unlikely to be confused for an original element on the property. The proposed recycled water pipeline would be compatible with materials and elements of the existing facilities while being identifiable as a new infrastructural feature. Therefore, the project would comply with Standard 3.

Standard 4: Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

Analysis: The period of significance identified for the property (1971-1992) is associated with the property's use as the Intel headquarters; subsequent alterations include the construction of Main Fab in multiple phases, as well as numerous auxiliary buildings, structures, and components of facility support equipment. No later periods of the property's development have acquired historical significance in their own right. Therefore, only those elements of the property that date to the identified period of significance are

included in the list of character-defining features listed in Section 4.5.1.2 and were considered in this analysis. Therefore, the project would comply with Standard 4.

Standard 5: Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.

Analysis: The distinctive features, finishes, and construction techniques that characterize the property would be preserved. The CUB would be constructed nearest to SC1, a contributing building of the Intel Campus that is characterized by its Late Modern architectural vocabulary, two-story stepped massing, and material palette of concrete, glass, and metal panels. The project would not result in physical changes to the original building volume and would result in limited changes to the overall site layout and circulation patterns, as described under Standard 2. The proposed recycled water pipeline would be constructed in close proximity to the existing facilities but would not require the removal of character-defining exterior materials. Therefore, the project would comply with Standard 5.

Standard 6: Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

Analysis: The project does not include the repair or replacement of any deteriorated historic elements of the property. Therefore, the project would comply with Standard 6.

Standard 7: Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

Analysis: The project does not propose to use any chemical or physical treatments on character-defining elements of the property. Therefore, the project would comply with Standard 7.

Standard 8: Significant archaeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

Analysis: The project would involve ground disturbance and excavation within a footprint that has already been disturbed to construct a surface parking lot and planting islands. The project would involve the installation of subsurface water lines, including trenching between Coronado Drive and SC2. The project's archaeological sensitivity is discussed in Section 4.5.1.1 Existing Conditions. The project would comply with the City of Santa Clara 2010-2035 General Plan policies relating to archaeological resources. Therefore, the project would comply with Standard 8.

Standard 9: New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

Analysis: The core component of the project is to construct a new facility, the CUB, west of SC1. As discussed under Standard 2, the new construction would be separated from SC1 by 50 feet and would not have a direct physical connection to the original volume. The CUB would have an irregular but generally rectangular footprint and a flat roof surrounded by a parapet. The CUB would be comprised of a few different building volumes and would include varied exterior cladding materials that would be industrial in nature. The CUB would be generally similar in height to the original building volume of the two-story SC1 and would not overwhelm or obscure it visually. Similarly, the CUB would be oriented within the site so that its north-south dimension would align with the corresponding dimensions of SC1.

The contemporary architectural style of the CUB would be broadly compatible with the Late Modern architectural style of SC1, which is characterized by angular and rectilinear forms. The CUB's utilitarian exterior material palette is likewise compatible with, but differentiated from, SC1's exterior concrete, glass, and metal cladding. The CUB would not have fenestration, which would contrast to the regular, tiered fenestration pattern of SC1. However, the design approach would reinforce the differentiation between the two building masses and would not represent severe enough of a contrast to diminish the integrity of SC1. Furthermore, because the raised trestle structure at the southeast corner of the CUB would connect to the Fan Deck Building instead of SC1, the project would not destroy or alter any of SC1's historic materials. Because the CUB would be compatible with the significant adjacent elements of the property in terms of size, design, and materials, the California Register-eligible property would retain sufficient integrity to convey its significance as Intel's headquarters and a key fabrication facility from 1971 to 1992.

As described under Standard 2, the project proposes to construct an additional raised trestle carrying a recycled water pipeline along the north façade of both SC1 and SC2. When compared to the overall mass of the historic facilities, the new pipeline and trestle would be minor infrastructural elements that would not require the removal of historic materials. Although these elements would be installed in close proximity to the existing facilities, the use of metal panel screening at SC2 would be similar to the building's original cladding material, reducing the pipeline's visual impact. Along SC1, the pipeline would have a similar visual character to a pipeline already in place. The pipeline would be located below the first-floor windows and would not interrupt the overall organization and hierarchy of the façade. As a result, the new pipeline and associated trestle would generally be compatible with the architectural character of the property and would not adversely diminish its integrity. Therefore, the project would comply with Standard 9.

Standard 10: New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

> **Analysis:** Although unlikely, the CUB could hypothetically be removed in the future without resulting in permanent change to the character-defining features of SC1 or the property as a whole. Because the project proposes no permanent changes to SC1 and involves only limited change in the character of the property, the properties essential form, materials, and architectural aesthetic would remain wholly identifiable. Similarly, the new trestle and recycled water pipeline would not require the removal of historic materials and could be removed in the future with minimal change to the historic facility. Therefore, the project would comply with Standard 10.

While the property is eligible for listing in the California Register under Criterion 1 and therefore qualifies as a historical resource under CEQA, the project complies with the Secretary of the Interior's Standards for Rehabilitation. The project, therefore, would result in a less than significant impact on historical resources. **(Less than Significant Impact)**

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

The project would require excavation to depths of up to ten feet for construction of the CUB and up to six feet for construction of the underground portions of the recycled waterline. Based upon the results of the Archaeological Sensitivity Assessment completed for the project, the site has a low sensitivity for buried Native American archaeological deposits and a low sensitivity for buried historic archaeological deposits. Although the analysis completed for Archaeological Literature Search deemed that the project area has low sensitivity for archaeological resources, the project would implement the following measures to avoid impacts in the event unrecorded subsurface resources are encountered during trenching and excavation of the site. The following mitigation measure would be implemented during construction to avoid significant impacts to unknown subsurface cultural resources:

Impact CUL-1: Construction activities could impact unrecorded subsurface archaeological resources.

Mitigation Measures:

MM CUL-1.1: If buried or previously unrecognized archaeological deposits or materials of any kind are inadvertently exposed during any construction activity, work within 50 feet of the find shall cease, the Director of Community Development shall be notified, and a qualified archaeologist shall examine the find and make appropriate recommendations. Recommendations could include collection, recordation, and analysis of any significant cultural

materials. Construction within a radius determined by the archaeologist shall not recommence until the assessment is complete. A report of findings documenting any data recovery would be submitted to the Director of Community Development.

With implementation of mitigation measure MM CUL-1.1 identified above, the project would not cause a substantial adverse change in the significance of an archaeological resource. **(Less than Significant Impact with Mitigation Incorporated)**

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

Although unlikely, trenching and excavation activities could disturb human remains, should they be encountered on the site.

Impact CUL-2: On-site construction activities could impact human remains.

Mitigation Measures:

MM CUL-2.1: If human remains are discovered during excavation and/or grading of the site, all activity within a 50-foot radius of the find will be stopped. The applicant shall immediately inform the Director of Community Development, who shall notify the Santa Clara County Coroner. The Santa Clara County Coroner shall determine 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 will notify the Native American Heritage Commission (NAHC) immediately. Once the NAHC identifies the most likely descendants, the descendants will make recommendations regarding proper burial, which will be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines.

With implementation of Mitigation Measure MM CUL 2.1 described above, impacts to unknown human remains would be less than significant. **(Less than Significant Impact with Mitigation Incorporated)**

4.6 Energy

4.6.1 Environmental Setting

4.6.1.1 *Regulatory Framework*

Federal and State

Energy Star and Fuel Efficiency

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

Renewables Portfolio Standard Program

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

Executive Order B-55-18 To Achieve Carbon Neutrality

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

California Building Standards Code

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6 of the California Code of Regulations (Title 24), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately

every three years.[25] Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.

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.

Local

Santa Clara Reach Code

The proposed project would be subject to the City's "Reach Code," adopted in 2021 (Ord. No. 2034) and updated In November 2022 (Ord. No. 2056) (See SCCC Chapter 15.36, Energy Code). The Reach Code requires that most new developments be all electric buildings. New developments must also comply with the building energy efficiency mandatory measures for solar photovoltaic systems pursuant with the Reach Code. Additionally, all residential and non-residential developments must comply with the CALGreen mandatory measures for EV charging.

4.6.1.2 *Existing Conditions*

Total energy usage in California was approximately 6,965 trillion British thermal units (Btu) in the year 2020, the most recent year for which this data was available.[26] 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 21.8 percent (1,507.7 trillion Btu) for residential uses, 19.6 percent (1,358.3 trillion Btu) for commercial uses, 24.6 percent (1,701.2 trillion Btu) for industrial uses, and 34 percent (2,355.5 trillion Btu) for transportation.[27] This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

Electricity

In 2020, California produced approximately 70 percent of the electricity it consumed and the rest was imported from outside the state, including from Mexico.[28] California's non-carbon dioxide emitting electric generation (from nuclear, large hydroelectric, solar, wind, and other renewable

[25] California Building Standards Commission. "California Building Standards Code." Accessed April 19, 2023. https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo.
[26] United States Energy Information Administration. "California Energy Consumption Estimates 2020." Accessed April 5, 2023. https://www.eia.gov/state/?sid=CA#tabs-1.
[27] United States Energy Information Administration. "California Energy Consumption by End-Use Sector, 2020." Accessed April 5, 2023. https://www.eia.gov/state/?sid=CA#tabs-2.
[28] U.S. Energy Information Administration. "California Energy Production Estimates, 2020." April 5, 2023. https://www.eia.gov/state/?sid=CA#tabs-3.

sources) accounted for more than 46 percent of total in-state generation for 2020.[29] Electricity from coal-powered plants located out of state has continued to decrease since 2006 due to a state law limiting new long-term financial investments in power plants that meet California emissions standards.

California's total system electric generation in 2020 was approximately 197,165,106 megawatt-hours (MWh), which was down three percent from 2019's total generation of approximately 201,784,204 MWh.[30] In 2020 natural gas represented the largest portion of the state's electricity sources (at 54 percent). Nonhydroelectric renewables (i.e., solar and wind) generation accounted for more than 65 percent of all renewable electricity generation.[31]

Electricity in Santa Clara County in 2021 was consumed primarily by the non-residential sector (74 percent), followed by the residential sector consuming 23 percent. In 2021, a total of approximately 16,904 gigawatt hours (GWh) of electricity was consumed in Santa Clara County.[32]

Silicon Valley Power (SVP) is the City of Santa Clara's energy utility and would provide electricity service to the project site. For commercial customers, SVP offers several options for participation in green energy programs, including a carbon-free energy option.[33]

The project site currently uses a minimum amount of energy to power lights within the parking lot.

Natural Gas

PG&E provides natural gas services within Santa Clara. In 2022, California's natural gas supply came from a combination of in-state production and imported supplies from other western states and Canada.[34] In 2021, California consumed approximately 2,173 trillion Btu or 21,730,000,000 therms (21,730 million therms).[35] In 2021, Santa Clara County consumed approximately 417 million therms used less than two percent of the state's total consumption of natural gas.[36]

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[29] Ibid.
[30] U.S. Energy Information Administration. *State Electricity Profiles; California Electricity Profile 2019.* November 2, 2020. And Ibid. *California Electricity Profile 2020.* November 10, 2022.
[31] U.S. Energy Information Administration. "California Net Electricity Generation by Source, Dec. 2022." Accessed April 5, 2023. https://www.eia.gov/state/?sid=CA#tabs-4.
[32] California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed April 19, 2023. http://ecdms.energy.ca.gov/elecbycounty.aspx.
[33] Silicon Valley Power. "FAQs." Last Updated July 25, 2022. Accessed April 19, 2023. https://www.siliconvalleypower.com/svp-and-community/about-svp/faqs.
[34] California Gas and Electric Utilities. *2022 California Gas Report.* Accessed July 14, 2023. https://www.socalgas.com/sites/default/files/Joint_Utility_Biennial_Comprehensive_California_Gas_Report_2022.pdf.
[35] United States Energy Information Administration. "California State Energy Profile." Last Updated April 20, 2023. Accessed July 14, 2023. https://www.eia.gov/state/print.php?sid=CA.
[36] California Energy Commission. "Natural Gas Consumption by County." Accessed July 14, 2023. http://ecdms.energy.ca.gov/gasbycounty.aspx.

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

Construction of the project would require energy for the manufacture and transportation of building materials, site preparation and grading, and construction activities. Construction processes are generally designed to be efficient to avoid excess monetary costs. Therefore, equipment and fuel are not typically used wastefully because of the added expense associated with renting equipment, as well as maintenance and fuel. In addition, as discussed in Section 4.3 Air Quality, the project would implement mitigation measures to minimize the idling of construction equipment, thus reducing the potential for energy waste. Additionally, the proposed project would be required to comply with the City's Construction and Demolition Diversion Program (refer to the checklist question a in Section 4.8 Greenhouse Gas Emissions). 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

Operation of the project would consume energy for multiple purposes, including building heating and cooling, lighting, and operation of electronics and other equipment. Energy in the form of diesel fuel would be consumed by the two 2.6 MW emergency generators during regular testing and maintenance, which would be considered normal operation. Each generator would be limited to a maximum of 50 hours per year of operation for testing. The emergency generators are tentatively proposed to be a KD2800 industrial diesel generator with an engine manufactured by Kohler. The fuel consumption at 100 percent load is 186.8 gallons per hour based on the specification engine for this generator.[37] Assuming a worst-case scenario where the two generators

[37] Kohler. "Industrial Diesel Generator Set – KD2800." Accessed July 23, 2023. https://resources.kohler.com/power/kohler/industrial/pdf/g5588.pdf

are tested at full load for the full 50 hours per year, the two generators would consume up to 18,680 gallons of fuel per year.[38] No fuel usage related to vehicle traffic would be expected since the project would not generate new vehicle trips. The project's estimated energy demands are summarized in Table 4.6-1.

Table 4.6-1: Estimated Annual Project Energy Demand

Electricity (kWh per year)[1]	Diesel (gallons)[2]	Natural Gas (therms)[3]
403,639	18,680	700,800

Notes: [1] Electrical consumption per year taken from the CalEEMod outputs shown in Appendix A.

[2] Annual diesel fuel consumption based on a rate of 186.8 gallons per hour assuming a 100 percent load scenario. Source: Kohler. "Industrial Diesel Generator Set – KD2800." Accessed July 23, 2023. https://resources.kohler.com/power/kohler/industrial/pdf/g5588.pdf.

[3] Project applicant provided information.

To ensure that energy is not wasted or unnecessarily consumed, the project would comply with Title 24 and CALGreen energy efficiency measures, as well as City of Santa Clara Reach Code and Recycling and Diversion of Construction and Demolition requirements. These various requirements would reduce project energy demand by ensuring that the project would be built to current energy efficiency standards and reduce construction waste disposal trips. Also, the proposed project would source electricity from SVP, which provides electricity procured from a percentage of renewable sources. Because the generators would only be operated when necessary for testing and maintenance, and would not be used regularly for electricity generation, the generator facility would not result in a wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources. Overall, the proposed CUB would provide current and anticipated utility needs for the SC1 and SC2 buildings. Older utility infrastructure would be removed and replaced with more modern equipment (e.g., cooling towers, boilers, and generators) that would service in a more energy efficient manner. Therefore, the project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project operation. **(Less than Significant Impact)**

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

According to the 2022 Integrated Energy Policy Report Update, the State is working towards decarbonizing the energy system and moving towards a 100 percent carbon-free system by 2045 to ensure that California reaches carbon neutrality.[39] Electricity on-site would be provided by SVP. As mentioned previously, the project would be required to comply with the City's Reach Code and the most recent CALGreen requirements. The City's Reach Code requires all new development to be all-electric unless granted an exception. The project would include natural gas boilers but the usage of

[38] 186.8 gallons per hour * 50 hours per year * 2x emergency generators = 18,680 gallons per year

[39] California Energy Commission. *2022 Integrated Energy Policy Report Update*. February 2023.

these boilers would be allowed under Exception 5 in City Code Chapter 15.36 Energy Code. The project would receive an exception from the City to use natural gas for boilers but would otherwise be all electric. With the granting of an exception, the project would comply with the City's Reach Code. 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

4.7.1 Environmental Setting

4.7.1.1 *Regulatory Framework*

State

Alquist-Priolo Earthquake Fault Zoning Act

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

Seismic Hazards Mapping Act

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

California Building Standards Code

The California Building Standards Code (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-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

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

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

Santa Clara City Code

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

4.7.1.2 *Existing Conditions*

Regional Geology

The project site is in the Santa Clara Valley, a relatively flat alluvial basin, bounded by the Santa Cruz Mountains to the southwest, the Diablo Mountain Range to the east, and San Francisco Bay to the north.

On-Site Geologic Conditions

Topography and Soils

The City primarily consists of well-drained loamy soils formed on alluvial sediments. They include loam and clay loam at the surface and in the very shallow subsurface, overlying gravelly sandy clay loam and fine sandy clay loam present at depth. Such units are typically moderate to very highly expansive. [40] The project site is located in soils that are identified as expansive soils that have poor permeability with slow very infiltration rates.[41] Soils on-site are comprised of urban land that includes disturbed soil and human transported material fill.[42] 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 an Alquist-Priolo Earthquake Fault Zone[43] nor are there any active faults present on-site. Active faults in the region and their distance from the project site are shown in Table 4.7-1 below.[44] The risk of surface fault rupture in Santa Clara is low.[45]

Table 4.7-1: Active Faults Near the Project Site

Fault	Distance from Site (miles)
San José Fault	1.4 southwest
Silver Creek	3.1 northeast
Stanford	3.1 southwest
Hayward	7.0 northeast

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. Based on the California Department of Conservation Earthquake Zones of Required Investigation, the project site is located within a liquefaction zone.[46]

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[40] City of Santa Clara. *2010-2035 General Plan Integrated Final EIR*. January 2011. Page 191.
[41] City of Santa Clara. *2010-2035 General Plan Integrated Final EIR*. January 2011. Figure 4.5-2.
[42] United States Department of Agriculture. "Web Soil Survey." Generated May 5, 2024. https://websoilsurvey.sc.egov.usda.gov/WssProduct/gqdf5v05ef3t53npsxcloprw/GN_00001/20230505_11210811582_15_Soil_Report.pdf
[43] California Department of Conservation. "Alquist-Priolo Faults Earthquake Fault Zones." Updated April 19, 2023. Accessed May 5, 2023. https://mtc.maps.arcgis.com/home/item.html?id=a1f74ce1577e4e98854df287d2e84b9d.
[44] United States Geological Survey. "U.S. Quaternary Faults." Accessed May 5, 2023. https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf.
[45] City of Santa Clara. *2010-2035 General Plan Integrated Final EIR*. January 2011. Page 183.
[46] California Department of Conservation. "Earthquake Zones of Required Investigation." Accessed May 5, 2024. https://maps.conservation.ca.gov/cgs/EQZApp/app/.

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 nearest creek is San Tomas Aquino Creek located 0.45 miles east of the project site. At this distance, there is no potential for lateral spreading on-site.

Landslides

Landslides occur when the stability of a slope changes from a stable to an unstable condition. Since the project area is flat, the potential for landslides on-site is low. Based on the California Department of Conservation Earthquake Zones of Required Investigation, the project site is not within a landslide zone.[47] Additionally, due to the generally flat topography of Santa Clara, the City is not generally subject to the risk of landslides.[48]

Groundwater

Based on the Phase I Environmental Site Assessment (ESA) prepared for the site (refer to Appendix D), groundwater in the vicinity of the site was estimated to range from five to 15 feet below the ground surface. Groundwater was observed at a depth of nine feet during investigations. The groundwater likely flows towards the north or northeast. Groundwater levels fluctuate seasonally depending on variables including variations in rainfall, irrigation, and groundwater pumping.

Paleontological Resources

Paleontological resources are the fossilized remains of organisms from prehistoric environments preserved in the geological strata. The project site is underlain by basin deposits of Holocene age.[49] Holocene geologic units are not generally considered paleontological sensitive, because remains dated less than 10,000 years are not usually considered fossils. Ground disturbing activities of 10 feet or more associated with the development and redevelopment of sites have the potential to impact undiscovered paleontological resources in older Pleistocene sediments.[50]

[47] California Department of Conservation. "Earthquake Zones of Required Investigation." Accessed May 5, 2024. https://maps.conservation.ca.gov/cgs/EQZApp/app/.
[48] City of Santa Clara. *2010-2035 General Plan Integrated Final EIR*. January 2011. Page 178.
[49] City of Santa Clara. *2010-2035 General Plan Integrated Final EIR*. January 2011. Figure 4.5-1.
[50] City of Santa Clara. *2010-2035 General Plan Integrated Final EIR*. January 2011. Page 328.

4.7.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
– Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42)?	☐	☐	☒	☐
– Strong seismic ground shaking?	☐	☐	☒	☐
– Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
– Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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 described in Section 4.7.1.2 Existing Conditions, the project site is not located within an Earthquake Fault Zone as defined by the State of California Alquist-Priolo Earthquake Fault Zoning Act. The site is not located within a fault rapture zone. The project site is not located within a landslide zone nor is there a high probability of landslides occurring due to the flat topography of the site. However, the project site is located within a liquefaction zone. The project site would be subject to strong seismic ground shaking and seismic-related ground failure, including liquefaction, in the event of a large earthquake. Therefore, seismic-related ground failure may occur.

Consistent with City's General Plan and City Code, to avoid and/or minimize potential damage from seismic shaking, the project would be built using standard engineering and seismic safety design techniques. The building foundation design would incorporate liquefaction control measures. Consistent with these requirements, the following condition of approval will be adhered to ensure the proposed development is designed to address seismic hazards.

Condition of Approval

To avoid or minimize potential damage from seismic shaking, the project would be built using standard engineering and seismic safety design techniques. Construction at the site shall be completed in conformance with the recommendations of a design-level geotechnical investigation, which will be included in a report to the City. The report shall be reviewed and approved by the City of Santa Clara's Building Division as part of the building permit review and issuance process. The buildings shall meet the requirements of applicable Building and Fire Codes, including the 2022 California Building Code, as adopted or updated by the City. The project shall be designed to withstand potential geologic hazards identified on the site and the project shall be designed to reduce the risk to life or property to the extent feasible and in compliance with the Building Code.

Incorporation of the condition of approval would ensure the proposed development is designed to address seismic hazards and would not exacerbate existing geological hazards on-site such that it would impact (or worsen) off-site geological and soil conditions. As a result, the proposed project would not expose people or property to significant impacts associated with seismically induced ground failures or other geologic conditions on-site. **(Less than Significant Impact)**

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

The project would require excavation of up to ten feet for construction of the CUB and excavation of up to six feet for construction of the recycled waterline. The project would not include any

substantial excavations, such as below-grade parking. However, any ground disturbance would expose soils and increase the potential for wind or water-related erosion and sedimentation until project construction is complete. Compliance with the erosion control measures, as required by the National Pollutant Discharge Elimination System (NPDES) (refer to Section 4.10 Hydrology and Water Quality) is the primary means of enforcing erosion control measures through the grading and building permit process. The grading and building permit process would ensure that the best management practices required under the NPDES, City policies (Policy 5.10.5-P11) and latest City Code would be enforced. Since project construction activities would be subject to the requirements of the regulatory programs and policies in place, the project would have a less than significant soil erosion impact. **(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 described in Section 4.7.1.2 Existing Conditions, the project site is located in a mapped liquefaction hazard zone. The site is not located within a landslide hazard zone. The project would be constructed using standard engineering and seismic safety design techniques. The project would not change geologic conditions in the project area or exacerbate existing geologic hazards. The project, therefore, would not result in a significant geological hazards impact. **(Less than Significant Impact)**

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

As described in Section 4.7.1.2 Existing Conditions, the site is likely located on soils with high potential for expansion. As stated under checklist question a), building design and construction at the site shall be completed in conformance with the recommendations of an approved geotechnical investigation pursuant with the City's Condition of Approval. This would include constructing the project in such a manner as to reduce the effects of underlying expansive soils. **(Less than Significant Impact)**

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

The project site is located within an urban area of Santa Clara where sewers are available to dispose of wastewater from the project site. Therefore, the project site would not need to support septic tanks or alternative wastewater disposal systems. **(No Impact)**

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

The project site is underlain by basin deposits of Holocene age. Geologic units of Holocene age are generally not considered sensitive for paleontological resources because biological remains younger than 10,000 years are not usually considered fossils. These sediments have low potential to yield fossil resources or to contain significant paleontological resources. 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. Because the project would not include excavation to depths greater than 10 feet, it is unlikely that paleontological resources would be encountered during construction activities. However, the unanticipated discovery of paleontological resources is possible during ground disturbing activities.

Impact GEO-1: Construction activities could disturb paleontological resources in older Pleistocene sediments at depth under the project site.

Mitigation Measures:

MM GEO-1.1: If vertebrate fossils are discovered during construction, all work on the site shall stop immediately, the Director of Community Development or the Director's designee shall be notified, and a qualified professional paleontologist shall assess the nature and importance of the find and recommend appropriate treatment. Treatment may include, but is not limited to, preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection and may also include preparation of a report for publication describing the finds. The project applicant shall be responsible for implementing the recommendations of the qualified paleontologist. A report of all findings shall be submitted to the Director of Community Development or the Director's designee.

Through compliance with Mitigation Measure MM GEO-1.1, the proposed project would avoid impacting paleontological resources or unique geological features. Therefore, the proposed project would have a less than significant impact through directly or indirectly destroying a unique paleontological resource or site or unique geological feature.**(Less than Significant Impact with Mitigation Incorporated)**

4.8 Greenhouse Gas Emissions

The following discussion is based, in part, on an Air Quality and Greenhouse Gas Assessment prepared for the project by Illingworth & Rodkin, Inc. (I&R). A copy of the report, dated July 2023, is included as Appendix A of this Initial Study. The discussion is also based on a City of Santa Clara 2022 Climate Action Plan (CAP) Compliance Checklist completed by the project applicant. The completed CAP Compliance Checklist is included as Appendix C.

4.8.1 Environmental Setting

4.8.1.1 *Background Information*

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

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

An expanding body of scientific research supports the theory that global climate change is currently causing changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. The climate and several naturally occurring resources within California are adversely affected by the global warming trend. Increased precipitation and sea level rise will increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes and drought; and increased levels of air pollution.

4.8.1.2 *Regulatory Framework*

State

Assembly Bill 32 (2006) and State Bill 32 (2016)

Under the California Global Warming Solutions Act, also known as AB 32, CARB established a statewide GHG emissions cap for 2020, adopted mandatory reporting rules for significant sources of GHGs, and adopted a comprehensive plan, known as the Climate Change Scoping Plan, identifying how emission reductions would be achieved from significant GHG sources. 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 express the 2030 statewide target in terms of million metric tons of CO_2e ($MMTCO_2e$). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 $MMTCO_2e$.

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.[51] 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 the natural carbon capture and storage process along with mechanical carbon capture programs to address the remaining 15 of anthropogenic GHG emissions that will remain post-2045. To meet these goals, CARB also includes a revised goal of reducing state GHG emissions 48 percent below 1990 levels by 2030.

Senate Bill 375 (2008) 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.

[51] CARB. *2022 Scoping Plan for Achieving Carbon Neutrality*. November 16, 2022. Page 5.

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.[52]

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 transportation modes, combined with 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 includes goals to expand TDM initiatives that support and augment employers' commute programs, providing a path to emissions reductions.

SB 100 (2018)

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

Executive Order B-55-18 and Assembly Bill 1279 (2022)

Executive Order B-55-18 was issued in September 2018. B-55-18 ordered a new statewide goal to achieve 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 strategies that enable CO_2 removal solutions and carbon capture, utilization, and storage technologies in California are implemented. The bill requires CARB to submit an annual report.

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

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 be zero emissions. 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 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 electric vehicles 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.[53] The CALGreen Code encourages sustainable construction standards that incorporate planning/design, energy efficiency, water efficiency resource efficiency, and environmental quality. These green building standard codes are mandatory statewide and are applicable to residential and non-residential developments. The most recent CALGreen Code (2022 CALGreen Code) was effective as of January 1, 2023.

The California Building Energy Efficiency Standards (California Energy Code) is under Title 24, Part 6 and is overseen by the CEC. This code includes design requirements to conserve energy in new residential and non-residential developments. This Energy Code is enforced and verified by cities during the planning and building permit process. The 2022 Energy Code replaced the 2019 Energy Code as of January 1, 2023. There are new 2022 standards for single-family residences, multi-family residences, and non-residential uses.[54,55,56] Major changes include electric-ready single-family and multi-family residence and solar photovoltaic systems and energy storage systems for residential and commercial developments.

Requirements for electric vehicle (EV) charging infrastructure are set forth in Title 24 of the California Code of Regulations and are regularly updated on a three-year cycle. The CALGreen standards consist of a set of mandatory standards required for new development, as well as two

[53] Refer to https://www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreen#:~:text=CALGreen%20is%20the%20first%2Din,to%201990%20levels%20by%202020.
[54] California Energy Commission. "2022 Building Energy Efficiency Standards What's New for Single-Family Residential." Revised July 15, 2022. Accessed January 18, 2023. https://www.energy.ca.gov/sites/default/files/2022-08/2022_Single-family_Whats_New_Summary_ADA.pdf.
[55] California Energy Commission. "2022 Building Energy Efficiency Standards What's New for Multifamily." Revised August 4, 2022. Accessed January 18, 2023. https://www.energy.ca.gov/sites/default/files/2022-08/2022_Multifamily_Whats_new_Summary_ADA.pdf.
[56] California Energy Commission. "2022 Building Energy Efficiency Standards What's New for Nonresidential." Revised August 4, 2022. Accessed January 18, 2023. https://www.energy.ca.gov/sites/default/files/2022-08/2022_Nonresidential_Whats_New_Summary_ADA.pdf.

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. The CALGreen standards 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. The 2022 CALGreen standards include both mandatory requirements and more aggressive voluntary Tier 1 and Tier 2 provisions:

- CALGreen Tier 1 standards require multi-family developments and hotels with less than 20 units to have 35 percent of the total number of parking spaces EV ready; if there are more than 20 units, 10 percent of the parking spaces must be provided with EV supply equipment. These standards also require 30 percent of total parking spaces to be EV capable and 33 percent of parking spaces to be EV capable with EV supply equipment for non-residential and non-hotel uses.
- CALGreen Tier 2 standards require multi-family developments and hotels with less than 20 units to have 40 percent of the total number of parking spaces EV ready; if there are more than 20 units, 15 percent of the parking spaces must be provided with EV supply equipment. For non-residential and non-hotel uses, 45 percent of total parking spaces require EV capable spaces and 33 percent of parking spaces require EV capable spaces provided with EV supply equipment.

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

Regional and Local

2017 Clean Air Plan

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

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

On April 20, 2022, the BAAQMD Board of Directors adopted the Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans. The report includes BAAQMD's thresholds of significance for use in determining whether a proposed project or plan will have a significant impact on climate change and provides substantial evidence to support these thresholds. The April 2022 GHG thresholds replace the GHG thresholds set forth in the May 2017 BAAQMD CEQA Air Quality Guidelines and represents what is required of new land

use development projects and plans to achieve California's long-term climate goal of carbon neutrality by 2045.

City of Santa Clara 2010-2035 General Plan

The General Plan policies related to GHGs that are applicable to the project are listed below.

Policies	Description
5.3.1-P10	Provide opportunities for increased landscaping and trees in the community, including requirements for new development to provide street trees and a minimum 2:1 on- or off-site replacement for trees removed as part of the proposal to help increase the urban forest and minimize the heat island effect.
5.8.5-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 Reach Code

In November 2022, the City of Santa Clara adopted the most recent version of its "Reach Code," which requires most new developments to be all electric buildings (Chapter 15.36 Energy Code). There are limited exceptions for projects meeting certain criteria. 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.

Local Greenhouse Gas Reduction Strategy or Climate Action Plan

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 that meets the criteria under CEQA Guidelines Section 15183.5(b), 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.

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 Intel Campus, as well as electricity required for lighting of the existing parking lot.

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?	☐	☐	☒	☐

The 2022 GHG thresholds require land use projects to comply with threshold A or B below to result in a less than significant GHG impact.

A. Projects must include, at a minimum, the following project design elements:
    1. Buildings
        a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).
        b. The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.
    2. Transportation
        a. Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet the locally adopted Senate Bill 743 VMT target as adopted in the City's Transportation Policy Resolution 20-80661 in compliance with the California Environmental Quality Act pursuant to State Senate Bill 743 (2013) and CEQA Guidelines Section 15064.3, which established the following thresholds:
            i. Residential projects: 15 percent below the existing Countywide VMT per resident
            ii. Office projects: 15 percent below the existing Countywide VMT per employee
            iii. Retail projects over 50,000 sf: no net increase in existing VMT
        a. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.

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

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 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. The project would be constructed for a period of approximately 15 months, during which time the project would generate approximately 263 MT of CO_2e of construction related GHG emissions.

Neither the City of Santa Clara nor BAAQMD have an adopted threshold of significance for construction related GHG emissions. BAAQMD encourages the incorporation of Best Management Practices (BMPs) to reduce GHG emissions during construction where feasible and applicable, including using alternative fueled (e.g., biodiesel, electric) construction vehicles/equipment for at least 15 percent of the construction fleet, using local building materials of at least 10 percent, and recycling or reusing at least 50 percent of construction waste or demolition materials.

In conformance with the City's Construction and Demolition Debris Recycling Program, applicants seeking construction and/or demolition permits or projects greater than 5,000 square feet are required to track and divert at least 65 percent of waste generated during project demolition and construction to reduce the amount of construction waste going to the landfill. Project construction would be a temporary condition that would not result in a permanent increase in local or regional emissions; therefore, the temporary increase in emissions due to project construction would be a less than significant impact.

Operational Emissions

As described in Section 4.8.1.2 Regulatory Framework, BAAQMD updated their recommended CEQA thresholds of significance for GHG emissions. Under these recently updated thresholds, projects must demonstrate either A) specific building design and transportation elements or B) consistency with a local GHG reduction strategy. The City's 2022 CAP is a qualified GHG reduction strategy that meets the CEQA Guidelines Section 15183.5(b) guidelines. Therefore, the BAAQMD qualitative threshold B (described above) is used for the project's operational emissions.

Since the project is consistent with the General Plan land use designation for the site, the project's GHG emissions are accounted for in the citywide GHG emissions inventory addressed in the 2022 CAP, provided the project complies with applicable GHG reduction measures identified in the 2022 CAP. As discussed in more detail below under question b), the project applicant has completed the 2022 CAP Compliance Checklist (refer to Appendix C), which documents the project's compliance

with the 2022 CAP and demonstrates the project would result in a less than significant GHG emissions impact.

Stationary Source Emissions

The BAAQMD threshold for stationary sources is 10,000 MT CO_2e per year. The project's emergency generators and natural gas boilers are considered stationary sources. The emergency generators (assuming both 50 hours of testing and maintenance annually per generator) and natural gas boilers would emit approximately 3,909 MT CO_2e per year, which is below the 10,000 MT CO_2e per year threshold. Emergency usage of the generators is speculative, and emissions from use during an emergency would not reflect the regular, routine operations that are used to evaluate a project under BAAQMD's thresholds. **(Less than Significant Impact)**

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

2022 Scoping Plan

As described in Section 4.8.1.2 Regulatory Framework, the 2022 Scoping Plan is a document that details how the State will achieve carbon neutrality by 2045 and reduce anthropogenic emissions to 85 percent below 1990 levels by 2045. The 2022 CAP was created to meet the SB 32 and EO B-55-18 GHG targets along with an interim target of reducing City GHG emission 80 percent below 1990 levels by 2035. In parallel with the 2022 CAP, a 2022 CAP Compliance Checklist was developed to demonstrate how projects would comply with GHG reduction strategies from the 2022 CAP. A project that is consistent with the 2022 CAP Compliance Checklist would be consistent with the 2022 CAP and would not hinder the State from achieving carbon neutrality. As described below, the project would comply with the 2022 CAP Compliance Checklist, which means the project would be in alignment with the 2022 Scoping Plan goals (i.e., achieve the SB 32 and EO B-55-18 GHG targets). Therefore, the proposed project would not exacerbate the cumulative GHG impact and the project's contribution to GHG emissions would not be cumulatively considerable, as the project does not impede California's ability to achieve carbon neutrality.

2017 Clean Air Plan

As discussed in Section 4.3 Air Quality under checklist question a), the project supports the primary goals of the 2017 Clean Air Plan and is consistent with applicable control measures that reduce both criteria air pollutant and GHG emissions.

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 can be presumed that the project would not have significant GHG emissions

under CEQA. The 2022 CAP Compliance Checklist includes Near Term Actions, Mid Term Actions, and Long Term Actions. Refer to Appendix C for the project's 2022 CAP Compliance Checklist. As demonstrated in the Compliance Checklist, the project would be consistent with the 2022 CAP.

Action B-1-5 of the 2022 CAP requires projects to be consistent with the City's Reach Code, with exceptions. One component of the Reach Code is the requirement for all-electric buildings in new construction. While the CUB would not be an all-electric building because it would include natural gas boilers, the Reach Code includes exceptions to the all-electric requirement. The project's use of natural gas boilers would fall under Exception 5 in City Code Chapter 15.36 Energy Code.

> Exception 5: If the applicant establishes that there is not an all-electric prescriptive compliance pathway for the building under the Energy Code, and that the building is not able to achieve the performance compliance standard applicable to the building under the Energy Code using commercially available technology and an approved calculation method or if it is demonstrated that there is equivalent greenhouse gas reduction, then the Building Official may grant an exception.

Electric boilers cannot reach the required water temperatures to support operations at Intel; therefore, conventional natural gas boilers would be needed. The City confirmed that the project's natural gas boilers qualify under Exception 5.[57] The project, therefore, would be consistent with Action B-1-5 of the 2022 CAP, which requires projects to be consistent with the City's Reach Code, with exceptions.

For the reasons discussed above, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. **(Less than Significant Impact)**

[57] Lobao, Armand. Building Official, City of Santa Clara Building Division. Personal Communication. June 29, 2023.

4.9 Hazards and Hazardous Materials

The discussion in this section is based in part upon a Phase I Environmental Site Assessment and Phase II Preliminary Soil and Groundwater Quality Evaluation prepared for the project by Cornerstone Earth Group in February 2023. A copy of this report is included in Appendix D of this Initial Study.

4.9.1 Environmental Setting

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 the enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA). In turn, local agencies have been granted responsibility for implementation and enforcement of many hazardous materials regulations under the Certified Unified Program Agency (CUPA) program.

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

Federal and State

Federal Aviation Regulations Part 77

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

Comprehensive Environmental Response, Compensation, and Liability Act

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

environment. Over five years, $1.6 billion was collected and the tax went to a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites. CERCLA accomplished the following objectives:

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

The law authorizes two kinds of response actions:

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

CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986.[58]

Resource Conservation and Recovery Act

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

The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization, phasing out land disposal of hazardous waste, and corrective action for releases. Some of the other mandates of this law include increased enforcement

[58] United States Environmental Protection Agency. "Superfund: CERCLA Overview." Accessed March 30, 2023. https://www.epa.gov/superfund/superfund-cercla-overview.

authority for the EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.[59]

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).[60]

Toxic Substances Control Act

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

California Accidental Release Prevention Program

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

Asbestos-Containing Materials

Friable asbestos is any asbestos-containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand, allowing the asbestos particles to become airborne. Common examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Common examples of non-friable ACMs are asphalt roofing shingles, vinyl floor tiles, and transite siding made with cement. The EPA began phasing out use of friable asbestos products in 1973 and issued a ban in 1978 on manufacture, import, processing, and distribution of some asbestos-containing products and new uses of asbestos products.[61] The EPA is currently considering a proposed ban on on-going use of

[59] United States Environmental Protection Agency. "Summary of the Resource Conservation and Recovery Act." Accessed March 30, 2023. https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act.
[60] California Environmental Protection Agency. "Cortese List Data Resources." Accessed March 30, 2023. https://calepa.ca.gov/sitecleanup/corteselist/.
[61] United States Environmental Protection Agency. "EPA Actions to Protect the Public from Exposure to Asbestos." Accessed August 7, 2023. https://www.epa.gov/asbestos/epa-actions-protect-public-exposure-asbestos

asbestos.[62] National Emission Standards for Hazardous Air Pollutants (NESHAP) guidelines require that potentially friable ACMs be removed prior to building demolition or remodeling that may disturb the ACMs.

CCR Title 8, Section 1532.1

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

Regional and Local

Municipal Regional Permit Provision C.12.f

Polychlorinated biphenyls (PCBs) were produced in the United States between 1955 and 1978 and used in hundreds of industrial and commercial applications, including building and structure materials such as plasticizers, paints, sealants, caulk, and wood floor finishes. In 1979, the EPA banned the production and use of PCBs due to their potential harmful health effects and persistence in the environment. PCBs can still be released to the environment today during demolition of buildings that contain legacy caulks, sealants, or other PCB-containing materials.

With the adoption of the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (MRP) by the San Francisco Bay Regional Water Quality Control Board on November 19, 2015, permittees are required to develop an assessment methodology for applicable structures planned for demolition to ensure PCBs do not enter municipal storm drain systems under Provision C.12.f.[63] Municipalities throughout the Bay Area are currently modifying demolition permit processes and implementing PCB screening protocols to comply with Provision C.12.f. Buildings constructed between 1950 and 1980 that are proposed for demolition must be screened for the presence of PCBs prior to the issuance of a demolition permit. Single family homes and wood-frame structures are exempt from these requirements.

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, assigns 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.

[62] Ibid.
[63] California Regional Water Quality Control Board. *San Francisco Bay Region Municipal Regional Stormwater NPDES Permit.* November 2015.

City of Santa Clara 2010-2035 General Plan

The Santa Clara 2010-2035 General Plan includes policies that address hazards and hazardous materials during the planning horizon of the General Plan. The following goals, policies, and actions 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-P24	Protect City residents from risks inherent in the transport, distribution, use and storage of hazardous materials.
5.10.5-P25	Use Best Management Practices to control the transport of hazardous substances and to identify appropriate haul routes to minimize community exposure to potential hazards.
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.
5.10.5-P33	Limit the height of structures in accordance with the Federal Aviation Administration Federal Aviation Regulations, FAR Part 77 criteria.

4.9.1.1 *Existing Conditions*

Historic Site Uses

The project site and overall Intel Campus was historically occupied with an orchard from 1889 to 1968. There is potential that agricultural chemicals, such as pesticides, herbicides, and fertilizers, were used on-site. In 1971, development began on the Intel Campus, with SC1 constructed in 1971 and SC2 constructed in 1974. The project site itself was developed with a parking lot in 1974.

Regulatory Agency Records Review

A review of federal, state, and local regulatory agency database records was conducted to obtain reasonable available information to help identify Recognized Environmental Conditions[64].

As summarized in Table 4.9-1 below, 3065 Bowers Avenue and several other adjoining/nearby properties were identified as reported spill incidents via listings on the national priorities list (NPL), cleanup program site (CPS), and leaking underground storage tank (LUST) databases.

[64] A Recognized Environmental Condition is defined by ASTM E1527-21 as: 1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; 2) 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 3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment.

The Intel Campus is listed as an open case on the CPS database (Case #43S0328). The case files include information pertaining to the removal of a diesel UST in 1988 and associated groundwater sampling from the UST excavation and from a monitoring well (SC4-1). The case files, however, pertain to a diesel UST that was located at Intel's SC4 facility at 2625 Walsh Avenue in Santa Clara, which is a LUST case (Case #06S1W33B01f) that was closed by the Santa Clara Valley Water District in 1996. The CPS case at 3065 Bowers Avenue appears to have been inaccurately opened; Intel at 3065 Bowers Avenue was identified as the responsible party for the UST release at 2625 Walsh Avenue, but the release did not occur on the 3065 Bowers Avenue property.

Based on information reviewed pertaining to cases listed in Table 4.9-1 for nearby properties, the reported releases from these properties do not appear likely to have impacted soil, soil vapor or groundwater at the project site. In general, a northerly groundwater flow direction has been reported in the project site vicinity and the documented releases are not shown to have migrated to the project site.

Table 4.9-1: Project Site and Nearby Property Listing Database Listings

Facility Name and Address	Approximate Distance and Direction from the Project Site
Intel Corporation 3065 Bowers Avenue	Located on easterly portion of Intel Campus
Applied Materials 3050 Bowers Avenue	Adjoining to the northwest (across Bowers Avenue)
Wyle Electronics 3000 Bowers Avenue	Adjoining to the southwest (across Bowers Avenue and Central Expressway)
Hewlett-Packard (Avantek/Agilent) 3175 Bowers Avenue	350 feet north
Synertek, Inc. 3050 Coronado Boulevard	950 feet east-northeast
Coronado Plaza 3190 Coronado Boulevard	550 feet northeast

Preliminary Soil and Groundwater Quality Investigation

Six exploratory borings were spaced evenly throughout the site and advanced using a direct push drilling rig for the purposes of evaluating soil and groundwater quality beneath the project site in January 2023. The locations of the borings can be seen in Figure Three of Appendix D. Below is a summary of the investigation's findings.

Subsurface Materials

No apparent chemical odors, staining, or discolored soil were observed in the soil samples. Groundwater was first observed in the groundwater borings between nine and 14 feet. Groundwater appeared to stabilize at a depth of approximately nine feet.

Organic Vapor Readings

Organic vapor readings were consistent between and within the borings, with organic vapor meter (OVM) readings of 0.0 to 0.1 parts per million.

Soil Quality

Chromium, nickel, and cobalt were detected in the shallow soil samples collected from EB-1 at concentrations that exceed their published background/ambient concentrations. Cobalt concentrations also exceeded cobalt's residential environmental screening levels (ESL). However, the detected metal concentrations of these metals are below their respective commercial ESLs.

Soil disposal facilities typically require analysis for soluble chromium and nickel when total concentrations of these metals are greater than 50 mg/kg and 200 mg/kg, respectively. Several samples exceeded these threshold values.

Arsenic was detected at a concentration of 17.2 mg/kg in sample EB-2, which exceeds its typical natural background concentration of 11 mg/kg. Natural background concentrations of arsenic are often well above arsenic's commercial ESL of 0.31 mg/kg; however, the California Environmental Protection Agency generally does not require cleanup of metals in soil to below background levels.

The remaining detected metal concentrations are below their respective residential and commercial screening criteria, and within the range of published ambient/background concentrations.

Asbestos was not detected in the aggregate base sample. The detected polycyclic aromatic hydrocarbons (PAHs) and organochlorine pesticides (OCP) concentrations were below their respective residential and commercial ESLs. PCBs were not detected above laboratory reporting limits.

Groundwater Quality

The groundwater analytical results were compared to the State Water Resources Control Board's maximum contaminant levels (MCLs, commonly called drinking water standards). Methylene chloride was detected in a groundwater sample at a concentration below its MCLs. Acetone was detected above method detection limits in the groundwater samples collected; however, an MCL has not been established. No other VOCs were detected in the groundwater samples analyzed.

Acetone and methylene chloride are common laboratory solvents; therefore, laboratory contamination may represent the source of these detected constituents. To assess this possibility, a field blank was collected for quality assurance and control. Field blank samples can measure if there are any atmospheric conditions at the sampling site that could contaminate the samples. The field blank sample was collected by pouring distilled water into laboratory-provided groundwater sample containers. Detected concentrations of acetone in the field blank were like those reported in the field sample; in addition, chloroform also was reported at a low concentration and may also be a laboratory contaminant.

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?

Some oils and lubricants could be stored on-site for maintenance of mechanical equipment. Additionally, operation of the proposed project would include the use and storage of diesel fuel for testing and maintenance of the two backup generators. The generators would be located within an enclosed, exterior generator yard and each generator would be housed within a generator enclosure. The generators would have a fuel tank within the generator enclosure with leak detection and spill containment under the fuel filter. The generators would have a combined diesel fuel storage capacity of approximately 3,000 gallons.

Hazardous material storage at the proposed CUB would be regulated under local, state, and federal regulations. For example, the project would be subject to the Aboveground Petroleum Storage Act (APSA) due to the volume of fuel[65] that would be stored in aboveground tanks. Tank facilities under APSA must comply with all APSA requirements and prepare and implement a Spill Prevention, Control, and Countermeasure Plan. The spill prevention measures described above would be incorporated into the Spill Prevention, Control, and Countermeasure Plan. Additionally, pursuant to California Health and Safety Code, Section 25503.5, a Hazardous Materials Business Plan would be completed for the safe storage and use of chemicals and would incorporate all relevant regulations.

Conformance with relevant laws and regulations would minimize the likelihood of hazardous material releases from the proposed fuel storage tanks and the use or storage of diesel fuel, oils, and lubricants by the project would not create a significant impact on the environment. **(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?

Project Operation

As described in the discussion under checklist question a), the proposed project would include the use and storage of diesel fuel for testing and maintenance of the backup generators. A Hazardous Materials Business Plan would be completed for the safe storage and use of chemicals. Conformance with relevant laws and regulations would minimize the likelihood of hazardous material releases from the proposed fuel storage tanks and the use or storage of diesel fuel, oils and lubricants by the project would not create a significant impact on the environment. **(Less than Significant Impact)**

Soil Contamination Impacts During Construction

Prior to the soil sampling completed on the proposed site, soil samples were taken on the Intel Campus at the adjacent SC1 building, which identified elevated lead and arsenic concentrations (metals commonly associated with pesticides used at agricultural properties) in the top four feet of soil.

A total of six soil samples were taken on the proposed site as part of the Preliminary Phase II ESA to evaluate if the soil on-site has similar concentrations of metals as those found adjacent to SC1 on the Intel Campus. Based on the soil quality data obtained, elevated concentrations of nickel,

[65] The Aboveground Petroleum Storage Act regulates tank facilities that are subject to the federal SPCC rule or tank facilities with an aggregate storage capacity of 1,320 gallons or more of petroleum in aboveground storage containers or tanks with a shell capacity equal to or greater than 55 gallons. Source: Office of the State Fire Marshal. Aboveground Petroleum Storage Act. Accessed April 5, 2023. https://osfm.fire.ca.gov/divisions/pipeline-safety-and-cupa/certified-unified-program-agency-cupa/aboveground-petroleum-storage-act/

chromium, and cobalt are present in on-site soil, primarily associated with baserock below the existing pavement. The detected concentrations did not exceed commercial screening levels, and therefore are considered to be a de minimis condition[66]. Most lead and arsenic concentrations detected in the soil on-site are typical of natural ambient levels, and the calculated 95 percent upper confidence limit for the reported on-site arsenic concentration was 7.88 mg/kg, which is within the range of published background concentrations. However, arsenic in one sample was detected at a concentration of 17.2 mg/kg, which exceeds arsenic's typical background concentration of 11 mg/kg. Additionally, greater concentrations could potentially be present in the soil on-site based on the site's proximity to the areas sampled around the SC1 building that showed higher levels of contamination. Therefore, construction workers could be exposed to elevated lead and arsenic concentrations when disturbing soil at the project site.

Impact HAZ-1: Soil disturbing construction activities could expose construction workers to elevated lead and arsenic concentrations.

Mitigation Measures:

MM HAZ-1.1: The applicant shall have a Certified Industrial Hygienist develop a Health and Safety Plan (HSP). Components of the HSP shall include, but not be limited to, the following elements, as applicable:

- Provisions for personal protection and monitoring exposure to construction workers;
- Procedures to be undertaken in the event that contamination is identified above action levels or previously unknown contamination is discovered;
- Procedures for the safe storage, stockpiling, and disposal of contaminated soils, should they be encountered, in accordance to California Hazardous Waste Regulations and applicable local, state, and federal laws.
- Emergency procedures and responsible personnel.

The HSP shall be submitted to the County of Santa Clara Department of Environmental Health for review and approval prior to the issuance of grading permits.

With implementation of Mitigation Measure MM HAZ-1.1 identified above, the proposed project would result in a less than significant impact from the release of contaminated soil. **(Less than Significant Impact with Mitigation Incorporated)**

[66] A de minimis condition is defined by the ASTM Standard as a condition related to a release that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

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

The project site is located within the Santa Clara Unified School District (SCUSD). The nearest public schools to the project site are Bracher Elementary School, located at 2700 Chromite Drive, approximately one mile south of the project site, Cabrillo Middle School, located at 2550 Cabrillo Avenue, approximately 1.6 miles south of the project site, and Adrian Wilcox High School, located at 3250 Monroe Street, approximately 1.6 miles southwest of the project site. Therefore, the project site is not within one-quarter mile of an existing school.

As described in Section 4.3 Air Quality, the project would not generate significant levels of hazardous air emissions. Although hazardous materials may be encountered during construction activities, potential exposure would be limited to the project site, and mitigation measure MM HAZ-1.1 would be implemented to reduce impacts to nearby receptors. The project would not handle acutely hazardous materials or hazardous waste during project operation. For these reasons, the project would not impact schools within the project area. **(Less than Significant Impact)**

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

As described in Section 4.9.1.1, the Intel Campus is listed as an open case on the CPS database (Case #43S0328). The case files pertain to a diesel UST that was located at Intel's SC4 facility at 2625 Walsh Avenue in Santa Clara, which is a LUST case (Case #06S1W33B01f) that was closed by the Santa Clara Valley Water District in 1996. The CPS case at 3065 Bowers Avenue appears to have been inaccurately opened; Intel at 3065 Bowers Avenue was identified as the responsible party for the UST release at 2625 Walsh Avenue, but the release did not occur on the 3065 Bowers Avenue property. Therefore, the project site should not be included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. **(No Impact)**

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

The proposed project site is approximately 1.75 miles northwest of the Norman Y. Mineta San José International Airport. The project site is not within an identified safety zone as defined in the CLUP. Additionally, the project would be located outside of the 65 CNEL Aircraft Noise Contour and would not be exposed to excessive noise. Therefore, the project would not result in a safety hazard or excessive noise for people residing or working in the project area. **(Less than Significant Impact)**

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

In June 2016, the City adopted an Emergency Response Plan which addresses the planned response of the City of Santa Clara to emergency situations associated with natural disasters, technological incidents, and chemical, biological, radiological, nuclear, and explosive emergencies. The project would include development of a CUB and would comply with relevant building and fire codes, and would not impair access to public streets or other emergency access routes. The proposed project would not, therefore, impair or interfere with the implementation of an adopted emergency response plan or emergency evacuation plan. **(Less than Significant Impact)**

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

The project site is in an urbanized area of Santa Clara. According to the California Department of Forestry and Fire Protection (CAL FIRE), the project site is not located within a moderate, high, or very high fire hazard severity zone.[67] **(No Impact)**

[67] State of California Department of Forestry and Fire Protection. Santa Clara County Fire Hazard Severity Zones in SRA. Adopted November 7, 2007.

4.10 Hydrology and Water Quality

4.10.1 Environmental Setting

4.10.1.1 *Regulatory Framework*

Federal and State

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

Under Section 303(d) of the federal Clean Water Act, the SWRCB and RWQCBs are required to identify impaired surface water bodies that do not meet water quality standards and develop total maximum daily loads (TMDLs) for contaminants of concern. The list of the state's identified impaired surface water bodies, known as the "303(d) list" can be found on the on the SWRCB's website.[68]

National Flood Insurance Program

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

Statewide Construction General Permit

The SWRCB has implemented an NPDES General Construction Permit for the State of California (Construction General Permit). For projects disturbing one acre or more of soil, a Notice of Intent (NOI) must be filed with the RWQCB by the project sponsor, and a Storm Water Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional prior to commencement of construction and filed with the RWQCB by the project sponsor. The Construction General Permit

[68] 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 2, 2022. https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_integrated_report.html.

includes requirements for training, inspections, record keeping, and, for projects of certain risk levels, monitoring. The general purpose of the requirements is to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges.

Regional and Local

San Francisco Bay Basin Plan

The San Francisco Bay RWQCB regulates water quality in accordance with the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The Basin Plan lists the beneficial uses that the San Francisco Bay RWQCB has identified for local aquifers, streams, marshes, rivers, and the San Francisco Bay, as well as the water quality objectives and criteria that must be met to protect these uses. The San Francisco Bay RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements, including permits for nonpoint sources such as the urban runoff discharged by a City's stormwater drainage system. The Basin Plan also describes watershed management programs and water quality attainment strategies.

Municipal Regional Permit Provision C.3

The San Francisco Bay RWQCB re-issued the Municipal Regional Stormwater NPDES Permit (MRP) in 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.[69] 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.

In addition to water quality controls, the MRP requires new development and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation, or other impacts to local rivers, streams, and creeks. Projects may be deemed exempt from these requirements if: (1) the post-project impervious surface area is less than, or the same as, the pre-project impervious surface area; (2) the project is located in a catchment that drains to a hardened (e.g., continuously lined with concrete) engineered channel or channels or enclosed pipes, which extend continuously to the Bay, Delta, or flow controlled reservoir, or, in a catchment that drains to channels that are tidally influenced; or

[69] 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.

(3) the project is located in a catchment or subwatershed that is highly developed (i.e., that is 70 percent or more impervious).[70]

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 Valley Water's State Water Project and Central Valley contract supplies and supplies delivered by the San Francisco Public Utilities Commission (SFPUC) to cities in northern Santa Clara County. Local sources include natural groundwater recharge and surface water supplies. A small portion of the county's water supply is recycled water.

Local groundwater resources make up the foundation of the county's water supply, but they need to be augmented by the District's comprehensive water supply management activities to reliably meet the county's needs. These include the managed recharge of imported and local surface water and in-lieu groundwater recharge through the provision of treated surface water and raw water, acquisition of supplemental water supplies, and water conservation and recycling.[71]

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.

[70] The Hydromodification Applicability Maps developed the permittees under Order No. R2-2009-0074 were prepared using this standard, adjusted to 65 percent imperviousness to account for the presence of vegetation on the photographic references used to determine imperviousness. Thus, the maps for Order No. R2-2009-0074 are accepted as meeting the 70 percent requirement.

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

City of Santa Clara 2010-2035 General Plan

General Plan policies related to hydrology and water quality that are applicable to the project are listed below.

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

Santa Clara City Code

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

4.10.1.2 *Existing Conditions*

Storm Drainage and Water Quality

The water quality of streams, creeks, ponds, and other surface water bodies can be greatly affected by pollution carried in contaminated surface runoff. Pollutants from unidentified sources, known as nonpoint source pollutants, are washed from streets, construction sites, parking lots, and other exposed surfaces into storm drains. Stormwater from urban uses contains metals, pesticides, herbicides, and other contaminants, including oil, grease, asbestos, lead, and animal wastes. Stormwater from the project site enters the City's storm drain system where it eventually drains into San Tomas Aquino Creek, located approximately 0.45 miles east of the project site. Based on

data from the SWRCB, San Tomas Aquino Creek is currently listed on the California 303(d) impaired waters list for diazinon.[72]

Groundwater

Based on the Phase I ESA (refer to Appendix D) prepared for the site, groundwater in the vicinity of the site was estimated to range from five to 15 feet below the ground surface with the groundwater flowing towards the north or northeast. The proposed project is located within the Santa Clara Subbasin within the Santa Clara Plain area.[73] The project site is not located within a groundwater recharge area. The Santa Clara Subbasin has not been identified as a groundwater basin in a current state of overdraft.

Flooding

According to the FEMA Flood Insurance Rate Maps (FIRM), the project site is located in Flood Zone X.[74] Flood Zone X is defined as "Areas of 0.2 percent annual chance flood; areas of one percent chance 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 flood." Flood Zone X is not subject to a 100-year flood hazard.

Seiches and Tsunamis

A tsunami is a sea wave generated by an earthquake, landslide, or other large displacement of water in the ocean. The subject site is not near the San Francisco Bay, and is not within a mapped tsunami inundation zone. 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 bodies of water or landlocked bodies of water near the project site (or Santa Clara) that would affect the site in the event of a seiche.[75]

[72] California Water Boards. "California 2020-2022 Integrated Report." Accessed May 5, 2023. https://gispublic.waterboards.ca.gov/portal/apps/webappviewer/index.html?id=6cca2a3a1815465599201266373cbb7b.
[73] Santa Clara Valley Water. *Annual Groundwater Report for Calendar Year 2021*. July 2022. Figure 1.
[74] Federal Emergency Management Agency. "FEMA Flood Map Service Center." Accessed May 5, 2023. https://msc.fema.gov/portal/search?AddressQuery=3065%20Bowers%20Ave%2C%20Santa%20Clara%2C%20CA%2095054#searchresultsanchor.
[75] City of Santa Clara. *2010-2035 General Plan Integrated Final EIR.* January 2011. Page 185.

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;	☐	☐	☒	☐
– 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?

The project site is currently 33,138 square feet of impervious area (54 percent) and 27,572 square feet of pervious area (46 percent). Upon completion of the proposed project, the site would have approximately 43,833 square feet of impervious surfaces (72 percent) and 16,877 square feet of pervious surface area (28 percent). Based on the change in impervious and pervious square footage, construction of the project would result in the replacement of more than 5,000 square feet of impervious surface area. The project is, therefore, classified as a Regulated Project under the MRP's Provision C.3, meaning it is subject to the LID source control, site design, and stormwater treatment control requirements of Provision C.3.

Construction Impacts

Implementation of the project would disturb approximately 1.3 acres. Requirements under Provision C.3 of the MRP would apply to the project and the project would be required to obtain an NPDES General Construction Permit. Construction activities could generate dust, sediment, litter, oil, and other pollutants that could temporarily contaminate water runoff from the site. The following measures would be required by the City as conditions of project approval to reduce potential construction-related water quality impacts:

Conditions of Approval

The project will incorporate the following measures into the project to reduce construction-related water quality impacts:

- 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 periods 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 required to be covered or maintain at least two feet of freeboard.
- All paved access roads, parking areas, and staging areas adjacent to the construction sites shall be swept daily (with water sweepers).
- Vegetation in disturbed areas shall be replanted as quickly as possible.
- All unpaved entrances to the site shall be filled with rock to knock mud from truck tires prior to entering City streets. A tire washing system may also be employed at the request of the City.

With implementation of the measures in the conditions of approval and the requirements of the NPDES General Construction Permit, 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. **(Less than Significant Impact)**

Post-Construction Impacts

The MRP requires all post-construction stormwater runoff to be treated by numerically sized LID treatment controls, such as biotreatment facilities, unless the project is granted Special Project LID Reduction Credits, which would allow the project to implement non-LID measures for the whole site or a portion of the site, depending on the project characteristics. To treat stormwater runoff, the project proposes two bioretention basins along the northern and southern corners of the project site which would help detain stormwater runoff and infiltrate water into the soil (see Figure 3.3-11). In addition, the project site design would include self-treating landscape areas, which are pervious areas that treat runoff through ponding or infiltration to remove pollutants from the water runoff . The project drainage infrastructure would include overland stormwater management basins and would connect to the existing City of Santa Clara storm drain system. On-site drainage facilities would be designed to meet City of Santa Clara standards and would drain to the existing storm drain system. With inclusion of LID stormwater treatment and compliance with the City's stormwater pollution prevention program, operation of the proposed project would have a less than significant water quality impact. **(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?

The proposed project is located within the Santa Clara Subbasin but not within a groundwater recharge area. The project site is not located on or adjacent to any of the 18 major groundwater recharge systems overseen by Valley Water and would not interfere with efforts to sustainably manage groundwater in the Santa Clara Plain subbasin.[76] The proposed project would increase water demand on-site, as discussed in Section 4.20 Utilities and Service Systems, but would rely on existing water delivery systems to meet its demand and would not rely on groundwater derived from beneath the site. The project would not establish or require additional groundwater pumping, actions which could impede efforts to sustainably manage the Santa Clara Subbasin. Therefore, the proposed project would not interfere with groundwater recharge or deplete supplies. For these reasons, the project would have a less than significant impact on groundwater supplies and would not impede sustainable groundwater management. **(Less than Significant Impact)**

[76] Santa Clara Valley Water. *Annual Groundwater Report for Calendar Year 2021.* Figure 10.

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 described in checklist question a), the impervious area on-site would increase with the proposed project compared to existing conditions, which could result in increased surface runoff. The project would comply with the RWQCB's MRP to minimize and treat stormwater runoff to reduce the rate of stormwater runoff while removing pollutants.

The project would include the installation of two bioretention basins at the northern and southern corners of the site. The project would also be designed to direct stormwater runoff into landscaped areas. These stormwater management features would capture stormwater during rainfall events and would prevent surface runoff from resulting in flooding on- and off-site during most rainfall events by retaining and releasing water slowly over time. The proposed project would size the stormwater features consistent with Provision C.3.c.iii.(3) of the MRP, which requires features to accommodate runoff of five inches per hour. This drainage rate would accommodate most storms and the project would not release water from the site during most storm events. As a result, polluted runoff and erosion would not be delivered into streams or other waterways. Therefore, the proposed project would not substantially alter the existing drainage pattern of the site or create or contribute runoff which would exceed existing stormwater drainage capacity or result in flooding on- or off-site. Impacts related to the existing drainage pattern and stormwater runoff would be less than significant. **(Less than Significant Impact)**

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

As described in Section 4.10.1.2 Existing Conditions, the project site would not be subject to inundation by seiche or tsunami due the lack of water bodies in proximity to the site. The project site is also located in Zone X, which is an area not subject to a 100-year flood hazard. Therefore, implementation of the project would not release pollutants due to flood hazard, 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 described above under checklist question a), the project would be required to implement conditions of approval and the MRP. In addition, the project would not interfere with groundwater recharge or deplete groundwater supplies as described in checklist question b). The project would be consistent with the SCVWD's 2021 Groundwater Management Plan. For these reasons, the project would not conflict with implementation of a water quality or groundwater management plan. **(Less than Significant Impact)**

4.11 Land Use and Planning

4.11.1 Environmental Setting

4.11.1.1 *Regulatory Framework*

City of Santa Clara

City of Santa Clara 2010-2035 General Plan

The Santa Clara 2010-2035 General Plan includes policies that address land uses during the planning horizon of the General Plan. The following goals, policies, and actions are applicable to the proposed project:

Policies	Description
5.3.1-P3	Support high quality design consistent with adopted design guidelines and the City's architectural review process.
5.3.1-P9	Require that new development provide adequate public services and facilities, infrastructure, and amenities to serve the new employment or residential growth.
5.3.5-P16	Protect the industrial land use designations from incompatible uses in order to maintain the City's strong fiscal health and quality services that are supported by new businesses and technologies and retention of well-established existing businesses.

General Plan Land Use Designation

The site has a General Plan designation of High Intensity Office/Research and Development (R&D). The High Intensity Office/R&D General Plan designation is intended for high-rise or campus-like developments for corporate headquarters, R&D and supporting uses, with landscaped areas for employee activities. Permitted uses include offices and prototype R&D uses. Accessory, or secondary, small-scale supporting retail uses that serve local employees and visitors are also permitted. The maximum floor area ratio (FAR) is 2.00, excluding any FAR devoted to supporting retail uses.

Zoning District

The site is located within the MP-Planned Industrial zoning district. The MP-Planned Industrial zoning district is intended to provide an environment exclusively for and conducive to the development and protection of modern large-scale administrative facilities, research institutions, and specialized manufacturing organizations, all of a non-nuisance type. Permitted uses under this district include chemical and physical science offices and laboratories; engineering and cartographic offices and laboratories; manufacture, assembling and packaging of electronic equipment, instrument, devices, and pharmaceuticals; research offices and laboratories; testing offices and laboratories; and incidental and accessory buildings, storage buildings, outdoor storage, warehouses, exposed mechanical appurtenances. The zoning allows for a maximum building height of 70 feet and a maximum building coverage of 50 percent.

Norman Y. Mineta San José International Airport

The proposed project site is approximately 1.75 miles northwest of the Norman Y. Mineta San José International Airport (Airport) and is not located within the Airport Influence Area (AIA) defined by the Santa Clara County Airport Land Use Commission's Comprehensive Land Use Plan (CLUP) for the Airport.[77]

4.11.1.2 *Existing Conditions*

The site is bordered by Bowers Avenue and one- and two-story industrial buildings to the west, Central Expressway and one- and two-story industrial buildings to the south, and industrial buildings and a five-story data center building to the east. The closest residences are approximately 1,600 feet northeast on Scott Boulevard.

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 site is in an industrial area and is surrounded by industrial land uses. The project would not include any features that would physically divide the community (e.g., blocking roadways or sidewalks or installing linear infrastructure that would create a barrier to movement) and would not interfere with the movement of residents through a neighborhood. The recycled water line extension would be contained within the project site. For these reasons, construction of the proposed project would not divide an established community. **(No Impact)**

[77] Santa Clara County Airport Land Use. Commission's Comprehensive Land Use Plan. Figure 8: Airport Influence Area Map. November 16, 2016.

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?

Land Use Compatibility

The project area consists primarily of industrial land uses. The nearest sensitive receptors to the proposed project site are existing residences on Scott Boulevard, approximately 1,600 feet northeast of the project site. The Norman Y. Mineta Airport is located approximately 1.75 miles southeast of the site. Aircraft, along with truck and other vehicle traffic, are readily apparent in the area. Lighting and noise levels associated with the proposed project are not anticipated to adversely affect adjacent properties because they are typical of lighting and noise generated by industrial uses in the vicinity, as discussed in Sections 4.1 Aesthetics and 4.13 Noise and Vibration. The proposed project, therefore, would not introduce a land use to the site that would create a land use compatibility conflict in the project area.

City of Santa Clara 2010-2035 General Plan

The site has a General Plan designation of High Intensity Office/Research and Development (R&D). Permitted uses under this designation include offices and prototype R&D uses. Accessory, or secondary, small-scale supporting retail uses that serve local employees and visitors are also permitted. The General Plan does not contain specific information for central utility buildings under this designation; however, the proposed project would directly serve the existing and planned equipment on the Intel Campus and, therefore, would be consistent with the General Plan designation. The maximum floor area ratio (FAR) of the High Intensity Office/R&D General Plan designation is 2.00. The proposed FAR of the project is 0.30, which is well within the allowable FAR for the site.

City Code

The site is located within the MP-Planned Industrial zoning district. Permitted uses under this district include chemical and physical science offices and laboratories; engineering and cartographic offices and laboratories; manufacture, assembling and packaging of electronic equipment, instrument, devices, and pharmaceuticals; research offices and laboratories; testing offices and laboratories; and incidental and accessory buildings, storage buildings, outdoor storage, warehouses, and exposed mechanical appurtenances. The zoning allows for a maximum building height of 70 feet. The CUB would have a height of 45 feet, which includes a 20-foot parapet to screen rooftop equipment. Additionally, noise generated by the project operation would comply with the City Code noise limits for adjacent land uses (refer to Section 4.13 Noise). The proposed project, therefore, would not conflict with the City's General Plan or Zoning Ordinance. **(Less than Significant Impact)**

4.12 Mineral Resources

4.12.1 Environmental Setting

4.12.1.1 *Regulatory Framework*

4.12.1.2 *Existing Conditions*

State

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act (SMARA) was enacted by the California legislature in 1975 to address the need for a continuing supply of mineral resources, and to prevent or minimize the negative impacts of surface mining to public health, property, and the environment. As mandated under SMARA, the State Geologist has designated mineral land classifications 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.

4.12.1.3 *Existing Conditions*

The City of Santa Clara in an area zoned MRZ-1, which is classified as an area where no significant mineral deposits are present.[78] The area is not known to support significant resources of any other type. No mineral resources are currently being extracted in the City. The State Office of Mine Reclamation's list of mines (the AB 3098 List) is regulated under the SMARA and does not include any mines within the City.[79]

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?	☐	☐	☐	☒

[78] City of Santa Clara. 2010-2035 General Plan Integrated Final EIR. January 2011.
[79] Ibid.

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 described in Section 4.12.1.2, there are no mineral resources in Santa Clara; therefore, the project site is not comprised of known mineral resources or mineral resource production areas. For this reason, 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 on a local general plan, specific plan, or other land use plan. **(No Impact)**

4.13 Noise

The following discussion is based, in part, on a Noise and Vibration Assessment prepared for the project by Illingworth & Rodkin, Inc. A copy of the report, dated June 9, 2023, is included in Appendix E of this Initial Study.

4.13.1 Environmental Setting

4.13.1.1 *Background Information*

Noise

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

Since excessive noise levels can adversely affect human activities and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. Noise guidelines are generally expressed using one of several noise averaging methods, including L_{eq}, DNL, or CNEL.[80] 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.

[80] L_{eq} is a measurement of average energy level intensity of noise over a given duration. 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

The Code of the City of Santa Clara does not have established noise limits for construction activities. Rather, the City controls noise impacts from construction by restricting allowable hours of construction (City Code Section 9.10.230). As a result, this assessment applies construction noise impact criteria developed by the U.S. Federal Transit Administration (FTA) to assess project construction noise level exposure. For construction restricted to daytime hours (7:00 a.m. and 10:00 p.m.), FTA guidance suggests that construction sound levels at or below the levels identified in Table 4.13-1.

Table 4.13-1: FTA Construction Noise Impact Criteria

Land Use	Daytime Eight-Hour L_{eq} (dB)
Residential	80
Commercial	85
Industrial	90

Source: FTA. Transit Noise and Vibration Impact Assessment Manual, Table 7-3. 2018.

State and Local

California Green Building Standards Code

For commercial uses, CALGreen (Section 5.507.4.1 and 5.507.4.2) requires that wall and roof-ceiling assemblies exposed to the adjacent roadways have a composite STC rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 when the commercial property falls within the 65 dBA L_{dn} or greater noise contour for a freeway or expressway, railroad, or industrial or stationary noise source. The state requires interior noise levels to be maintained at 50 dBA $L_{eq(1\text{-}hr)}$ or less during hours of operation at a proposed commercial use.

City of Santa Clara 2010-2035 General Plan

The City of Santa Clara General Plan identifies noise and land use compatibility standards for various land uses (General Plan Table 5.10-2). The noise standard is 70 dBA Community Noise Equivalent Level (CNEL) for uses with an industrial land use designation and 55 dBA CNEL for uses with a residential land use designation. The following policies are applicable to the 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-P4	Encourage the control of noise at the source through site design, building design, landscaping, hours of operation and other techniques.
5.10.6-P5	Require noise-generating uses near residential neighborhoods to include solid walls and heavy landscaping along common property lines, and to place compressors and mechanical equipment in sound-proof enclosures.
5.10.6-P7	Implement measures to reduce interior noise levels and restrict outdoor activities in areas subject to aircraft noise in order to make Office/Research and Development uses compatible with the Norman Y. Mineta International Airport land use restrictions.

City Code

Chapter 9.10 "Regulation of Noise and Vibration," of the City of Santa Clara City Code identifies allowable hours for construction to limit impacts to sensitive uses within 300 feet of a project site. The nearest sensitive receptors to the proposed project site are approximately 1,600 feet northeast of the site. The project is, therefore, not subject to the City Code regulations on construction hours.

The City Code also includes standards for maximum noise levels according to zoning districts for fixed sources of noise, as shown in Table 4.13-2 below.

Table 4.13-2: Noise Limits for Zoning Districts

Receiving Zone	Daytime Noise Limit (dBA)	Nighttime Noise Limit (DBA)
Single-family and duplex residential	55	50
Multiple-family residential, public space	55	50
Commercial, Office	65	60
Light Industrial	70	70
Heavy Industrial	75	75

Norman Y. Mineta San José International Comprehensive Land Use Plan

The Santa Clara County Airport Land Use Commission (ALUC) has adopted a Land Use Compatibility table for projects near Norman Y. Mineta San José International Airport (Airport). Under the ALUC's land use compatibility noise policies, industrial uses are compatible in noise environments (from aircraft overflights) that are 70 CNEL or less. The site is located outside of the 65 CNEL airport noise contours on the Comprehensive Land Use Plan noise map.

California Green Building Standards Code

Fornon-residential buildings, CALGreen (Section 5.507.4.1 and 5.507.4.2) requires that wall and roof-ceiling assemblies exposed to the adjacent roadways have a composite STC rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 when the commercial property falls within the 65 dBA L_{dn} or greater noise contour for a freeway or expressway, railroad, or industrial or stationary noise source.

4.13.1.3 *Existing Conditions*

The predominant sources of noise in the project vicinity include traffic on Central Expressway, equipment noise from the surrounding data centers and industrial sites, and aircraft noise associated with the Norman Y. Mineta Airport. The nearest sensitive receptors to the proposed project site are existing residences on Scott Boulevard, approximately 1,600 feet northeast.

A noise monitoring survey was performed at the site beginning on Tuesday January 24, 2023 and concluding on Thursday January 26, 2023. The monitoring survey included two long-term (LT-1 and LT-2) and three short-term (ST-1 through ST-3) noise measurements, which are shown in Figure 4.13-1.

LT-1 was made in front of an existing office building along Central Expressway, approximately 110 feet from the centerline of the roadway, which was the dominant noise source at LT-1. Hourly average noise levels at LT-1 typically ranged from 66 to 76 dBA L_{eq} during the daytime hours between 7:00 a.m. and 10:00 p.m. and from 57 to 68 dBA L_{eq} at nighttime hours between 10:00 p.m. and 7:00 a.m. The average CNEL for 24-hour periods calculated was 73 dBA CNEL. LT-2 was made over 400 feet north of the proposed CUB along Bowers Avenue. LT-2 was positioned approximately 140 feet east of the centerline Bowers Avenue, which would be the dominant noise source at this location. Hourly average noise levels at LT-2 typically ranged from 61 to 66 dBA Leq during the day and from 53 to 64 dBA Leq at night. The average CNEL calculated was 67 dBA.

Short-term measurements (ST-1, ST-2, and ST-3) were made at various locations around the site. ST-1 was made along the northern boundary of the Intel Campus, approximately 65 feet from the centerline of Coronado Drive. The primary noise sources were continually operating mechanical equipment and parking lot activity. ST-2 was made at 2975 Bowers Avenue, approximately 80 feet east of the centerline of the Bowers Avenue and approximately 135 feet south of the centerline of Central Expressway. The primary noise source was traffic noise; no noise generated by the Intel Campus was audible over the traffic noise. ST-3 was made at 2727 Walsh Avenue, approximately 70 feet south of the centerline of Central Expressway. The primary noise sources were mechanical campus from the Intel Campus and traffic. The short-term noise measurements are shown in Table 4.13-3.

NOISE MEASUREMENT LOCATIONS | FIGURE 4.13-1

Table 4.13-3: Short-Term Noise Measurement Summary (dBA)

Noise Measurement Location (Date, Time)	L_{max}	$L_{(1)}$	$L_{(10)}$	$L_{(50)}$	$L_{(90)}$	$L_{eq(10)}$
ST-1: Northern boundary of Intel Bowers Campus (1/24/2023, 11:20-11:30 a.m.)	73	63	59	56	65	57
ST-2: 2975 Bowers Avenue (1/26/2023, 10:40-10:50 a.m.)	75	73	71	67	62	68
ST-3: 2727 Walsh Avenue (1/26/2023, 11:00-11:10 a.m.)	83	77	75	69	64	71

ST = short-term; L_{max} = maximum A-weighted noise level during the measurement period; $L_{(1)}$, $L_{(10)}$, $L_{(50)}$, $L_{(90)}$ = The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period; L_{eq} = The average A-weighted noise level during the measurement period.
Source: Illingworth & Rodkin Inc. *Intel Central Utilities Building Project Noise and Vibration Assessment.* June 2023.

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?

Temporary Construction Noise

Noise impacts resulting from construction depend upon the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, and the distance between construction noise sources and noise-sensitive areas. Construction noise impacts primarily

result when construction activities occur during noise-sensitive times of the day (e.g., early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction lasts over extended periods of time.

The construction of the proposed project would involve demolition of the existing pavement, site preparation, grading and excavation, trenching, building erection, interior/architectural coating, and paving. As described in Section 4.13.1.3 Existing Conditions, the City Code limits construction activities (including the loading and unloading of materials and truck movements) within 300 feet of residentially zoned properties to the hours of 7:00 a.m. through 6:00 p.m. on weekdays and to the hours of 9:00 a.m. through 6:00 p.m. on Saturdays. No construction is permitted on Sundays or holidays. There is no residentially zoned property within 300 feet of the project site; therefore, the project would not violate the City Code limits for residentially zoned properties.

The City of Santa Clara does not establish noise level thresholds for construction activities. In lieu of thresholds from the City, this analysis uses the noise limits established by the Federal Transit Administration (FTA) to identify the potential for impacts due to substantial temporary construction noise. The FTA identifies the following construction noise limits in the Transit Noise and Vibration Impact Assessment Manual: during daytime hours, an exterior threshold of 80 dBA L_{eq} shall be applied at residential land uses and 90 dBA L_{eq} shall be applied at commercial and industrial land uses.

The anticipated construction equipment that would be used for each construction phase and the associated noise reference level at 50 feet are shown in Table 4.13-4 and Table 4.13-5. Table 4.13-4 shows the estimated construction noise levels associated with construction of the CUB, while Table 4.13-5 shows the estimated construction noise levels associated with the construction of the recycled water line connection.

Table 4.13-4: Proposed CUB Construction Noise Levels at 50 feet

Phase of Construction	Total Workdays	Construction Equipment (Quantity)	Estimated Construction Noise Level at 50 feet
Demolition	20 days	Concrete/Industrial Saw (1)a Rubber-Tired Dozer (1)	85 dBA Leq
Site Preparation	2 days	Tractor/Loader/Backhoe (3)a Grader (1)a Rubber-Tired Dozer (1)	84 dBA Leq
Grading/Excavation	4 days	Tractor/Loader/Backhoe (1)a Grader (1)a Rubber-Tired Dozer (1)	84 dBA Leq
Trenching/Foundation	4 days	Tractor/Loader/Backhoe (2)a Tractor/Loader/Backhoe (1)a Excavator (1)a	82 dBA Leq
Building – Exterior	200 days	Crane (1) Forklift (1)	82 dBA Leq

Phase of Construction	Total Workdays	Construction Equipment (Quantity)	Estimated Construction Noise Level at 50 feet
Building – Interior/ Architectural Coating	10 days	Generator Set (1)a Tractor/Loader/Backhoe (1)a Welder (3) Air Compressor (1)a	74 dBA Leq
Paving	10 days	Cement & Mortar Mixer (1) Paver (1) Paving Equipment (1)a Roller (1) Tractor/Loader/Backhoe (1)a	84 dBA Leq

a Denotes two loudest pieces of construction equipment per phase.

Source: Illingworth & Rodkin Inc. *Intel Central Utilities Building Project Noise and Vibration Assessment*. June 2023.

Table 4.13-5: Construction Noise Levels for the Proposed Pipe Trenching and Trellis at 50 feet

Phase of Construction	Total Workdays	Construction Equipment (Quantity)	Estimated Construction Noise Level at 50 feet
Demolition	20 days	Concrete/Industrial Saw (1)a Excavator (1)a Dump Truck (1)	84 dBA Leq
Trenching/Foundation	30 days	Excavator (1)a Dump Truck (4)a	78 dBA Leq
Building – Exterior	60 days	Forklift (2) Generator Set (1)a Welder (1)a	78 dBA Leq
Building – Interior/ Architectural Coating	80 days	Aerial Lift (2)a	68 dBA Leq
Paving	5 days	Paving Equipment (1)a Roller (1) Tractor/Loader/Backhoe (1)a	84 dBA Leq

[a] Denotes two loudest pieces of construction equipment per phase.

Source: Illingworth & Rodkin Inc. *Intel Central Utilities Building Project Noise and Vibration Assessment*. June 2023.

The Federal Highway Administration's (FHWA's) Roadway Construction Noise Model (RCNM) was used to calculate the hourly average noise levels for each phase of construction, assuming the two loudest pieces of equipment would operate simultaneously, as recommended by the FTA for construction noise evaluations. To calculate the noise impacts at the receiving property lines, the worst-case hourly average noise level was modeled from the geometrical center of the proposed CUB to the property line of the receptors. The estimated construction noise levels reflect simultaneous construction of the proposed CUB and recycled water line connection. Some phases of construction would not have concurrent CUB and recycled water line connection construction

activities. The estimated construction noise levels at nearby land uses are shown in Table 4.13-6. Except for the nearest residence, no reduction in noise level is assumed due to intervening buildings or existing barriers (i.e., attenuation). Several intervening buildings would provide more than 20 dBA attenuation for the nearest residences northeast of the site.

Table 4.13-6: Estimated Construction Hourly Average Noise Levels, L_{eq} (dBA) at Nearby Land Uses

Phase of Construction	North Silicon Valley Christian Assembly (620ft[a])	West Industrial & Office Buildings (450ft[a])	South Medical Office & Office Buildings (400ft[a])	Northeast Office Building (660ft[a])	Nearest Residences (1,655ft[a])
Demolition	66 to 67[b]	68 to 70[b]	69 to 71[b]	65 to 67[b]	37 to 39[b,c]
Site Preparation	63	66	67	62	34[c]
Grading/ Excavation	64	67	68	63	36[c]
Trenching/Foundation	60 to 62[b]	63 to 65[b]	64 to 66[b]	59 to 62[b]	31 to 34[b,c]
Building – Exterior	61 to 63[b]	64 to 66[b]	65 to 67[b]	61 to 62[b]	33 to 34[b,c]
Building – Interior/ Architectural Coating	52 to 53[b]	55 to 56[b]	56 to 57[b]	51 to 52[b]	23 to 24[b,c]
Paving	64 to 66[b]	66 to 69[b]	67 to 70[b]	63 to 66[b]	35 to 38[b,c]

[a] The distances shown in the table were measured from the center of the nearest project building to the receiving property lines.

[b] Range of noise levels reflects construction activities for the CUB only and in combination with pipe trenching and construction of the trellis.

[c] Conservative 20 dBA attenuation assumed for intervening structures.

Source: Illingworth & Rodkin Inc. *Intel Central Utilities Building Project Noise and Vibration Assessment*. June 2023.

As shown in Table 4.13-6, construction noise levels would be below 60 dBA L_{eq} at the nearest residence and range from 51 to 71 dBA L_{eq} at existing industrial, office, medical office buildings, and church uses surrounding the site. These construction noise levels would not exceed the exterior threshold of 80 dBA L_{eq} for residential uses or the 90 dBA L_{eq} threshold for nonresidential uses.

Permanent Operational Noise

The primary source of noise from operation of the project would be related to mechanical equipment associated with CUB operations. The project would not generate new vehicle trips since existing employees would maintain and operate the CUB; therefore, the project would not cause any operational noise from vehicle traffic.

Section 9.10.040 of the City Code establishes noise level performance standards for fixed sources of noise (refer to Table 4.13-2, above). The City Code states that noise limits set forth in the code are not applicable to the performance of emergency work, including the operation of emergency generators and pumps or other equipment necessary to provide services during an emergency.

However, the City has applied the noise limits to testing of the standby generators for similar developments, such as data center buildings in Santa Clara.

Mechanical Equipment

Project mechanical equipment would include emergency generators, chillers, transformers, pumps, a cooling tower, and heating, ventilation, and air conditioning (HVAC) units. According to the site plan, the transformers would be housed within the building on the ground floor, which would adequately shield the equipment noise from the surrounding land uses. The generators would be located within an enclosed space at the southern end of the building. The cooling towers and air handling units would be located on the rooftop of the proposed building. A proposed screen would be located around the building, providing partial shielding. The noise associated with the mechanical equipment was modeled in SoundPLAN (version 8.2) using project applicant provided manufacturer specifications for the equipment. The daily operational noise levels from the mechanical are summarized in Table 4.13-7.

Table 4.13-7: Daily Operational Noise Levels (includes Emergency Generators)

Receptor	Distance from Center of Proposed CUB (feet)	L_{eq} from Daily Operational Noise (No Generators), dBA	Calculated CNEL, dBA	Noise Level Increase, dBA CNEL
North Silicon Valley Christian Assembly	620	54	61	1
Northeast Office	575	55	61	1
West Office & Industrial Buildings	450	57	64	2
South Medical Office & Office Buildings	400	49 to 56	55 to 63	0
Nearest Residences	1,655	26	32	0

Note: The hourly average noise levels, the calculated CNEL (assuming daily operations run each hour for a 24-hour period), and the permanent noise level increase calculated for the surrounding receptors are shown.

Source: Illingworth & Rodkin Inc. Intel Central Utilities Building Project Noise and Vibration Assessment. June 2023.

As shown in Table 4.13-7, the daily operational noise levels generated from the mechanical equipment, which include the emergency generator testing and maintenance operation, would not exceed the daytime (65 dBA L_{eq})or nighttime (60 dBA L_{eq}) hourly average thresholds for commercial uses, hourly average noise levels (70 dBA L_{eq}) for light industrial uses, or exceed the daytime (55 dBA L_{eq}) and nighttime (50 dBA L_{eq}) thresholds at the nearest residential use. Impacts related to permanent operational noise sources would be less than significant because the daily operational

noise levels would be below the applicable City Code noise level thresholds for commercial, industrial, and residential land uses. **(Less than Significant Impact)**

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

The City of Santa Clara does not specify a construction vibration limit. For structural damage, the California Department of Transportation recommends a vibration limit of 0.5 in/sec PPV for new residential and modern commercial/industrial structures, 0.3 in/sec PPV for older residential structures, and a limit of 0.25 in/sec PPV for historic and some old buildings. The 0.3 in/sec PPV vibration limit would be applicable to residences. The 0.5 in/sec PPV vibration limit would be applicable to other properties in the vicinity of the project site. The SC1 and SC2 buildings are historical buildings (as described in Section 4.5 Cultural Resources) in proximity to the project site; therefore, the limit of 0.25 in/sec PPV for historic buildings is applicable.

The construction of the project may generate perceptible vibration when heavy equipment or impact tools are used. Construction activities would include demolition, site preparation, grading and excavation, trenching, building (exterior), interior/architectural coating, and paving. Other project construction activities, such as the use of jackhammers, rock drills, and other high-power or vibratory tools, and rolling stock equipment, may potentially generate substantial vibration in the immediate vicinity. Erection of the building structure is not anticipated to be a source of substantial vibration except for sporadic events such as the dropping of heavy objects, which should be avoided to the extent possible.

Table 4.13-8 shows the estimated vibration levels from operation of construction equipment at the surrounding structures and nearest residence. The vibration levels were calculated assuming that the construction equipment would be operating along the boundary of the construction site closest to the surrounding land use. This approach is taken because vibration levels are highest closest to the source and then attenuate or decrease with increasing distance.

Table 4.13-8: Construction Vibration Levels at Structures Surrounding the Project Site (in/sec PPV)

Equipment		PPV at 25 ft. (in/sec)	North Silicon Valley Christian Assembly (690 feet)	West Office & Industrial Buildings (360 feet)	South Medical Office & Office Buildings (335 feet)	Nearest Residences (1,570 feet)	On-site Intel SC1 Building (30 feet)
Clam shovel drop		0.202	0.005	0.011	0.012	0.002	0.165
Hydromill (slurry wall)	in soil	0.008	0.000	0.000	0.001	0.000	0.007
	in rock	0.017	0.000	0.001	0.001	0.000	0.014
Vibratory Roller		0.210	0.005	0.011	0.012	0.002	0.172
Hoe Ram		0.089	0.002	0.005	0.005	0.001	0.073
Large bulldozer		0.089	0.002	0.005	0. 005	0.001	0.073
Caisson drilling		0.089	0.002	0.005	0.005	0.001	0.073
Loaded trucks		0.076	0.002	0.004	0.004	0.001	0.062
Jackhammer		0.035	0.001	0.002	0.002	0.000	0.029
Small bulldozer		0.003	0.000	0.000	0.000	0.000	0.002

Source: Illingworth & Rodkin Inc. *Intel Central Utilities Building Project Noise and Vibration Assessment*. June 2023.

As shown in Table 4.13-8, none of the construction vibration levels at any of the surrounding structures would exceed the 0.25 in/sec PPV vibration limit for historic buildings (i.e., SC1) or the 0.5 in/sec PPV vibration limit for other land uses (commercial and industrial buildings). Vibration generated from construction activities would not be expected to cause cosmetic damage; however, vibration levels may still be perceptible. As with any type of construction, perceptible vibration is anticipated and would not be considered a significant impact given the intermittent and short duration of the phases that have the highest potential of producing vibration. **(Less than Significant Impact)**

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

The Norman Y. Mineta Airport is located approximately 1.75 mile southeast of the project site. The project site is located outside of the 60 dBA CNEL airport noise exposure contour shown in the Airport Master Plan 2037 Noise Contour Map (refer to Appendix E). Aircraft noise would result in exterior noise levels below the City's requirements for industrial land uses. Therefore, the proposed project would be compatible with the City's exterior noise standards for aircraft noise. **(No Impact)**

4.14 Population and Housing

4.14.1 Environmental Setting

4.14.1.1 *Regulatory Framework*

State

Housing-Element Law

State requirements mandating that housing be included as an element of each jurisdiction's general plan is known as housing-element law. The Regional Housing Need Allocation (RHNA) is the state-mandated process to identify the total number of housing units (by affordability level) that each jurisdiction must accommodate in its housing element. California housing-element law requires cities to: 1) zone adequate lands to accommodate its RHNA; 2) produce an inventory of sites that can accommodate its share of the RHNA; 3) identify governmental and non-governmental constraints to residential development; 4) develop strategies and a work plan to mitigate or eliminate those constraints; and 5) adopt a housing element and update it on a regular basis.[81] On June 27, 2023, the City of Santa Clara City Council adopted the 2023 – 2031 (6th Cycle) Housing Element with revisions incorporated based on the California Department of Housing and Community Development's (HCD) comments. Prior to this, the City of Santa Clara Housing Element and related land use policies were last updated in 2015.

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.[82]

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

[81] California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements." Accessed October 28, 2022. https://www.hcd.ca.gov/planning-and-community-development/regional-housing-needs-allocation

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

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

4.14.1.2 *Existing Conditions*

As of January 2023, Santa Clara had a population of 132,476 persons and 53,370 households with an average of 2.57 persons per household.[83] In 2035, it is estimated that the City will have a population of approximately 154,990 and up to 154,000 jobs with 86,800 employed residents.[84]

The jobs/housing relationship is quantified by the jobs/employed resident ratio. When the ratio reaches 1.0, a balance is struck between the supply of local housing and jobs. The jobs/housing resident ratio is determined by dividing the number of local jobs by the number of employed residents that can be housed in local housing. The City of Santa Clara had an estimated 1.85 jobs for every employed resident in 2008.[85] The General Plan focuses on increased housing and the placement of housing near employment. As a result, the jobs to housing ratio is projected to slightly decrease to 1.77 by the year 2035.[86] Some employees who work within the City would still be required to seek housing outside the community with full implementation of the General Plan.

The project site is currently developed with a parking lot, with no residential uses on-site.

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?	☐	☐	☐	☒

[83] California Department of Finance. "E-5 City/County Population and Housing Estimates." May 1, 2023. https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/.
[84] City of Santa Clara 2010-2035 General Plan Final Environmental Impact Report. 2011. Page 124.
[85] Ibid.
[86] Ibid.

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 would be operated by current Intel Campus employees and no additional employees would be hired. Therefore, approval of the project would not substantially increase jobs in the City. The proposed project would not induce substantial population growth in the City or substantially alter the City's job/housing ratio and would, therefore, result in less than significant population and housing impacts. Additionally, the proposed project would not expand existing roads or infrastructure supporting population growth. Therefore, the proposed project would not induce substantial unplanned population growth, and no impacts would occur. **(No Impact)**

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

The existing project site does not include residents or housing units and, therefore, the project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. **(No Impact)**

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) was approved by the California legislature to ensure that new residential developments set aside sufficient parkland and open space for recreational purposes and/or require the payment of fees due in lieu of parkland dedication to help mitigate the impacts from new residential developments. This legislation was initiated in response to California's increased rate of urbanization and the need to preserve open space and provide parks and recreation facilities for California's growing communities. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two at the discretion of the City.

Government Code Section 65995 through 65998

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

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

Regional and Local

City of Santa Clara 2010 – 2035 General Plan

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

Policies	Description
5.9.3-P1	Encourage design techniques that promote public and property safety in new development and public spaces.
5.9.3-P3	Maintain a City-wide average three-minute response time for fire emergency service calls.
5.9.3-P4	Maintain a City-wide average three-minute response time for fire emergency service calls.

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.

4.15.1.2 *Existing Conditions*

Fire Protection

Fire protection services for the project site are provided by the City of Santa Clara Fire Department (SCFD). The SCFD consists of ten stations (Station 10 is temporarily closed while it is relocated) consisting of eight engines, two trucks, one rescue/light unit, one hazardous materials unit and two command vehicles.[87] The closest fire stations to the project site are Station 9, located at 3011 Corvin Drive, approximately one mile west of the project site, Station 2, located at 1900 Walsh Avenue, approximately 1.7 miles southeast of the project site, and Station 5, located at 1912 Bowers Avenue, approximately 1.6 miles southwest of the project site.

The Fire Department responds with highly trained and equipped personnel to emergency scenes, maintaining a City-wide response time of six minutes to 90 percent of all high-level emergency calls. Response time is measured from time of dispatch to the time of arrival at the call.[88]

Police Protection

Police protection services are provided by the City of Santa Clara Police Department (SCPD). The SCPD consists of 232 full-time employees and a varying number of part-time or per diem employees, community volunteers, Police Reserves and Chaplains.[89] Police headquarters are located at 601 El Camino Real, approximately 3.8 miles southeast of the project site.[90]

[87] City of Santa Clara. "Santa Clara Fire Department." Accessed January 10, 2023. https://www.santaclaraca.gov/our-city/departments-a-f/fire-department
[88] City of Santa Clara. "Emergency Services." Accessed January 17, 2023. https://www.santaclaraca.gov/services/emergency-services.
[89] City of Santa Clara Police Department. "Fact Sheet." Accessed on January 10, 2023. https://www.santaclaraca.gov/our-city/departments-g-z/police-department/about-us/fact-sheet
[90] City of Santa Clara Police Department. "Contact Us." Accessed on January 10, 2023. https://www.santaclaraca.gov/our-city/departments-g-z/police-department/about-us/contact-us

The General Plan identifies a public service goal to maintain the SCPD response time average of three minutes for all areas of the City.[91]

Schools

The project site is located within the Santa Clara Unified School District (SCUSD). The nearest public schools to the project site are Bracher Elementary School, located at 2700 Chromite Drive, approximately one mile south of the project site, Cabrillo Middle School, located at 2550 Cabrillo Avenue, approximately 1.6 miles south of the project site, and Adrian Wilcox High School, located at 3250 Monroe Street, approximately 1.6 miles southwest of the project site.

Parks

The Santa Clara Parks and Recreation Department (Department) provides parks and recreational services in the City. The Department is responsible for maintaining and programming the various parks and recreation facilities and works cooperatively with public agencies in coordinating all recreational activities within the City. Overall, as of May 2023, the Department maintains and operates Central Park, a 45.04-acre community park (45.04 acres improved and Central Park North 34.93 acres unimproved, resulting in 79.97 acres), 31 neighborhood parks (125.572 acres improved and 5.220 acres unimproved resulting in 130.792 acres), 13 mini parks (2.59 acres improved and 3.189 acres unimproved resulting in 5.779 acres), public open space (16.13 acres improved and 40.08 acres unimproved resulting in 56.21 acres), recreational facilities (23.898 acres improved and excluding the BMX track), recreational trails (7.59 acres improved and 0.20 acres unimproved resulting in 7.79 acres), and joint use facilities (48.588 acres) throughout the City totaling approximately 269.408 improved acres and 83.619 unimproved acres. Community parks are over fifteen acres, neighborhood parks are one to fifteen acres and mini parks are typically less than one acre in size.

The nearest neighborhood park to the project site is Bracher Park, located at 2560 Alhambra Drive, approximately one mile south of the project site, but it is not within walking distance (a 10-minute walk) of the project site. San Thomas Aquino Creek Trail also provides recreational opportunities in the project area and is located approximately one mile east of the project site.

Libraries

Library services are provided by the Santa Clara City Library (SCCL). The City of Santa Clara is served by the Central Park Library, located at 2635 Homestead Road, approximately 3.8 miles south of the project site, Mission Branch Library, located at 1098 Lexington Street, approximately 3.6 miles southeast of the project site, and Northside Branch Library, located at 695 Moreland Way, approximately 2.8 miles northeast of the site.

[91] City of Santa Clara. *City of Santa Clara 2010-2035 General Plan*. Section 5.9.3. November 2010.

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 project site is currently served by the SCFD. The proposed project may result in an incremental increase in the need for fire services associated with increased building area (though no increase in employment) but would not require the construction of new facilities or stations.

The project would be constructed in conformance with current building and fire codes, and the SCFD would review project plans to ensure appropriate safety features are incorporated to reduce fire hazards. The potential incremental increase in fire protection services would not require new or expanded fire protection facilities (the construction of which could cause significant environmental impacts) in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services. **(Less than Significant Impact)**

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 project site is currently served by the SCPD. The project may result in an incremental increase in the need for police services associated with increased building area (though not increase in employment) but would not require the construction of new facilities or stations.

The SCPD would review the final site design, including proposed landscaping, access, and lighting, to ensure that the project provides adequate safety and security measures. The potential incremental increase in police protection services would not require new or expanded police protection facilities (the construction of which could cause significant environmental impacts) in order to maintain acceptable service rations, response times or other performance objectives for police protection services. **(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 proposed project would not generate substantial population growth in the project area or result in the use of public facilities in the area by new residents. The project proposes a central utility building, not a residential use, and would therefore not generate students. The project would not require new or expanded school facilities, the construction of which could cause environmental impacts. **(No 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 proposed project would not generate substantial population growth in the project area or result in the use of public facilities in the area by new residents. Some employees at the project site may visit local parks; however, the project would not increase the number of employees working at the Intel Campus, and therefore not create the need for any new facilities or adversely impact the physical condition of existing 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 proposed project would not generate substantial population growth in the project area or result in the use of public facilities in the area by new residents. Some employees at the project site may visit library facilities; however, this would not be an increase compared to current site employment levels and therefore, the project would not create the need for any new facilities or adversely impact the physical condition of existing facilities. **(No 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) was approved by the California legislature to ensure that new residential developments set aside sufficient parkland and open space for recreational purposes and/or require the payment of fees due in lieu of parkland dedication to help mitigate the impacts from new residential developments. This legislation was initiated in response to California's increased rate of urbanization and the need to preserve open space and provide parks and recreation facilities for California's growing communities. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two at the discretion of the City.

Local

City of Santa Clara 2010-2035 General Plan

Applicable General Plan policies related to recreation include, but are not limited to, the following listed below.

Policies	Description
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.
5.9.1-P4	Provide connections between private and public open space through publicly accessible trails and pathways and by orienting open spaces to public streets.

4.16.1.2 *Existing Conditions*

The City of Santa Clara Parks & Recreation Department (Department) provides parks and recreational services in the City. The Department is responsible for maintaining and programming the various parks and recreation facilities and works cooperatively with public agencies in coordinating all recreational activities within the City. Overall, as of May 2023, the Department

maintains and operates Central Park, a 45.04-acre community park (45.04 acres improved and Central Park North 34.93 acres unimproved, resulting in 79.97 acres), 30 neighborhood parks (125.57 acres improved and 5.220 acres unimproved resulting in 130.79 acres), 13 mini parks (2.59 acres improved and 3.19 acres unimproved resulting in 5.78 acres), public open space (16.13 acres improved and 40.08 acres unimproved resulting in 56.21 acres), recreational facilities (23.90 acres improved and excluding the BMX track), recreational trails (7.59 acres improved and 0.20 acres unimproved resulting in 7.79 acres), and joint use facilities (48.59 acres) throughout the City totaling approximately 269.408 improved acres and 83.619 unimproved acres. Community parks are over fifteen acres, neighborhood parks are one to fifteen acres and mini parks are typically less than one acre in size. As mentioned in Section 4.15 Public Services, the nearest park is Brancher Park, located at 2560 Alhambra Drive, approximately one mile south of the project site, but it is not within walking distance (a 10-minute walk) of the project site.

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?

The proposed project would construct an industrial structure, which would not increase the population of the City. The project would not increase employment on the site above current levels and, therefore, would not contribute to the use of parks surrounding the project site. **(No Impact)**

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

The project does not include the expansion or construction of additional recreational facilities. In addition, as an industrial use, the project would not require the construction or expansion of recreational facilities for the City to meet its service goals. For these reasons, implementation of the project would not result in an adverse physical effect on the environment. **(No Impact)**

4.17 Transportation

4.17.1 Environmental Setting

4.17.1.1 *Regulatory Framework*

State

Regional Transportation Plan

MTC is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including Santa Clara County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and ABAG adopted Plan Bay Area 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.

Senate Bill 743 (2013)

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.

To comply with Senate Bill 743, on June 23, 2020, the City adopted a new Transportation Analysis Policy which establishes Santa Clara land use and transportation project requirements for evaluating transportation impacts under CEQA using VMT methodology, including baselines, thresholds, as well as criteria for exempting certain types of projects from VMT analysis. Most notably, projects located within 0.50 miles from transit should be considered to have less than significant transportation impacts provided the project meets certain policy criteria.

Regional and Local

Congestion Management Program

Santa Clara Valley Transportation Authority (VTA) oversees the Congestion Management Program (CMP), which is aimed at reducing regional traffic congestion. The relevant state legislation requires that urbanized counties in California prepare a CMP 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 generate 100 peak hour trips or more and that are expected to affect CMP-designated intersections.

City of Santa Clara 2010-2035 General Plan

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

Policies	Description
5.8.1-P3	Identify opportunities to connect people to supportive services, public amenities, and transit.
5.8.2-P2	Discourage widening of existing roadway or intersection rights-of-way without first considering operational improvements, such as traffic signal modifications, turn-pocket extensions, and intelligent transportation systems.
5.8.2-P3	Encourage undergrounding of utilities and utility equipment within the public right-of-way and site these facilities to provide opportunities for street trees and adequate sidewalks.
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.
5.8.3-P10	Require new development to participate in public/private partnerships to provide new transit options between Santa Clara residences and businesses.
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.
5.8.4-P9	Encourage pedestrian- and bicycle-oriented amenities, such as bicycle racks, benches, signalized mid-block crosswalks, and bus benches or enclosures.
5.8.4-P10	Encourage safe, secure, and convenient bicycle parking and end-of-trip, or bicycle “stop” facilities, such as showers or bicycle repair near destinations for all users, including commuters, residents, shoppers, students, and other bicycle travelers.
5.8.4-P13	Promote pedestrian and bicycle safety through “best practices” or design guidelines for sidewalks, bicycle facilities, landscape strips and other buffers, as well as crosswalk design and placement.
5.3.1-P14	Encourage TDM strategies and the provision of bicycle and pedestrian amenities in all new development greater than 25 housing units or more than 10,000 non-residential square feet, and for City employees, in order to decrease use of the single-occupant automobile and reduce vehicle miles traveled, consistent with the Climate Action Plan.

4.17.1.2 *Existing Conditions*

Existing Roadway Network

Regional access to the project site is provided by US 101, as described below.

- *US 101* is an eight-lane freeway with three mixed-flow lanes and one high-occupancy vehicle (HOV) lane in each direction in the vicinity of the site. It extends north through San Francisco and south through Gilroy. Regional access to the project site is provided via its interchange with Bowers Avenue.

Local access to the site is provided by Central Expressway, Bowers Avenue, Kifer Road, Walsh Avenue, Scott Boulevard and Coronado Drive.

- *Central Expressway* is a six-lane east-west expressway with four to six lanes. It begins at De La Cruz Boulevard in San José and extends westward to San Antonio Road where it transitions into Alma Street in Mountain View. East of San Tomas Expressway, Central Expressway has HOV lanes. Central Expressway provides access to and from the project site via Bowers Avenue.

- *Bowers Avenue* is a six-lane north-south street, north of Kifer Road, and a four-lane street south of Kifer Road. It transitions from Great America Parkway north of US 101 and extends southerly to El Camino Real, where it transitions to Kiely Boulevard. Bicycle lanes exist along most of Bowers Avenue, except between Central Expressway and Kifer Road. Bowers Avenue provides direct access to the project site via an existing driveway.

- *Kifer Road* is a four-lane east-west street with left-turn pockets provided at intersections and a center turn lane provided between intersections. It runs between Fair Oaks Avenue in Sunnyvale and Bowers Avenue, where it transitions into Walsh Avenue. Bicycle lanes exist west of Uranium Road. Kifer Road provides access to the project site via its intersection with Bowers Avenue.

- *Walsh Avenue* is a four-lane west/east roadway and a two-lane roadway from Lafayette Street where it ends at a bulb-out. Walsh Avenue provides access to the project site via its intersection with Bowers Avenue.

- *Scott Boulevard* is a four-lane east/west arterial with a divided median. It extends from the Sunnyvale/Santa Clara border near Oakmead Parkway to Saratoga Avenue. Scott Boulevard provides access to the project site via Bowers Avenue.

- *Coronado Drive* is a two-lane north-south street. It extends from Central Expressway to Scott Boulevard, where it transitions from Coronado Drive to Coronado Place. Coronado Drive provides direct access to the overall Intel Campus.

Existing Pedestrian Facilities

Pedestrian facilities consist of sidewalks, crosswalks, and pedestrian signals at signalized intersections. Pedestrian facilities in the project area consist of sidewalks and crosswalks. A continuous network of sidewalks is present along all the surrounding streets except the southern

side of Central Expressway. Crosswalks with pedestrian signal heads are located at all the signalized intersections in the area. Crosswalks are available at the intersection of Central Expressway and Bowers Avenue and the intersection of Scott Boulevard and Bowers Avenue.

Existing Bicycle Facilities

Bicycle facilities are comprised of paths (Class I), lanes (Class II), and routes (Class III). Bicycle paths are paved trails that are separate from roadways. The San Tomas Aquino Creek trail/bicycle path extends from Sunnyvale Baylands Park, north of SR 237, to Homestead Road. Between Cabrillo Avenue and Homestead Road, the trail runs on the west side of San Tomas Expressway. The trail can be accessed via the bicycle lanes on Scott Boulevard and Central Expressway.

Class II bicycle lanes, which are preferential use areas within a roadway designated for bicycles, within approximately one mile of the project site are present along the following roadways:

- Kifer Road, west of Uranium Road
- Scott Boulevard/Arques Avenue, between Monroe Street and North Fair Oaks Avenue in Sunnyvale
- Bowers Avenue/Great America Parkway, between Chromite Drive and Yerba Buena Way,
- Lakeside Drive, for the entire street
- Oakmead Parkway, for the entire street
- Calabazas Boulevard, for the entire street

Class III bicycle routes are typically designated with signage or with painted shared lane markings (sharrows) on a road that indicate to motorists that bicyclists may use the full travel lane. Within a one-mile radius of the project site, sharrows are present along the following roadway segments:

- Bowers Avenue, between Chromite Drive and El Camino Real
- Chromite Drive, between Monroe Street and Bowers Avenue

Bicycles are also allowed on Central Expressway, Lawrence Expressway, and San Tomas Expressway.

According to the Santa Clara Bicycle Master Plan Update 2018, Class II bike lanes (striped bike lanes) are planned on Bowers Avenue south of Chromite Drive, and Class IV separated bikeways are planned on Kifer Road.

Transit Facilities

Existing transit service in the project vicinity is provided by the VTA. The nearest bus stops to the project site are located along Bowers Avenue, north of Central Expressway (approximately 500-feet north of the project site as the crow flies, but an approximately 900-foot walk), along Bowers Avenue, south of Kifer Road (approximately 1,000-feet south of the project site), and at the intersection of Bowers Avenue and Scott Boulevard (approximately 1,500-feet north of the project site). The nearest VTA bus services are described in Table 4.17-1.

Table 4.17-1: VTA Bus Service in the Project Area

Route	Route Description	Location of Nearest Bus Stops
Local Route 20	Milpitas BART and Sunnyvale Transit Center	Bowers Avenue/Scott Boulevard
Local Route 57	Old Ironsides/Great America Parkway to West Valley College in Saratoga	Bowers Avenue/Kifer Road
ACE Gray (822) Shuttle	Great America Station to South Sunnyvale	Scott Boulevard at its intersections with Garrett Drive, Lakeside Drive, and Bowers Avenue
ACE Yellow (827) Shuttle	Great America Station to South Santa Clara	Bowers Avenue and Central Expressway

4.17.2 Impact Discussion

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

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

Construction

Construction activities would mostly occur on-site, except for connections to a recycled waterline in Coronado Drive. Project construction would not significantly obstruct any transit, roadway, bicycle, or pedestrian facilities in the area.

Operation

The need for the preparation of a traffic impact analysis for a particular development is based on its estimated trip generation and its effect on surrounding transportation facilities. According to the City of Santa Clara and VTA Transportation Impact Analysis Guidelines, a Transportation Impact

Analysis is needed when a project generates 100 or more net new peak hour trips in either the AM or PM peak hour.

The proposed CUB would serve and be part of the existing Intel Campus operations and would not generate new employees. Staff working within the CUB would be existing employees from the Intel Campus. The project would not generate regular vehicle trips other than occasional trips associated with maintenance activity and, therefore, would not result in impacts related to vehicle trips.

Operation of the project would occur fully on-site and would not obstruct pedestrian, bike, or transit plans for the area. Operation of the project would not conflict with any program, plan, ordinance, or policy addressing the circulation system, and would therefore result in less than significant impacts. **(Less than Significant Impact)**

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

The CEQA Guidelines Section 15064.3, Subdivision (b)(1) states that land use projects with vehicle miles traveled (VMT) exceeding an applicable threshold of significance may indicate a significant impact. The proposed CUB would serve and be part of the existing Intel Campus operations and would not generate new employees or regular trips to and from the site. Staff working within the CUB would be existing employees from the Intel Campus and the project would not regularly generate VMT other than occasional trips associated with maintenance activity. Therefore, the project would not result in a significant net increase in VMT. The project would also fall below the minimum number of trips (110 daily) to trigger a VMT analysis under the City's Transportation Analysis Policy. Consequently, the project would not conflict or be inconsistent with the City's adopted Transportation Analysis Policy (June 23, 2020) in compliance with the California Environmental Quality Act pursuant to State Senate Bill 743 (2013) and CEQA Guidelines Section 15064.3, subdivision (b). **(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)?

Access to the site would be provided via an existing two-way driveway on Bowers Avenue. The project would construct a building within an existing campus and would not include a new driveway to provide access to the site. Therefore, the project would not alter the circulation patterns of the surrounding roadways, nor would it modify ingress/egress to the site. The project would include a 26-foot-wide fire access lane along the western and southern borders of the CUB for emergency services. Construction of the project would be consistent with regulatory requirements for emergency services and would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). **(Less than Significant Impact)**

d) Would the project result in inadequate emergency access?

As mentioned under question (c) above, the project would include a 26-foot-wide fire access lane along the western and southern borders of the CUB for emergency services. The proposed project would not alter circulation patterns in a manner which would inhibit emergency access to the site or surrounding uses. Construction of the project would be consistent with regulatory requirements for emergency services. **(Less than Significant Impact)**

4.18 Tribal Cultural Resources

4.18.1 Environmental Setting

4.18.1.1 *Regulatory Framework*

State

Assembly Bill 52 (2015)

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

Under AB 52, TCRs are defined as follows:

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

4.18.1.2 *Existing Conditions*

On January 31, 2023, the Native American Heritage Commission (NAHC) responded to a Sacred Lands File request for the project site and the results were negative. On May 19, 2023, letters were sent to the following Native American tribes based on the recommendation of the NAHC): Amah Mutsun Tribal Band, Amah Mutsun Tribal Band of Mission San Juan Bautista, Indian Canyon Mutsun Band of Costanoan, Muwekma Ohlone Indian Tribe of the SF Bay Area, North Valley Yokuts Tribe, North Valley Yokuts Tribe, The Ohlone Indian Tribe, Wuksache Indian Tribe/Eshom Valley Band, and Tamien Nation. The 30-day period to request consultation under AB 52 concluded on June 19, 2023, with no tribes requesting consultation. There are no known TCRs on-site.

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 described in the 4.18.1.2 Existing Conditions, the results of a record search of the NAHC Sacred Land Files were negative and no tribes have also requested consultation under AB 52, indicating that TCRs are not known to be present on the site. While there is the potential for unknown Native American resources or human remains to be present in the project area, impacts would be less than significant with implementation MM CUL-1.1 and MM CUL-2.1, as described in Section 4.5 Cultural Resources, which would avoid potential impacts to unknown subsurface cultural resources or human remains. These mitigation measures would be applicable to tribal cultural resources and would function to avoid impacts to such resources if they are discovered on-site. Therefore, the project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k). **(Less than Significant Impact with Mitigation Incorporated)**

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

As discussed under checklist question a), there are no known TCRs on-site, and the project includes measures to reduce potential impacts to less than significant levels should TCRs be unexpectedly discovered during project construction. For these reasons, the project would not cause a substantial adverse change in the significance of a TCR that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. **(Less than Significant Impact with Mitigation Incorporated)**

4.19 Utilities and Service Systems

4.19.1 Environmental Setting

4.19.1.1 *Regulatory Framework*

State

State Water Code

Pursuant to the State Water Code, water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (approximately 980 million gallons) of water annually must prepare and adopt an urban water management plan (UWMP) and update it every five years. As part of a UWMP, water agencies are required to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon, water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought events. The City of Santa Clara adopted its most recent UWMP in June 2021.

Assembly Bill 939 (1989)

The California Integrated Waste Management Act of 1989, or AB 939, established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures.

Assembly Bill 341 (2012)

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

Senate Bill 610 (2001)

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.

Senate Bill 1383 (2017)

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 of 2020, which recommended maintaining the disposal reduction targets set forth in SB 1383.[92]

California Green Building Standards Code

In January 2010, the State of California adopted the CALGreen standards, establishing mandatory green building standards for all buildings in California. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and indoor environmental quality. These standards include the following mandatory set of measures, as well as more rigorous voluntary guidelines, for new construction projects to achieve specific green building performance levels:

- Reducing indoor water use by 20 percent;
- Reducing wastewater by 20 percent;
- Recycling and/or salvaging 50 percent of nonhazardous construction and demolition debris; and

[92] CalRecycle. Analysis of the Progress Toward the SB 1383 Organic Wase Reduction Goals. August 18, 2020. 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.

- Providing readily accessible areas for recycling by occupants.

CALGreen is updated every three years; the City adopted the most recent (2022) version, with local amendments, effective January 1, 2023.

Local

City of Santa Clara 2010-2035 General Plan

The Santa Clara 2010-2035 General Plan includes policies that address the reduction of GHG gas emissions during the planning horizon of the General Plan. The following goals, policies, and actions are applicable to the proposed project:

Policies	Description
5.3.1-P9	Require that new development provide adequate public services and facilities, infrastructure, and amenities to serve the new employment or residential growth.
5.3.1-P27	Encourage screening of above-ground utility equipment to minimize visual impacts.
5.3.1-P28	Encourage undergrounding of new utility lines and utility equipment throughout the City.
5.10.1-P6	Require adequate wastewater treatment and sewer conveyance capacity for all new development.
5.10.4-P3	Promote water conservation, recycled water use and sufficient water importation to ensure an adequate water supply.
5.10.5-P21	Require that storm drain infrastructure is adequate to serve all new development and is in place prior to occupancy.

4.19.1.2 *Existing Conditions*

Water Services

Water is provided to the site by the City of Santa Clara Water and Sewer Utility. The system consists of more than 335 miles of water mains, 19 active wells, and seven storage tanks with approximately 28.8 million gallons of water capacity.[93] Drinking water is provided by an extensive underground aquifer (accessed by the City's wells) and by two wholesale water importers: Valley Water (imported from the Sacramento-San Joaquin Delta) and the San Francisco Hetch-Hetchy System (imported from the Sierra Nevada). The three sources are used interchangeably or are blended. A water recharge program administered by Valley Water from local reservoirs and imported Sacramento-San Joaquin Delta water enhances the dependability of the underground aquifer.

[93] City of Santa Clara. *2020 Urban Water Management Plan*. June 2021. Page 5.

The project site is currently developed with a paved surface parking area and landscaped islands. The existing landscaping uses approximately 129,379.81 gallons of water per year, or 354.47 gallons per day.[94]

Recycled Water Services

Recycled water within the City is supplied from the San José-Santa Clara Regional Wastewater Facility (RWF). Recycled water from the plant is delivered to the City through a system of water pipelines totaling 33 miles. The City utilizes recycled water in order to offset and conserve use of potable water citywide. Recycled water is primarily used for irrigation within the City; however, several industries use recycled water in industrial processes, cooling towers, or for flushing toilets in dual plumbed buildings.

The project site does not currently use recycled water on the site.

Wastewater Services

The City of Santa Clara Departments of Public Works and Water and Sewer Utilities are responsible for the wastewater collection system within the City. Wastewater is collected by sewer systems in Santa Clara and is conveyed by pipelines to the Regional Wastewater Facility (RWF) located in San José. The RWF is one of the largest advanced wastewater treatment facilities in California and serves over 1,400,000 people in San José, Santa Clara, Milpitas, Campbell, Cupertino, Los Gatos, Saratoga, and Monte Sereno.[95] The RWF has available capacity to treat up to 167 million gallons per day (mgd). The RWF presently operates at an average dry weather flow of 110 mgd, which is 57 mgd (or 35 percent) under the facility's 167 mgd treatment capacity. Approximately ten percent of the plant's effluent is recycled for non-potable uses and the remainder flows into San Francisco Bay.[96]

The project site consists of a parking lot and landscaped areas, and therefore does not currently produce wastewater. Wastewater flow from the Intel Campus enters the City's sanitary sewer system via an existing 10-inch pipeline on-site that connects to a 12-inch pipeline along Bowers Avenue.

[94] This number was calculated as follows: Based on Attachment 6 of the March 2023 PCC Submittal, the proposed CUB would use 93,079 gallons of water per year for landscaping. The proposed CUB will have 16,877 square feet of landscaped area, a 10,695 square feet (or 39%) decrease in landscaped area compared to the existing landscaped area of 27,572 square feet. Therefore, the existing landscaping uses approximately 39% percent more water per year (or 36,300.81 gallons of water more per year) than the proposed CUB. The calculation was as follows: [(39 x 93,079)/100] + 93,079 = 129,379.81 gallons per year.

[95] City of San José. "Protecting Our Health, Bay, and Economy. San José/Santa Clara Water Pollution Control Plant." Accessed June 23, 2023. https://www.sanjoseca.gov/home/showpublisheddocument/32059/636703801187470000.

[96] Ibid.

A Wastewater Flow Monitoring Services Report was completed for the project in February 2023[97]. As part of the report, sewer flow monitoring was completed at three sewer utility access holes near the project site, one in the site's parking lot, one in Bowers Avenue and one in Coronado Drive. The results of the flow monitoring are summarized in Table 4.19-1 below.

Table 4.19-1: Existing Sanitary Flow Data

Utility Access Hole Location	Average Flows (mgd)	Peak Flow (mgd)	Available Capacity Remaining (mgd)
Bowers Avenue	0.0254	0.1031	0.4456
Parking Lot on-site	0.0497	0.2085	0.4340
Coronado Drive	0.1952	0.4020	0.7612

Storm Drainage

The City of Santa Clara owns and maintains the municipal storm drainage system. The site is served by existing 12-inch and 18-inch storm drain pipes under the site and within Central Expressway. The storm drain eventually discharges to the San Tomas Aquino Creek, which ultimately flows to the San Francisco Bay.

Solid Waste

Solid waste collection in the City of Santa Clara is provided by Mission Trail Waste System through a contract with the City. Mission Trail Waste System also has a contract to implement the Clean Green portion of the City's recycling plan by collecting yard waste. All other recycling services are provided through Stevens Creek Disposal and Recycling. The City has an arrangement with the owners of the Newby Island Landfill, located in San José, to provide disposal capacity for the City of Santa Clara through 2024. The City of San José approved expansion of Newby Island Landfill in August 2012 and the landfill could continue to provide disposal capacity to Santa Clara beyond 2024. The City also owns property outside its jurisdictional boundaries that could provide for solid waste disposal. The Newby Island Landfill has a remaining capacity of 12.42 million cubic yards.[98]

As discussed in Section 4.19.1.1 Regulatory Framework, 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. In addition to the state targets, the City of Santa Clara has a construction debris diversion ordinance which requires all projects over 5,000 square feet to divert a minimum of 50 percent of construction and demolition debris from landfills.

The project site is currently a paved parking lot serving an existing industrial campus and does not generate solid waste.

[97] Utility Systems Science & Software, Inc. "Wastewater Flow Monitoring Services for Gilbane Building Company, Bowers Intel Campus Project." February 2023.
[98] Boccaleoni, Anthony. Division Manager, Republic Services. Personal Communication. May 12, 2023.

4.19.2 Impact Discussion

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

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 and Recycled Water System

The project proposes to use recycled water for irrigation around the CUB site, as well as for the plumbing fixtures and cooling towers in the CUB. Recycled water is available from an existing line in Coronado Drive, at the northeastern portion of the Intel Campus. In order to serve the CUB and project site, a connection to this line would be trenched from Coronado Drive south to the northeast side of the campus, where it would connect to a proposed soft water system. From there, the water line would be routed west along the northern side of SC2 and SC1 buildings via an aboveground utility trestle, and then connect with the CUB site via a planned underground connection with SC1. See Figure 3.3-12 for a depiction of the recycled water routing plan. The

design criteria used for the extension of the recycled water line would be based on established industry operation standards and would comply with all City policies. Construction of the recycled water pipeline extension is included in the analysis of construction impacts in this document and would not cause significant environmental effects that could not be mitigated by the various mitigation measures identified throughout this document.

The project would rely on the domestic water line in Bowers Avenue and Central Expressway via a new connection to serve as the primary source of potable water and fire supply to the project.

The 1.3 acre site's current water demand (as itemized separately within the larger Intel campus) is 129,379.81 gallons of water per year, or 0.40 acre-feet of water per year.[99] The total proposed water demand for the CUB project, including the cooling towers, irrigation and potable domestic water use, would be 45.9 acre-feet of water per year, which is a 45.50 acre-feet of water per year increase compared to existing uses.[100] The additional 45.50 acre-feet of water per year would not exceed the capacity of Santa Clara Water Utility to provide water services to the project site and would not meet any of the regulatory criteria requiring a Water Supply Assessment.[101] Additionally, a portion of the project's water demand would be served by recycled water, as recycled water would be used for process flow, irrigation, and dual plumbing of the building fixtures with the intent of expanding the recycled water use on the Intel campus in the future.

Sanitary Sewer System/Wastewater Treatment Facilities

As shown in Table 4.19-1 above, the sanitary sewer pipelines surrounding the site have the following flow capacities remaining: 0.45 mgd for the pipeline in Bowers Avenue, 0.43 mgd for the pipeline on-site, and 0.76 mgd for the pipeline in Coronado Drive. The project would produce 14,853 gallons of wastewater per day, or 0.01 mgd, with a peak discharge of 49 gallons per minute, or 0.07 mgd, from cooling tower blowdown. Blowdown occurs when water evaporates from a cooling tower and freshwater replacements are needed to dilute solids remaining in the cooling tower tank. The three surrounding pipelines would have capacity for the wastewater flow of the proposed project.

Stormwater Drainage Facilities

As discussed in Section 4.10 Hydrology and Water Quality, the project would result in a net increase of impervious surface at the project site (18 percent increase). However, stormwater runoff from the site's impervious surfaces would be directed to treatment systems before being collected in a

[99] This number was calculated as follows: Based on Attachment 6 of the March 2023 PCC Submittal, the proposed CUB would use 93,079 gallons of water per year for landscaping. The proposed CUB will have 16,877 square feet of landscaped area, a 10,695 square feet (or 39%) decrease in landscaped area compared to the existing landscaped area of 27,572 square feet. Therefore, the existing landscaping uses approximately 39% percent more water per year (or 36,300.81 gallons of water more per year) than the proposed CUB. The calculation was as follows: [(39 x 93,079)/100] + 93,079 = 129,379.81 gallons per year
(55,000 square feet) x (177,734 gallons per year per 1,000 square feet) = 9,775,370 gallons per year.
[100] City of Santa Clara PCC Comments. Wendy Kwong, Water Resources Specialist. January 11, 2023.
[101] City of Santa Clara PCC Comments. Wendy Kwong, Water Resources Specialist. January 11, 2023.

series of pipes sized for a 10-year storm event in accordance with the City's design requirements. One 6,248-square foot bioretention treatment area would be located on the northwestern corner of the project site. A second 2,005-square foot bioretention treatment area would be located on the southwestern corner of the project site. The proposed stormwater control plan is shown on Figure 3.3-11. Although the project would increase the amount of impervious surfaces on the site, the proposed bioretention system would limit runoff from the proposed project to the equivalent of existing conditions under the typical design storm used to evaluate the performance of the storm drain system.

Electric Power, Natural Gas, and Telecommunications

The project would connect to an underground gas line in Bowers Avenue to provide natural gas to the site. No offsite infrastructure is needed to support the project's electrical, natural gas, or telecommunication needs. The project would route two underground electrical lines from two existing switchgears located in a central utility yard on the Intel Campus, northeast of the proposed CUB, connecting to the eastern portion of the CUB (see Figure 3.3-12). Combined, the two lines would be capable of providing six-megavolt amperes (MVA) of power to the electric equipment in the CUB and adjacent buildings.

The project would be required to detail the exact locations for all utility connections and utility plans would be subject to review by the City. The project would coordinate with the appropriate electric power and telecommunication providers. The project would utilize existing utility connections to connect to telecommunications systems. The project would not require or result in the relocation or construction of new or expanded potable water, wastewater treatment or stormwater drainage, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. The project would require the expansion of a recycled water pipeline and underground electrical lines; however, the expansion would not cause significant environmental effects that could not be mitigated by the various mitigation measures identified throughout this document. **(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?

As discussed under checklist question a), the project would result in an additional demand of 45.50 acre-feet of water per year but would not exceed the capacity of Santa Clara Water Utility to provide water services to the project site and would not meet any of the regulatory criteria requiring a Water Supply Assessment.[102] Additionally, a portion of the project's water demand would be served by recycled water, as recycled water would be used for process flow, irrigation, and dual plumbing of the building fixtures. The project is not considered a 'water demand project' pursuant to CEQA Guidelines section 15155(E), which defines an industrial, manufacturing/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 as a

[102] City of Santa Clara PCC Comments. Wendy Kwong, Water Resources Specialist. January 11, 2023.

water demand project. The project would use reclaimed water for irrigation around the CUB site, as well as for the plumbing fixtures and cooling towers in the CUB. The project would rely on the domestic water line in Bowers Avenue and Central Expressway to serve as the primary source of potable water and fire supply to the project.

The projected water demand associated with the proposed project is consistent with the growth projections and future water demand assumed in the preparation and analysis of the City's 2020 Urban Water Management Plan (UWMP).[103] The UWMP specifically discusses how the expansion of the recycled water distribution system will allow more industrial customers access to recycled water for cooling towers and processing, thus reducing industrial sector portable water demands. The City's 2020 UWMP concluded that sufficient water supplies are available to meet the project demand. As such, there is a sufficient water supply to serve the project site under normal water year (non-drought) conditions.

In addition to normal water years, the UWMP assessed the ability of Santa Clara to meet forecasted water demands (including the proposed project) during multiple dry weather (drought) years. The City concluded that with projected supply totals and implementation of conservation measures consistent with its Water Shortage Contingency Plan, the retailer would be able to meet the projected demand during multiple dry water years. On July 13, 2021, City Council ratified the City Manager's declaration of a Local Emergency for Extreme Drought Conditions and implemented a Water Shortage Contingency Plan Stage 2, which requires up to a 20 percent reduction in water usage. While the Santa Clara City Council rescinded the Proclamation of Drought Emergency on May 9, 2023, water restrictions currently remain in effect throughout the City.[104] As a result, the project may be subject to water supply and capacity fees, additional water efficiency standards, establishment of annual water budgets, and may be required to utilize to the maximum extent possible, alternative water supplies.

Implementation of the project would not have a significant impact on existing or future water supplies. **(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?

The proposed project would connect to an existing sewer line on Bowers Avenue, which ultimately flows to the RWF. The RWF has available capacity to treat up to 167 million gallons per day (mgd). Based on 2020 data, the City's peak week flow is 15.5 mgd while the treatment capacity allocated

[103] City of Santa Clara. "2020 Urban Water Management Plan." June 22, 2021.
[104] City of Santa Clara. "Help Save our Water – Water Conservation. Accessed June 26, 2023. https://www.santaclaraca.gov/our-city/departments-g-z/water-sewer-utilities/drought-update-save-our-water-14616

to Santa Clara is 25.17 mgd.[105] As discussed under checklist question a, the project would produce 0.01 mgd, with a peak discharge 0.07 mgd. Although the project would result in an increase of 0.01 mgd of wastewater, the project would not increase the need for wastewater treatment beyond the capacity of the RWF. The RWF can treat wastewater generated by the proposed project and, as a result, the project would not have a significant impact on the capacity of the RWF. **(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?

Solid Waste

The project would generate a total of 48 cubic yards per year (four cubic yards/month).[106] This is a 48-cubic-yard increase in solid waste compared to the existing solid waste generation on-site (as itemized separately within the larger Intel campus), as the site currently does not generate solid waste. The project would dispose of waste from the CUB at the existing trash enclosures on the Intel Campus, which are located northeast of the CUB site, north of building SC2.

The proposed project would comply with the City's construction debris diversion ordinance and state waste diversion requirements. As discussed in Section 4.20.1.2 Existing Conditions, the Newby Island Landfill, located in San José, has an agreement with the City to provide disposal capacity and has a remaining capacity of 12.42 million cubic yards.[107] Because the project can be served by a landfill with capacity and would not result in a significant increase in solid waste or recyclable materials, the project's impacts related to solid waste and landfill capacity would be less than significant. The City also owns property outside its jurisdictional boundaries that could provide for solid waste disposal. **(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 not negatively impact the provision of solid waste services and would comply with AB 341, which requires all businesses in California that generate four or more cubic yards of garbage per week (approximately 6,740 pounds per week) to recycle. While the project would produce less solid waste than this (four cubic yards per month, as itemized separately within the larger Intel campus), the project would nonetheless recycle. The project is estimated to produce four cubic yards per month of recycling, in addition to the four cubic yards per month of solid

[105] City of San Jose, Environmental Services Department. San Jose - Santa Clara Regional Wastewater Facility Tributary Agencies' Estimated Available Plant Capacity – 2020. December 2020. https://www.sanjoseca.gov/Home/ShowDocument?id=68283

[106] Architectural Review Application. Post-Construction Solid Waste Generations Estimation and Collection Form for New Development & Redevelopment. March 16, 2023.

[107] Boccaleoni, Anthony. Division Manager, Republic Services. Personal Communication. May 12, 2023.

waste. The construction and operation of the project would comply with federal, state, and local regulations related to diversion of materials from disposal and appropriate disposal of 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 complies with California's building and fire codes. Only lands zoned for very high fire hazard are identified within LRAs.

California Public Resources Code Section 4442 through 4431

The California Public Resources Code includes fire safety regulations that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment that uses an internal combustion engine; specify requirements for the safe use of gasoline-powered tools on forest-covered land, brush-covered land, or grass-covered land; and specify fire suppression equipment that must be provided on-site for various types of work in fire-prone areas. These regulations include the following:

- Earthmoving and portable equipment with internal combustion engines would be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code Section 4442);
- Appropriate fire suppression equipment would be maintained during the highest fire danger period, from April 1 to December 1 (Public Resources Code Section 4428);
- On days when a burning permit is required, flammable materials would be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor would maintain appropriate fire suppression equipment (Public Resources Code Section 4427); and
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines would not be used within 25 feet of any flammable materials (Public Resources Code Section 4431).

Fire Management Plans

CAL FIRE has developed an individual Unit Fire Management Plan for each of its 21 units and six contract counties. CAL FIRE has developed a strategic fire management plan for the Unit, which covers the project area and addresses citizen and firefighter safety, watersheds and water, timber, wildlife and habitat (including rare and endangered species), unique areas (scenic, cultural, and historic), recreation, range, structures, and air quality. The plan includes stakeholder contributions and priorities and identifies strategic areas for pre-fire planning and fuel treatment as defined by the people who live and work with the local fire issues.

4.20.1.2 *Existing Conditions*

The project site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones.[108]

4.20.2 Impact Discussion

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

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

[108] State of California Department of Forestry and Fire Protection. Santa Clara County Fire Hazard Severity Zones in SRA. Adopted November 7, 2007.

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 previous sections of this Initial Study, the proposed project would not degrade the quality of the environment with the implementation of the identified mitigation measures and Conditions of Approval. As discussed in Section 4.4 Biological Resources, with implementation of the identified mitigation measures (MM BIO-1.1 and MM BIO-2.1 through MM BIO-2.5), the project would not significantly impact sensitive habitats or species, including disturbance of nesting birds. As discussed in Section 4.5 Cultural Resources, with implementation of the identified mitigation measures (MM CUL-1.1 and MM CUL-2.1), the project would result in a less than significant impact on archaeological resources. As discussed in Section 4.8 Geology and Soils, with implementation of GEO-1.1, the project would result in a less than significant impact on paleontological resources. As discussed in Section 4.9 Hazards and Hazardous Materials, with implementation of the identified mitigation measure (MM HAZ-1.1) the project would not release hazardous materials into the

environment and pose a risk to construction workers and the general public. As discussed in Section 4.10 Hydrology and Water Quality, with implementation of the Condition of Approval, the project would not cause significant construction related water quality impacts. **(Less than Significant Impact with Mitigation Incorporated)**

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

While individual projects may result in significant impacts in particular issue areas, it is assumed that all projects will comply with existing regulations and statutes, and will incorporate measures to reduce potential impacts to a less than significant level, if necessary. For example, all projects are required to incorporate best management practices and comply with local and regional regulations to reduce impacts to water quality to the maximum extent feasible. With the proposed project's adherence to the Land Use, Air Quality, Noise, Energy, and Water Policies described in the City's General Plan, project impacts would not contribute to cumulatively considerable impacts. Given the project's location and proposed operation, areas of particular concern for cumulative impacts include cultural resources, and hazards and hazardous materials. These impact areas are discussed in further detail below.

Cultural Resources

The geographic area for cumulative impacts to cultural resources is generally limited to the immediate area in which a given cultural resource is located, as cultural resource impacts are typically localized.

As described in Section 4.5 Cultural Resources, the project would include disturbance of native soils for trenching, site grading, and other construction activities. While there are no recorded archaeological sites on the project site, there is a potential for buried archaeological resources to occur on the site. Construction of the proposed project could impact unknown buried archaeological resources and human remains, if present on-site. The project would implement several measures to reduce impacts on cultural resources. Additionally, all projects are required to implement best management practices and comply with all federal, state, and local regulations described in Section 4.5. The project would comply with the Secretary of the Interior's Standards for Rehabilitation and would not significantly impact historic resources on the Intel campus. There are no other pending or foreseeable projects that could impact the historic Intel campus. Therefore, the project would not significantly contribute to cumulative impacts on cultural resources.

As described in Section 4.9 Hazards and Hazardous Materials, the project site may contain contaminated soil; therefore, construction workers could be exposed to contaminated soil during excavation, grading, and construction activities. With implementation of mitigation measure MM HAZ-1.1, the project would result in a less than significant soil contamination impact and would not conflict with plans, policies or regulation adopted for the purpose of reducing impacts from hazardous materials. The project's hazardous materials impacts are localized, and there are no pending or foreseeable projects on or near the Intel campus with the potential to combine with the project to create a cumulative impact.

The project does not have impacts that are individually limited, but cumulatively considerable. **(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 construction-related air quality (fugitive dust) and hazardous materials. Implementation of mitigation measures and Conditions of Approval identified in Section 4, however, would reduce these impacts to a less than significant level. No other direct or indirect adverse effects on human beings have been identified. **(Less than Significant Impact with Mitigation Incorporated)**

Section 5.0 References

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

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Section 6.0 Lead Agency and Consultants

6.1 Lead Agency

City of Santa Clara
Community Development Department
Steve Le, Senior Planner

6.2 Consultants

David J. Powers & Associates, Inc.
Environmental Consultants and Planners
Akoni Danielsen, Principal
Michael Lisenbee, Senior Project Manager
Désirée Dei Rossi, Project Manager
Mimi McNamara, Associate Project Manger

Archaeological/Historical Consultants LLC
Archaeological/Historical Consultants
Molly Fierer-Donaldson, RPA

Architectural Resources Group
Architectural/Historical Consultants
Matthew Davis, Principal
Joe Rusch, Architectural Historian & Preservation Planner

Cornerstone Earth Group, Inc.
Environmental Health/Hazardous Material Consultants
Ron L. Helm, Senior Principal Geologist
Michael F. Change, Senior Project Engineer

Illingworth & Rodkin, Inc.
Air Quality and Noise/Vibration Consultants
James Reyff, Air Quality Principal
Casey Divine, Air Quality Consultant
Jordyn Bauer, Air Quality Staff Consultant
Michael S. Thill, Noise/Vibration Principal
Carrie J. Janello, Noise/Vibration Senior Consultant

Section 7.0 Acronyms and Abbreviations

°F	Fahrenheit Degrees
µg	Microgram
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACM	Asbestos-Containing Material
ALUC	Airport Land Use Commission
APN	Assessor's Parcel Number
ATCM	Asbestos Airborne Toxic Control Measure
BAAQMD	Bay Area Air Quality Management District
Bay Area	San Francisco Bay Area
BMP	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
CalEEMod	California Emissions Estimator Model
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
CUB	Central Utility Building
CUPA	Certified Unified Program Agency
dBA	A-weighted decibel
Department	Santa Clara Parks and Recreation Department
DNL	Day/Night Average Sound Level
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EMFAC2021	EMission FACtors 2021
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
EV	Electric vehicle
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GHG	Greenhouse Gases
GHGRS	Greenhouse Gas Reduction Strategy
GWh	Gigawatt Hour
GWMP	Groundwater Management Plan
GWP	Global Warming Potential
Habitat Plan	Santa Clara Valley Habitat Plan
HRI	Historic Resources Inventory

HSWA	Hazardous and Solid Waste Amendments
HVAC	Heating, ventilation, and air conditioning
Intel	Intel Corporation
kV	Kilovolt
kVA	Kilovolt amps
L_{eq}	Energy-Equivalent Sound/Noise Descriptor
LID	Low Impact Development
L_{max}	Maximum A-weighted noise level during a measurement period
LOS	Level of Service
LRA	Local Responsibility Area
m^3	Cubic meters
MBTA	Migratory Bird Treaty Act
$MMTCO_2e$	Million Metric Tons of Carbon Dioxide Equivalent
MND	Mitigated Negative Declaration
mpg	Miles per Gallon
MSL	Mean Sea Level
MTC	Metropolitan Transportation Commission
MVA	Megavolt Amperes
MW	Megawatt
MWh	Megawatt hour
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standard
NAHC	Native American Heritage Commission
NCP	National Contingency Plan
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_2	Nitrogen Dioxide
NOA	Naturally Occurring Asbestos
NOD	Notice of Determination
NO_x	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O_3	Ozone

PCB	Polychlorinated Biphenyls
PCF	Perfluorocarbon
PDA	Priority Development Areas
PG&E	Pacific Gas and Electric Company
PM	Particulate Matter
PM_{10}	Particulate matter with a diameter of 10 microns or less
$PM_{2.5}$	Particulate matter with a diameter of 2.5 microns or less
PPV	Peak Particle Velocity
R&D	Research and Development
RAP	Removal Action Plan
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act
RHNA	Regional Housing Need Allocation
ROG	Reactive Organic Gases
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	State Bill
SC1	Santa Clara 1
SC2	Santa Clara 2
SCPD	Santa Clara Police Department
SCS	Sustainable Communities Strategy
SCUSD	Santa Clara Unified School District
SCVNSPC	Santa Clara Valley Nonpoint Source Pollution Control Program
SCVURPPP	Santa Clara Valley Urban Runoff Pollution Prevention Program
SF_6	Sulfur Hexafluoride
SFPUC	San Francisco Public Utilities Commission
SHMA	Seismic Hazards Mapping Act
SMARA	Surface Mining and Reclamation Act
SMGB	State Mining and Geology Board
SMP	Site Management Plan
SO_x	Sulfur Oxides
SR	State Route

SRA	State Responsibility Area
SVP	Silicon Valley Power
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants
Title 24	Title 24, Part 6 of the California Code of Regulations
TSCA	Toxic Substances Control Act
URMP	Urban Runoff Management Plan
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
V	Volt
Valley Water	Santa Clara Valley Water District
VMT	Vehicle Miles Traveled
VTA	Santa Clara Valley Water District
Williamson Act	California Land Conservation Act
WUI	Wildland-Urban Interface
ZNE	Zero Net Carbon Emission